# Self-Compassion and Relationship Maintenance: The Moderating Roles of Conscientiousness and Gender

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Should intimates respond to their interpersonal mistakes with self-criticism or with self-compassion? Although it is reasonable to expect self-compassion to benefit relationships by promoting selfesteem, it is also reasonable to expect self-compassion to hurt relationships by removing intimates' motivation to correct their interpersonal mistakes. Two correlational studies, 1 experiment, and 1 longitudinal study demonstrated that whether self-compassion helps or hurts relationships depends on the presence versus absence of dispositional sources of the motivation to correct interpersonal mistakes. Among men, the implications of self-compassion were moderated by conscientiousness. Among men high in conscientiousness, self-compassion was associated with greater motivation to correct interpersonal mistakes (Studies 1 and 3), observations of more constructive problem-solving behaviors (Study 2), reports of more accommodation (Study 3), and fewer declines in marital satisfaction that were mediated by decreases in interpersonal problem severity (Study 4); among men low in conscientiousness, self-compassion was associated with these outcomes in the opposite direction. Among women, in contrast, likely because women are inherently more motivated than men to preserve their relationships for cultural and/or biological reasons, self-compassion was never harmful to the relationship. Instead, women's self-compassion was positively associated with the motivation to correct their interpersonal mistakes (Study 1) and changes in relationship satisfaction (Study 4), regardless of conscientiousness. Accordingly, theoretical descriptions of the implications of self-promoting thoughts for relationships may be most complete to the extent that they consider the presence versus absence of other sources of the motivation to correct interpersonal mistakes.

Keywords: self-compassion, conscientiousness, gender, romantic relationships, motivation

Do not brood over your past mistakes and failures as this will only fill your mind with grief, regret and depression.

-Swami Sivananda Saraswati, Bliss Divine

The experience of actual misery motivates thought, yes, but above all it motivates action.

—Victorio Araya, God of the Poor: The Mystery of God in Latin American Liberation Theology

Everyone makes mistakes and has inadequacies. People differ, however, in how they respond to these shortcomings. Whereas some people tend to respond to their mistakes and inadequacies

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with self-criticism, for example, others tend to respond to such shortcomings with self-compassion—a noncritical stance toward one's inadequacies and failures (K. D. Neff & Lamb, 2009).

Which strategy is most likely to promote well-being? According to Swami Saraswati's observation that self-criticism leads to negative emotions, self-compassion may be most likely to promote well-being by protecting people from the negative emotional implications of their mistakes. According to Victorio Araya's observation that negative emotions can motivate, however, this protective nature of self-compassion may ultimately harm well-being by removing an important source of people's motivation to correct their mistakes and prevent them from recurring.

These contrasting effects of self-compassion may have important implications for people's close relationships. On the one hand, in line with Saraswati's assertion that self-criticism may have emotional costs, more self-compassionate intimates may feel better about themselves and thus be more satisfied in their interpersonal relationships (see Hendrick, Hendrick, & Adler, 1988; Murray, Holmes, & Griffin, 1996a). On the other hand, in line with Araya's claim that negative emotions can motivate, the emotional benefits of self-compassion may lead self-compassionate intimates to be less motivated to correct their interpersonal mistakes and thus experience interpersonal problems that remain or worsen over time.

The overarching goal of the current research was to illuminate the implications of self-compassion for romantic relationships. To this end, the remainder of this introduction is organized into four sections. The first section reviews evidence consistent with the possibility that self-compassion may benefit relationships by enhancing self-esteem and self-efficacy. The second section reviews evidence consistent with the possibility that self-compassion may harm relationships by removing intimates' motivation to correct their interpersonal mistakes. The third section attempts to reconcile these contrasting implications by reviewing evidence consistent with the possibility that intimates' levels of conscientiousness should supplement any motivation to correct interpersonal mistakes undermined by self-compassion and thus moderate the effects of self-compassion on relationship outcomes. The fourth section, however, reviews evidence consistent with the possibility that women may remain motivated to correct their interpersonal mistakes despite their levels of self-compassion and conscientiousness because they are more motivated than men to preserve their relationships for cultural and/or biological reasons. Finally, we describe four studies of romantic relationships that examined the interactive effects of self-compassion and conscientiousness on intimates' self-reported motivation to fix their relationship problems, self-reported and observed relationship-problem-solving behaviors, and changes in problem severity and marital satisfaction over the first 5 years of marriage.

# **Self-Compassion and Positive Relationship Outcomes**

A developing line of research has documented numerous intrapersonal benefits of self-compassion. More self-compassionate people, for example, report less depression, lower levels of anxiety, and higher levels of self-esteem and self-efficacy than do less self-compassionate people (Iskender, 2009; Leary, Tate, Adams, Allen, & Hancock, 2007; K. D. Neff, 2003; K. D. Neff, Hsieh, & Dejitterat, 2005; K. D. Neff, Kirkpatrick, & Rude, 2007; K. D. Neff, Pisitsungkagarn, & Hsieh, 2008). One way that self-compassion appears to offer such intrapersonal benefits is by buffering people against the negative implications (i.e., self-evaluations, emotions) of their failures (Leary et al., 2007; K. D. Neff et al., 2005). Leary et al. (2007), for example, demonstrated that more self-compassionate people reported less negative self-feelings after imagining a stressful social event than did less self-compassionate people.

What exactly is self-compassion? Although it may be one mechanism through which people achieve self-esteem, self-compassion is not the same as self-esteem. Whereas self-esteem is a way of conceptualizing people's favorable or unfavorable attitudes toward themselves (Rosenberg, 1965), self-compassion is a way of conceptualizing how people cognitively treat themselves following their mistakes (K. D. Neff, 2009). People who are high in self-compassion tend to be kind and understanding toward themselves when they make mistakes, recognize that all humans are imperfect and make mistakes, and do not ruminate about their mistakes. People who are low in self-compassion, in contrast, tend to be critical of themselves when they make mistakes, believe they are unique in making such mistakes, and obsessively fixate on their mistakes (K. D. Neff, 2003). It is perhaps not surprising, then, that self-compassion appears to promote intrapersonal well-being.

Given the novelty of research on the implications of self-compassion, however, little is known about the interpersonal implications of self-compassion. There are at least two theoretical reasons to expect self-compassion to have interpersonal benefits as

well. First, by promoting self-esteem, self-compassion may help individuals experience the relationship benefits associated with high self-esteem. Indeed, a consistent body of cross-sectional research demonstrates that, compared to low self-esteem individuals, high self-esteem individuals report more favorable views of their partners (Murray, Holmes, & Griffin, 1996b), being more trusting of their partners' love and support (Murray, Holmes, MacDonald, & Ellsworth, 1998), behaving in ways that increase closeness with their partners (Murray, Derrick, Leder, & Holmes, 2008), and being more satisfied in their relationships (Karney & Bradbury, 1995; Murray et al., 1996a). Second, by promoting self-efficacy, self-compassion may help individuals experience the relationship benefits associated with high self-efficacy. Indeed, relationship self-efficacy is negatively associated with changes in problem severity and positively associated with changes in relationship satisfaction (Baker & McNulty, 2010; Cui, Fincham, & Pasley, 2008).

# **Self-Compassion and Negative Relationship Outcomes**

Nevertheless, there is at least one theoretical reason to expect self-compassion to lead to more negative relationship outcomes. According to Leary and colleagues' (e.g., Leary, Tambor, Terdal, & Downs, 1995) sociometer model, self-esteem acts as a gauge that informs people of their social standing. Whereas experiencing high self-esteem signals to people that their behaviors have led them to be accepted, experiencing low self-esteem signals to people that their behaviors have led them to be rejected. Accordingly, low levels of self-esteem can "motivate behaviors that help to maintain or enhance one's relational value" (Leary & MacDonald, 2003, p. 402). Because more self-compassionate people should experience high self-esteem despite their shortcomings, they should feel accepted despite their interpersonal mistakes and thus may be less motivated to correct those mistakes. Because less self-compassionate people should experience low self-esteem following their interpersonal mistakes, in contrast, they may be more motivated to correct those interpersonal mistakes to regain social acceptance. Given that unaddressed problems may accumulate over time and that accumulating interpersonal problems are associated with decreasing satisfaction (McNulty, O'Mara, & Karney, 2008), self-compassion may thus ultimately predict more interpersonal problems and less satisfaction with the relationship.

Empirical research is consistent with this idea. Specifically, one inverse of self-compassion is self-criticism (K. D. Neff, 2003), and both criticism and self-criticism are associated with increased motivation to correct problems. Regarding criticism, Overall, Fletcher, Simpson, and Sibley (2009) argued that criticism during problem-solving discussions "motivates [emphasis added] partners to bring about desired change" (p. 621; also see Holmes & Murray, 1996; Krokoff, 1991; McNulty & Russell, 2010). Indeed, Overall et al. reported that direct negative behaviors exchanged during problem-solving discussions between romantic partners were associated with greater changes in the partner one year later. Selfcriticism may have similar implications. Self-criticism is one component of perfectionism (Hewitt & Flett, 1991), defined as the intense motivation to correct one's flaws (Flett & Hewitt, 2002). Indeed, perhaps due to this self-critical component, perfectionism is associated with greater achievement (e.g., Stoeber & Eismann, 2007; Witcher, Alexander, Onwuebuzie, Collins, & Witcher, 2007).

# Reconciliation: The Moderating Role of Conscientiousness

Given that self-compassion may benefit intimates by enhancing self-esteem and self-efficacy but thus could also harm their relationships by reducing their motivation to correct their interpersonal mistakes, whether self-compassion benefits or harms relationships may depend on the presence versus absence of other sources of the motivation to correct interpersonal mistakes. Specifically, the presence of more dispositional sources of the motivation to correct mistakes should allow intimates to remain motivated to correct any interpersonal mistakes, regardless of their levels of self-esteem. Accordingly, intimates with more dispositional sources of the motivation to correct their mistakes should be able to capitalize on the benefits of self-compassion (i.e., high self-esteem and selfefficacy) without experiencing the low levels of the motivation to correct their interpersonal mistakes and their consequences (i.e., increased problems and decreased satisfaction). Intimates who lack such dispositional sources of the motivation to correct their mistakes, in contrast, may only be motivated to correct their interpersonal mistakes if they are also low in self-compassion and thus experience decreased self-esteem following their interpersonal mistakes.

What dispositional qualities should be associated with the motivation to correct interpersonal mistakes? Given that the five-factor model of personality (McCrae & Costa, 1987) theoretically captures all dispositional qualities of personality (Goldberg, 1993; but see Kroger & Wood, 1993), it should capture the extent to which people are motivated to correct their mistakes. Indeed, as one of the Big Five, conscientiousness captures a general tendency to be determined, scrupulous, reliable (Costa & McCrae, 1992), and high in achievement motivation (Mount & Barrick, 1995). Not surprisingly, conscientiousness is associated with high achievement in domains such as academics (e.g., Digman & Inouye, 1986; Grazlano & Ward, 1992) and occupation (e.g., Barrick & Mount, 1991; Hogan & Ones, 1997).

McCrae and John (1992) described several qualities of conscientious people that may benefit interpersonal relationships as well. First, conscientious individuals are more planful and thus may be more likely to develop strategies to correct their relationship problems. Indeed, strategic attempts to repair relationship problems are associated with greater marital satisfaction (e.g., Dainton & Aylor, 2002). Second, conscientious individuals tend to be highly dutiful and thus may be more likely to carry out plans to correct their relationship problems. Indeed, dependability is associated with greater self and partner marital satisfaction (Kurdek, 1999). Third, conscientious individuals possess greater self-control and thus may be better able to ignore their own self-interests and successfully carry out the strategies necessary to resolve their relational problems. Indeed, impulse control is positively associated with marital satisfaction (Robins, Caspi, & Moffit, 2000) and negatively associated with divorce (Kelly & Conley, 1987) among men.

Nevertheless, research has been inconsistent in demonstrating the effects of conscientiousness on interpersonal outcomes. Whereas several studies have shown that conscientiousness is associated with greater relationship satisfaction (Bouchard, Lussier, & Sabourin, 1999; Donnellan, Conger, & Bryant, 2004; Shackelford, Besser, & Goetz, 2008) and less likelihood of divorce (Kurdek, 1993; Tucker, Friedman, Wingard, & Schwartz, 1996), other studies have demonstrated either inconsistent benefits of conscientiousness (Botwin, Buss, & Shackelford, 1997; Giguère, Fortin, & Sabourin, 2006; Watson, Hubbard, & Wiese, 2000; White, Hendrick & Hendrick, 2004) or no benefits of conscientiousness (Cook, Casillas, Robbins, & Dougherty, 2005; Demir, 2008). In fact, Karney and Bradbury's (1995) meta-analysis of the association between conscientiousness and marital outcomes indicated that conscientiousness tends to be rather weakly associated with marital satisfaction on average (aggregate effect-size r for husbands = .07 and for wives = .06).

These weak and inconsistent main effects may reflect several interpersonal costs of conscientiousness. First, individuals high in conscientiousness often possess a high need for individual achievement (Mount & Barrick, 1995), especially regarding their work performance (Judge & Ilies, 2002), that may interfere with their interpersonal relationships. Indeed, Andreassen, Hetland, and Pallesen (2010) reported that conscientiousness was associated with the tendency to spend considerable time at work to the detriment of social or family activities. Second, individuals high in conscientiousness are more likely than individuals low in conscientiousness to report greater stress from work (e.g., Tyssen et al., 2009), stress that may negatively impact their relationships (L. A. Neff & Karney, 2009). Third, given that those high in conscientiousness have unrealistically high expectations for themselves (Stoeber, Otto, & Dalbert, 2009) and others (Sherry, Hewitt, Flett, Lee-Baggley, & Hall, 2007), they risk that their actual relationships may fall short of their expectations. Indeed, having positive relationship expectations that are out of reach leads to decreases in relationship satisfaction (McNulty & Karney, 2004).

The inconsistent main effects and potential interpersonal costs of conscientiousness are consistent with the possibility that conscientiousness may interact with self-compassion to predict relationship outcomes. Just as high levels of self-compassion may only predict positive relationship outcomes among people who are high in conscientiousness, high levels of conscientiousness may only predict positive relationship outcomes among people who are high in self-compassion. Specifically, just as high levels of conscientiousness should buffer self-compassionate intimates against the decreased interpersonal motivation to correct interpersonal mistakes that may accompany their high levels of self-compassion, high levels of self-compassion should buffer conscientious intimates against some of the negative implications that accompany high levels of conscientiousness (e.g., negative feelings from not meeting unrealistic expectations). Furthermore, low levels of selfcompassion may only predict positive relationship outcomes among people who are low in conscientiousness, and low levels of conscientiousness may only predict positive relationship outcomes among people who are low in self-compassion. Specifically, the lower standards of achievement that accompany low levels of conscientiousness may buffer intimates against the high levels of criticism that accompany low levels of self-compassion, and the enhanced motivation to correct interpersonal mistakes that should arise from low levels of self-compassion may buffer lowconscientious intimates against the low intrapersonal motivation that accompanies their low levels of conscientiousness.

# Gender Differences in the Interactive Effects of Self-Compassion and Conscientiousness

Nevertheless, gender differences in other sources of the motivation to address interpersonal mistakes may lead to gender differences in the interactive effects of self-compassion and conscientiousness. Specifically, whereas men may be relatively unmotivated to correct their interpersonal mistakes unless they either are conscientious or lack self-compassion (and thus experience a loss of self-esteem due to those mistakes), women may be motivated to correct their mistakes regardless of their levels of self-compassion or conscientiousness. According to social role theory (Eagly, 1987; Eagly & Wood, 1999), for example, women are inherently more motivated than men to preserve their relationships because they traditionally encounter more barriers to leaving their relationships, such as lower employment rates (Organisation for Economic Co-Operation and Development, 2009), lower income (Blau & Kahn, 2006), greater perceived responsibility for offspring (Gilbert, Hanson, & Davis, 1982), and greater societal pressure to adhere to a communal role that values relationship maintenance (Eagly, 1987). Furthermore, according to evolutionary perspectives (Buss & Kenrick, 1998; Buss & Schmidt, 1993), women are also inherently more motivated than men to preserve their relationships because long-term relationships provided more reproductive benefits (e.g., access to resources, physical protection) to ancestral women than to ancestral men. Indeed, consistent with both theories, women are more likely than men to want to discuss their relationship problems (e.g., Rusbult, 1987), less likely than men to back away from or neglect their relationship problems (e.g., Gottman, 1994), less likely than men to avoid closeness in their relationships (e.g., Del Giudice, 2009), and more likely than men to report that developing and maintaining relationships is one of their central goals (Cross & Madson, 1997). Given these additional sources of the motivation to preserve their relationships, even women who are high in self-compassion but low in conscientiousness may be motivated to correct their interpersonal mistakes. In fact, given the stresses likely to be associated with their increased motivation to maintain their relationships, women may be particularly likely to benefit from self-compassion.

# Study 1

Study 1 assessed self-compassion, conscientiousness, and the motivation to correct interpersonal mistakes in a sample of dating individuals. On the basis of the theoretical analysis described above, we predicted that intimates' levels of conscientiousness would moderate the effects of their self-compassion on their motivation to correct their mistakes, such that self-compassion would be positively associated with the motivation to correct interpersonal mistakes among intimates high in conscientiousness but negatively associated with the motivation to correct interpersonal mistakes among intimates low in conscientiousness. Given that theory and existing research suggest these interactive effects may emerge more strongly among men than women, we tested this gender difference.

# Method

**Participants.** Participants were 243 undergraduate students (143 women) at the University of Tennessee (Knoxville, TN)

who had a mean age of 19.86 years (SD=3.43). All participants had been involved in a romantic relationship for at least 3 months (M=17.52, SD=16.12). One hundred and ninety-five (80%) identified as White or Caucasian, 18 (7%) identified as Black or African American, 11 (5%) identified as Asian American, five (2%) identified as Hispanic or Latino(a), 13 (5%) identified as another race/ethnicity or as two or more races/ethnicities, and one (<1%) did not report race/ethnicity.

**Procedure.** Participants were recruited through the university's online subject pool and were offered partial course credit for their participation in the study. After providing informed consent, participants completed the following measures that were presented through the university's online participation site.

#### Measures.

Self-Compassion Scale. Self-compassion was assessed using the Self-Compassion Scale (SCS; K. D. Neff, 2003). This measure requires individuals, using a 5-point Likert-type response scale (1 = almost always, 5 = almost never), to report agreement with 26 items that assess three aspects of selfcompassion—self-kindness (e.g., "When I'm going through a very hard time, I give myself the caring and tenderness I need"), thoughts of common humanity (e.g., "When things are going badly for me, I see the difficulties as part of life that everyone goes through"), and mindful acceptance (e.g., "When something painful happens, I try to take a balanced view of the situation")—and their inverses—self-judgment (e.g., "I'm disapproving and judgmental about my own flaws and inadequacies"), feelings of isolation (e.g., "When I fail at something that's important to me, I tend to feel alone in my failure"), and overidentification with faults (e.g., "When I'm feeling down, I tend to obsess and fixate on everything that's wrong"). After reversing appropriate items, all 26 items were averaged to form an index of self-compassion. The SCS demonstrated high internal consistency. (Coefficient alpha was .83 for men and .93 for women.)

Conscientiousness. Conscientiousness was assessed using the Conscientiousness subscale of the Big Five Personality Inventory—Short (Goldberg, 1999). This measure requires individuals to report agreement with 10 items that assess conscientiousness (e.g., "I get chores done right away") using a 5-point Likert-type response scale (1 = strongly disagree, 5 = strongly agree). Internal consistency was high. (Coefficient alpha was .81 for men and .85 for women.)

Motivation to correct interpersonal mistakes. We developed a new measure that assessed participants' motivation to correct their interpersonal mistakes. Specifically, we asked participants to report the extent to which 10 items completed the sentence "When I have made a mistake or caused a problem in my relationship..." (e.g., "I usually try to figure out a solution to the problem," "I usually try to work things out with my partner right away," "I sometimes wait for the problem to improve on its own"; reverse-scored), using a scale from 1 (almost never) to 7 (almost always). After reversing appropriate items, all 10 items were averaged to create a mean index of motivation to correct interpersonal mistakes, where higher scores indicated greater motivation to correct interpersonal mistakes. Internal consistency was high. (Coefficient alpha was .89 for men and .88 for women.)

## Results

Descriptive statistics and preliminary analyses. tive statistics are presented in Table 1. As the table reveals, men and women reported self-compassion and conscientiousness scores that were slightly above the midpoint, suggesting that these intimates saw themselves as somewhat self-compassionate and somewhat conscientious on average. These statistics are similar to those obtained in previous studies (e.g., K. D. Neff, 2003). Likewise, both men and women reported being relatively motivated to resolve their relationship problems; however, the standard deviations indicated variability that may be related to self-compassion, conscientiousness, and/or their interaction. Notably, consistent with the gender differences in motivation to address problems described previously, women were marginally more motivated to address relationship problems than were men, t(241) = 1.77, p = .08. In sum, this sample seemed an appropriate one in which to examine the effects of self-compassion and conscientiousness on motivation to correct interpersonal mistakes.

Correlations among the independent variables are also presented in Table 1. Among men and women, conscientiousness was positively associated with motivation to correct interpersonal mistakes and self-compassion. Furthermore, among women, but not among men, self-compassion was positively associated with motivation to correct interpersonal mistakes. The primary analyses examined whether the association between self-compassion and motivation varied across levels of conscientiousness.

Does conscientiousness moderate the association between self-compassion and motivation to resolve relationship problems? To address the primary hypothesis, we conducted separate multiple regressions for men and women in which motivation to resolve relationship problems was regressed onto mean-centered self-compassion scores, mean-centered conscientiousness scores, and their interaction. Results of these analyses are presented in Table 2.

Among women, self-compassion and conscientiousness demonstrated positive main effects on the motivation to resolve relationship problems. The Self-Compassion  $\times$  Conscientiousness interaction did not reach significance. Among men, in contrast, consistent with predictions, the Self-Compassion  $\times$  Conscientiousness interaction was positively associated with the motivation to resolve relationship problems.

The significant interaction is plotted in Figure 1. Consistent with predictions, tests of the simple slopes revealed that self-

Table 1
Descriptive Statistics and Correlations Among Independent
Variables in Study 1

Variable	1	2	3	M	SD
Self-compassion     Conscientiousness     Motivation     M     SD	.35** .08 3.13 0.52	.26**  .24* 33.15 7.13	.35** .25**  5.26 0.84	3.14 35.90 5.45	0.69 7.24 0.84

*Note.* Descriptive statistics and correlations are presented above the diagonal for women and below the diagonal for men. Scores on self-compassion could have ranged from 1 to 5, conscientiousness from 10 to 50, and motivation from 1 to 7.

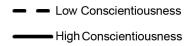
Table 2
Effects of Self-Compassion, Conscientiousness, and Their
Interaction on Motivation in Study 1

		Motiva	otivation					
		oands 4.57**)		ives 8.69**)				
Measure	В	r	В	r				
Self-compassion	-0.03	02	0.33	.28**				
Conscientiousness Self-Compassion ×	0.03	.25*	0.02	.18*				
Conscientiousness	0.06	.27**	0.02	.11				

*Note.* For the t test, df = 95 for men's motivation and accommodation and 139 for women's motivation and accommodation. \* p < .05. \*\* p < .01.

compassion was marginally significantly associated with more motivation to correct interpersonal mistakes among men who were one standard deviation above the mean on conscientiousness ( $\beta$  = .24, p = .08) but significantly associated with less motivation to correct interpersonal mistakes among men one standard deviation below the mean on conscientiousness ( $\beta$  = -.28, p = .05).

Were the interactive effects of self-compassion and conscientiousness stronger among men than women? We conducted post hoc analyses to test for possible gender differences in the interactive effects of self-compassion and conscientiousness on motivation to address interpersonal problems. Somewhat consistent with the idea that self-compassion and conscientiousness may differently interact to predict men's and women's motivation to



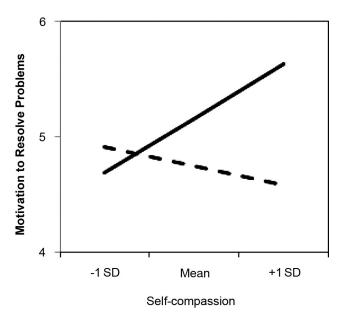


Figure 1. Interactive effects of men's self-compassion and conscientiousness on men's motivation to address relationship problems.

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

address their interpersonal problems, a test of strength of the interactive effects reported above indicated that the interactive effect of self-compassion and conscientiousness that emerged as significant among men trended toward being stronger than the corresponding interactive effect that was not significant among women, t(238) = 1.45, p = .15.

## Discussion

Study 1 provides preliminary evidence that men's self-compassion interacts with conscientiousness to predict relationship outcomes. Specifically, self-compassion was associated with greater motivation to correct interpersonal mistakes among men high in conscientiousness but was associated with less motivation to correct interpersonal mistakes among men low in conscientiousness. Among women, in contrast, self-compassion and conscientiousness were associated with greater motivation to correct interpersonal mistakes independent of one another. Consistent with the possibility that women may experience higher levels of motivation independent of their levels of self-compassion and conscientiousness, women reported marginally greater motivation to address their relationship problems than did men.

Nevertheless, Study 1 was limited in at least two respects. First, although Study 1 demonstrated that men's levels of self-compassion and conscientiousness interact to predict their motivation to fix their relationship problems, Study 1 did not directly observe participants' problem-solving attempts. Second, although Study 1 demonstrated the effects of self-compassion and conscientiousness among those in dating relationships, it left questions regarding whether these variables would interact among people in more established relationships who may face more severe problems on average and be more motivated to correct their interpersonal mistakes on average. Study 2 addressed these limitations.

## Study 2

Study 2 used newlyweds' self-reports of self-compassion and conscientiousness and observations of these couples' attempts to resolve their marital problems to examine whether the effects that emerged on intimates' motivation in Study 1 extended to actual behaviors of newlywed couples. We hypothesized that self-compassion would be associated with more constructive problemsolving behaviors among spouses high in conscientiousness but with less constructive behavior among spouses low in conscientiousness. Given the theoretical reasons to expect these interactive effects to emerge more strongly among men than among women and that the interactive effects that emerged in Study 1 emerged only among men and not among women, we again tested for gender differences in the interactive effects of self-compassion and conscientiousness on these behaviors.

# Method

**Participants.** Participants were drawn from a broader longitudinal study of 135 newlywed couples. The 84 couples examined here were the only couples who completed a measure of conscientiousness and engaged in two videotaped problem-solving discussions at baseline and completed a measure of self-compassion 12 months later. At baseline, participants were recruited through

advertisements placed in community newspapers and bridal shops and through invitations sent to eligible couples who had applied for marriage licenses in counties near the study location. Couples who responded were screened in a telephone interview to ensure they met the following eligibility criteria: (a) They had been married for less than 6 months, (b) neither partner had been previously married, (c) they were at least 18 years of age, (d) they spoke English and had completed at least 10 years of education (to ensure comprehension of the questionnaires), and (e) they did not yet have children (because a larger aim of the study was to examine the transition to parenthood).

At baseline, husbands were on average 26.90 years old (SD=4.57) and had received 16.85 years (SD=2.54) of education. Ninety-two percent were Caucasian, and 76% were Christian. Seventy percent were employed full time, and 26% were full-time students. On average, wives were 25.21 years old (SD=3.59) and had received 19.91 years (SD=2.30) of education. Ninety-four percent were Caucasian, and 82% were Christian. Fifty-six percent were employed full time, and 28% were full-time students.

Procedure. Before the baseline laboratory session during which we observed participants' problem-solving behaviors, participants were mailed a packet of questionnaires to complete at home and bring with them to their appointment. This packet included a consent form approved by the local human subjects review board, self-report measures that included a measure of conscientiousness, and a letter instructing couples to complete all questionnaires independently of one another and to bring their completed questionnaires to their upcoming laboratory session. Upon arriving at that session, spouses participated in two problemsolving discussions designed to assess their attempts to resolve marital problems during their interactions with each other. Each spouse identified an area of difficulty in the marriage, and then both spouses participated in two 10-min videotaped discussions in which they were left alone to "work towards some resolution or agreement" for each area of difficulty. The order of the two interactions was determined through a coin flip. If both spouses chose the same topic, they first discussed that topic and then discussed a second topic chosen by the spouse whose topic was designated to be discussed second. After completing their interactions, couples were paid \$80 for participating in this phase of the study.

Approximately 12 months after the initial assessment, couples were recontacted by phone and mailed self-report measures that included a measure of self-compassion, along with postage-paid return envelopes and a letter reminding couples to complete forms independently of one another. After completing this phase, couples were mailed a check for \$50 for participating.

#### Measures.

*Observed problem-solving behavior.* The extent to which spouses engaged in constructive attempts to correct their interper-

<sup>&</sup>lt;sup>1</sup> Although data from this sample have been described in several articles (Baker & McNulty, 2010; Little, McNulty, & Russell, 2010; McNulty & Russell, 2010; Meltzer & McNulty, 2010), there is no overlap between the variables examined in these prior articles and the variables examined here.

<sup>&</sup>lt;sup>2</sup> We did not assess self-compassion until 12 months after baseline because that was when we first became interested in the implications of self-compassion for close relationships.

sonal problems was estimated at baseline by coding videotapes of couples' problem-solving discussions. After watching each interaction, four coders globally rated the extent to which each spouse (a) took responsibility for the problem ("How much did the husband/wife take responsibility for solving the problem?"), (b) clarified the problem ("How much did the husband/wife fail to work toward clarifying the problem?"; reverse-scored), (c) was engaged in the conversation ("How engaged was the husband/wife?"), (d) did not avoid the problem ("How much did the husband/wife avoid talking about the problem?"; reverse-scored), and (e) did not withdraw from the conversation ("How much did the husband/wife withdraw?"; reserve-scored), on a scale from 1 (not at all) to 7 (extremely/a lot). Given that our hypotheses addressed how intimates deal with their own faults and failings and because the conversation topics chosen by the partners were most likely to address those individuals' faults and failings, we analyzed the problem-solving scores from the conversations in which the topics had been chosen by the partner (i.e., we predicted husbands' problem solving during the discussion of the topic chosen by the wife and vice versa). Observations of the five behaviors demonstrated acceptable internal consistency (coefficient alpha was .61 for husbands and .71 for wives), and thus, husbands' behaviors were averaged to create a mean index of husbands' constructive problem-solving behavior during discussions of wives' topics, and wives' behaviors were averaged to create a mean index of wives' constructive problem-solving behavior during discussions of husbands' topics, with higher scores indicating more constructive problem-solving behaviors. Approximately 20% of the discussions were coded by a second rater. Intraclass correlation coefficients (ICCs) indicated that our system was reliable (for husbands, ICC = .67; for wives, ICC = .81).

Self-Compassion Scale. Self-compassion was assessed 12 months after the conversations were recorded, again using the SCS (K. D. Neff, 2003; see footnote 2). Although the 12-month lag was not ideal, the high test–retest reliability of the measure (r=.93; K. D. Neff, 2003) indicates extremely high stability of self-compassion that suggests the levels of self-compassion captured 12 months after the discussions should have been similar to the levels of self-compassion present at the time of the discussions. Once again, this measure demonstrated high internal consistency. (Coefficient alpha was .94 for husbands and .94 for wives.)

Conscientiousness. Conscientiousness was again assessed using the Conscientiousness subscale of the Big Five Personality Inventory—Short (Goldberg, 1999). Once again, this measure demonstrated high internal consistency. (Coefficient alpha was .93 for husbands and .94 for wives.)

#### Results

**Descriptive statistics and preliminary analyses.** Descriptive statistics of the variables examined in Study 2 are presented in Table 3. As the table reveals, as in Study 1, husbands and wives reported self-compassion and conscientiousness scores that were slightly above the midpoint. Furthermore, both husbands and wives demonstrated relatively constructive problem-solving behavior, although wives demonstrated more constructive problem-solving behavior than did husbands, t(131) = 3.54, p < .01.

Correlations among the independent variables are also presented in Table 3. Several results are worth highlighting. First, among

Table 3
Descriptive Statistics and Correlations Among Independent
Variables in Study 2

Variable	1	2	3	M	SD
1. Self-compassion	.44**	.24*	.10	3.37	0.71
<ol><li>Conscientiousness</li></ol>	.07	01	.34**	36.39	6.65
3. Problem solving	.01	.13	.10	5.45	0.87
M	3.40	35.33	5.11		
SD	0.65	6.46	0.97		

*Note.* Descriptive statistics and correlations are presented above the diagonal for wives and below the diagonal for husbands; correlations between husbands and wives appear on the diagonal. Scores on self-compassion could have ranged from 1 to 5, conscientiousness from 10 to 50, and problem-solving behaviors from 1 to 7.

\* p < .05. \*\* p < .01.

husbands, neither self-compassion nor conscientiousness was significantly associated with constructive problem solving. Among wives, in contrast, although self-compassion was unrelated to constructive problem solving, conscientiousness was positively associated with constructive problem solving. Finally, husbands' and wives' levels of self-compassion were positively associated with one another, although their levels of conscientiousness and observations of their problem solving were unrelated.

Does conscientiousness moderate the association between self-compassion and observations of problem-solving behaviors during discussions? To address whether conscientiousness moderated the effects of self-compassion on observations of problem solving, we conducted separate multiple regressions for husbands and wives in which each spouse's problem-solving scores were regressed onto his or her mean-centered self-compassion scores, his or her mean-centered conscientiousness scores, and the interaction of those two variables.

Results of the analyses are reported in Table 4. Among wives, conscientiousness was positively associated with observations of problem-solving behaviors, but self-compassion and the Self-Compassion  $\times$  Conscientiousness interaction were not significantly associated with problem-solving behaviors. Among husbands, in contrast, consistent with predictions, the Self-Compassion  $\times$  Conscientiousness interaction was positively associated with observations of their problem-solving behaviors.

A plot of this interaction is depicted in Figure 2. Tests of the simple slopes revealed that self-compassion was significantly associated with less constructive problem-solving behavior among husbands one standard deviation below the mean on conscientiousness ( $\beta = -.47$ , p = .02) but trended toward being associated with more constructive problem-solving behaviors among husbands one standard deviation above the mean on conscientiousness ( $\beta = .30$ , p = .12).

Did self-compassion and conscientiousness differentially predict problem solving among men and women? We again conducted post hoc analyses to test for possible gender differences in the interactive effects of self-compassion and conscientiousness on behavior. Consistent with the idea that self-compassion and conscientiousness may differently interact to predict men's and women's motivation to address their interpersonal problems and thus their behavior, the interactive effect of husbands' self-compassion and

Table 4
Effects of Self-Compassion, Conscientiousness, and Their
Interaction on Problem-Solving Behaviors in Study 2

	Problem solving						
	Husbands $(F = 3.19^*)$			ives 3.69*)			
Measure	В	r	В	r			
$\begin{tabular}{ll} Self-compassion \\ Conscientiousness \\ Self-Compassion $\times$ Conscientiousness \\ \end{tabular}$	-0.20 $0.03$ $0.08$	13 .22* .30**	0.04 $0.04$ $-0.02$	.04 .30** 12			

*Note.* For the t test, df = 79 for husbands and 80 for wives. \* p < .05. \*\* p < .01.

conscientiousness on their problem-solving behaviors was significantly stronger than the corresponding interaction that was not significant among wives, t(163) = 2.72, p = .01.

#### Discussion

Results from the second study provide further evidence that men's self-compassion interacts with conscientiousness to predict their motivation to correct their interpersonal mistakes by demonstrating that self-compassion was associated with observations of more constructive problem-solving behavior during discussions of wives' problems among men who were high in conscientiousness but associated with observations of less constructive problemsolving behavior during discussions of wives' problems among men who were low in conscientiousness. However, as in Study 1, the interaction between wives' self-compassion and conscientiousness was not associated with their problem-solving behaviors during discussions of husbands' topics. In fact, consistent with the idea that women may experience additional sources of motivation that lead them to address their problems independent of their levels of self-compassion and conscientiousness, men demonstrated less constructive problem solving than women, and the interactive effects of self-compassion and conscientiousness on problem solving that emerged among men were significantly stronger than the corresponding interactive effects that did not emerge among women.

Nevertheless, several qualities of both Studies 1 and 2 limit conclusions. First, Studies 1 and 2 were correlational, obviating the ability to draw causal conclusions. Second, in Study 2, self-compassion was assessed after behavior. Although the high test-retest reliability of the SCS (r=.93; K. D. Neff, 2003) suggests that self-compassion is an extremely stable trait, an experimental procedure that manipulates self-compassion and subsequently assesses motivation and behavior would go further in demonstrating the causal effects of self-compassion.

# Study 3

In Study 3, we experimentally manipulated self-compassion to examine the causal effects of self-compassion on individuals' motivation to resolve their relationship problems and, given that such motivation should eventually manifest in better problem-

solving behaviors, their willingness to engage in accommodation behaviors. We hypothesized that self-compassion would predict greater motivation to resolve relationship problems and willingness to engage in accommodation behaviors among intimates high in conscientiousness, whereas self-compassion would predict less motivation and willingness to engage in accommodation behaviors among intimates low in conscientiousness. Furthermore, given the theoretical reasons to expect these interactive effects to emerge more strongly among men than among women and that the interactive effects emerging in Studies 1 and 2 emerged only among men and not among women, we once again tested whether these interactive effects would emerge more strongly among men than among women.

## Method

**Participants.** Participants were 88 undergraduate students (45 men) at the University of Tennessee who had a mean age of 19.34 years (SD = 1.67). All participants had been involved in a romantic relationship for at least 3 months (M = 15.41, SD = 14.53). Seventy-one (81%) identified as White or Caucasian, 10 (11%) identified as Black or African American, 2 (2%) identified as Asian American, and 5 (6%) identified as another race/ethnicity or two or more races/ethnicities.

**Procedure.** Participants were recruited through the university's online subject pool and were offered partial course credit for their participation in the study. Participants completed all tasks and

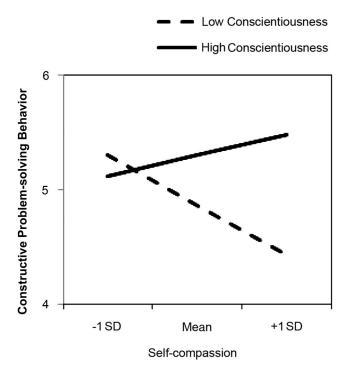


Figure 2. Interactive effects of men's self-compassion and conscientiousness on observations of men's problem-solving behaviors.

measures online at surveymonkey.com. First, they gave informed consent; second, they completed a measure of conscientiousness; third, they underwent a self-compassion manipulation; fourth, they completed a manipulation check; fifth, they completed measures of their motivation to correct interpersonal mistakes and willingness to accommodate.

#### Measures.

Conscientiousness. Conscientiousness was again assessed using the Conscientiousness subscale of the Big Five Personality Inventory—Short (Goldberg, 1999). Once again, this measure demonstrated acceptable internal consistency. (Coefficient alpha was .93 for husbands and .76 for wives.)

Self-compassion manipulation. Participants were instructed to come up with, imagine, and describe a situation in which (a) something terrible had happened to their partner, (b) their partner needed support, and (c) they failed to provide that support. Next, participants were randomly assigned to imagine responding to their hypothetical mistake with self-compassion or with selfcriticism. In the self-compassion condition, participants were asked to list the thoughts that would lead them to agree with one positively scored item from each of the three subscales of the SCS (K. D. Neff, 2003): (a) "What thoughts would lead you to keep your emotions in balance?", (b) "What thoughts would lead you to see your mistake as part of the human condition (the type of mistake all people make)?", and (c) "What thoughts would lead you to be understanding and patient of your mistake?" In the self-criticism condition, participants were asked to list the thoughts that would lead them to agree with one negatively scored item from each of the three subscales of the SCS: (a) "What thoughts would lead you to be consumed by feelings of inadequacy because of your mistake?", (b) What thoughts would lead you to feel like you are alone in making such a mistake (that others would not make similar mistakes)?", and (c) What thoughts would lead you to get down on yourself because of the mistake?"

*Manipulation check.* To determine whether our manipulation led participants to be more versus less self-compassionate, we administered the same (or similar) 6 items from the SCS (K. D. Neff, 2003) that were used in the manipulations. These items demonstrated acceptable internal consistency. (Coefficient alpha was .86 for husbands and .74 for wives.)

Motivation to correct interpersonal mistakes. Motivation to correct interpersonal mistakes was assessed using the same measure that was used in Study 1. Once again, this measure demonstrated acceptable internal consistency. (Coefficient alpha was .96 for men and .84 for women.)

Accommodation. The Voice subscale of Rusbult, Verette, Whitney, Slovik, and Lipkus's (1991) Accommodation Scale was used to assess participants' willingness to use positive, active behaviors to address relationship problems. This subscale requires participants to report their agreement with four items (e.g., "When my partner and I have problems, I discuss things with him/her"). Although the items are framed such that participants report on their general tendencies to engage in these behaviors, prior work has demonstrated that manipulations that influence these reports can reflect changes in actual behavior (e.g., Finkel & Campbell, 2001). These items demonstrated acceptable internal consistency. (Coefficient alpha was .89 for men and .79 for women.)

#### Results

**Descriptive statistics and preliminary analyses.** Descriptive statistics of the variables examined in Study 3 are presented in Table 5. As the table reveals, as in Studies 1 and 2, men and women reported conscientiousness scores that were slightly above the midpoint. Furthermore, both men and women reported relatively high motivation to correct their interpersonal mistakes, although women trended toward reporting greater motivation than men, t(86) = 1.51, p = .13. Also, although both men and women reported relatively high levels of willingness to engage in accommodation, women trended toward reporting more willingness to engage in accommodation than men, t(86) = 1.57, p = .12.

Correlations among the independent variables are also presented in Table 5. Several results are worth highlighting. First, among both men and women, accommodation and motivation to resolve relationship problems were positively correlated, suggesting that intimates who are motivated to correct their interpersonal mistakes are also likely to engage in the behaviors needed to do so. Second, conscientiousness was positively correlated with motivation to correct interpersonal mistakes and accommodation among women, but unrelated to motivation and accommodation among men.

**Manipulation checks.** Confirming the effectiveness of the manipulation, participants primed to think of themselves as self-compassionate reported higher levels of self-compassion than did participants primed to think of themselves as self-critical, t(86) = 2.11, p = .04. Notably, although the manipulation appeared to be less successful among women—for men, t(43) = 2.50, p = .02; for women, t(41) = 0.19, p = .85—men's and women's levels of self-compassion did not differ within each condition—for self-compassion condition, t(39) = 0.96, p = .35; for self-critical condition, t(45) = -1.80, p = .08—indicating the men and women within each condition reported similar levels of self-compassion.

Does conscientiousness moderate the effects of self-compassion on motivation to resolve relationship problems and accommodation? To address whether conscientiousness moderated the effects of condition (self-compassionate or self-critical) on motivation and accommodation, we conducted four separate multiple regressions in which each dependent variable (motivation and accommodation for either men or women) was regressed onto a dummy-coded condition score, mean-centered conscientiousness scores, and their interaction.

Table 5
Descriptive Statistics and Correlations Among Independent
Variables in Study 3

Variable	1	2	3	М	SD
Conscientiousness     Motivation     Accommodation     M     SD	.17 .05 34.64 10.63	.41** — .88** 5.19 1.63	.42** .67**  5.35 1.76	36.28 5.61 5.83	5.32 0.81 1.03

*Note.* Descriptive statistics and correlations are presented above the diagonal for wives and below the diagonal for husbands. Scores on conscientiousness could have ranged from 10 to 50, motivation from 1 to 7, and accommodation from 1 to 8.

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

**Motivation.** Results of the analyses regarding the motivation to correct interpersonal mistakes are presented in Table 6. Among women, as in Study 1, conscientiousness was positively associated with motivation. Also as in Study 1, the Self-Compassion  $\times$  Conscientiousness interaction was not significantly associated with women's motivation. Among men, consistent with predictions and the effects obtained in Study 1, the Self-Compassion  $\times$  Conscientiousness interaction was positively associated with motivation

A plot of this interaction is depicted in Figure 3A. Consistent with predictions, tests of the simple slopes revealed that the self-compassion manipulation predicted more motivation to correct interpersonal mistakes among men one standard deviation above the mean on conscientiousness ( $\beta = .51$ , p < .01) but less motivation to correct interpersonal mistakes among men one standard deviation below the mean on conscientiousness ( $\beta = -.69$ , p < .01).

Accommodation. Results of the analyses regarding accommodation are also reported in Table 6. Among women, conscientiousness predicted more accommodation. Yet again, the Self-Compassion  $\times$  Conscientiousness interaction was not significantly associated with accommodation among women. Among men, consistent with predictions, as well as with the findings from Study 2 and the findings regarding motivation reported above, the Self-Compassion  $\times$  Conscientiousness interaction was positively associated with accommodation.

A plot of this interaction is depicted in Figure 3B. Again consistent with predictions, tests of the simple slopes revealed that the self-compassion manipulation predicted more accommodation among men one standard deviation above the mean on conscientiousness ( $\beta = .47$ , p < .01) but predicted less accommodation among men one standard deviation below the mean on conscientiousness ( $\beta = -.49$ , p < .01).

Did self-compassion and conscientiousness differentially predict motivation and accommodation among men and women? We conducted post hoc analyses to test for possible gender differences in the interactive effects of self-compassion and conscientiousness on motivation and accommodation. Consistent with the idea that self-compassion and conscientiousness may differentially interact to predict men's and women's motivation and accommodation, the interactive effect of men's self-compassion and conscientiousness on motivation was significantly stronger than the corresponding interaction that was not significant

among women, t(84) = 2.60, p = .01. Likewise, the interactive effect that emerged between men's self-compassion and conscientiousness on accommodation was significantly stronger than the corresponding interaction that was not significant among women, t(84) = 3.74, p < .01.

#### Discussion

Study 3 provides further support for the prediction that selfcompassion interacts with conscientiousness to cause relationship outcomes among men by demonstrating that experimental manipulations in self-compassion interacted with conscientiousness to predict men's motivation to correct their interpersonal mistakes and to engage in accommodation behaviors. Specifically, consistent with the findings from Studies 1 and 2, self-compassion caused greater motivation to correct interpersonal mistakes and reports of greater willingness to engage in accommodation behaviors among men who were high in conscientiousness but less motivation to correct interpersonal mistakes and less willingness to engage in accommodative behaviors among men low in conscientiousness. In contrast, but consistent with the findings from Studies 1 and 2, self-compassion and conscientiousness did not interact to predict either motivation or accommodation among women. In fact, conscientiousness was positively associated with women's motivation to resolve their relationship problems and accommodation behaviors, regardless of their levels of self-compassion. Furthermore, consistent with Studies 1 and 2, the interactive effects between self-compassion and conscientiousness that emerged among men were significantly stronger than the corresponding interactive effects that were not significant among women.

# Meta-Analysis of Studies 1 and 3

Nevertheless, the difference between men's and women's motivation to correct their interpersonal mistakes in both Studies 1 and 3 did not quite reach statistical significance. To provide support for the theoretical rationale that self-compassion did not interact with conscientiousness to predict relationship outcomes among women because women are more motivated than men to preserve their relationships for other reasons (e.g., cultural and/or biological sources of such motivation), we maximized our power to detect such a difference by conducting a meta-analysis of the

Table 6
Effects of Self-Compassion, Conscientiousness, and Their Interaction on Motivation and Accommodation in Study 3

		Мо	tivation			Accommodation			
		Husbands $(F = 10.67^{**})$		Wives $(F = 2.68)$		Husbands $(F = 10.01^{**})$		Wives $(F = 4.18^{**})$	
Measure	В	r	В	r	В	r	В	r	
Self-compassion Conscientiousness Self-Compassion × Conscientiousness	0.07 0.02 0.10	.05 .16 .63**	-0.04 0.06 0.01	05 .39** .06	-0.02 0.00 0.11	01 .00 .64**	0.25 0.08 -0.01	.26 .40** 08	

*Note.* For the t test, df = 44 for men's motivation and accommodation and 42 for women's motivation and accommodation. \*\* p < .01.

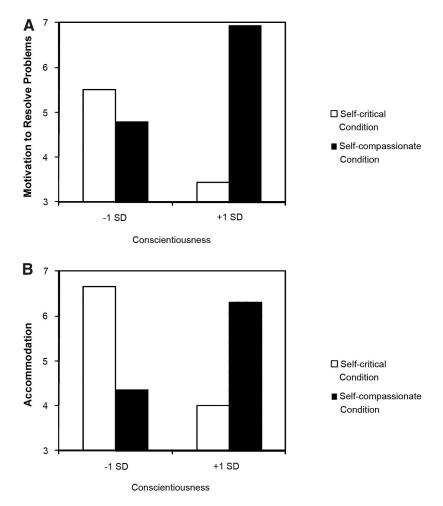


Figure 3. Interactive effects of men's self-compassion and conscientiousness on men's motivation (A) and accommodation (B).

difference between men's and women's motivation to correct their interpersonal mistakes reported in Studies 1 and 3.

# Method

First, for each study, we regressed men's and women's self-reported motivation to correct their interpersonal mistakes onto a dummy-coded gender variable, self-compassion, and conscientiousness, then used the beta of that dummy-coded gender variable as a measure of the effect size of the gender difference in motivation for each study. Next, we weighted each effect size by the inverse of its variance. We then computed the mean effect size across the two studies by dividing the sum of the two weighted effect sizes by the sum of their variance weights and computed the standard error of that mean effect size by taking the square root of the inverse of those summed variance weights. Finally, we obtained a z statistic by dividing that mean effect size by that standard error.

# **Results**

Results of the meta-analysis supported the idea that sources other than self-compassion and conscientiousness (i.e., for cultural

or biological reasons) lead women to be more motivated than men to correct their interpersonal mistakes. Specifically, across Studies 1 and 3, women were more motivated to correct their interpersonal mistakes than were men, controlling for self-compassion and conscientiousness (z = 2.25, p = .01).

## Discussion

Consistent with the idea that women may be more motivated than men to preserve their relationships and correct their interpersonal mistakes for reasons other than self-compassion and conscientiousness (e.g., cultural and/or biological sources of the motivation to correct interpersonal mistakes), a meta-analysis of the motivation data described in Studies 1 and 3 revealed that women reported more motivation to resolve their interpersonal mistakes than men, controlling for self-compassion and conscientiousness. This gender difference may explain the gender difference in the implications of self-compassion for relationships that emerged across Studies 1–3. That is, it may be that the implications of men's self-compassion depend on their levels of conscientiousness because more self-compassionate men need an additional source of motivation before correcting their interpersonal mistakes, whereas

the implications of women's self-compassion do not depend on their levels of conscientiousness because they are more motivated than men to correct their interpersonal mistakes regardless of their levels of self-compassion and conscientiousness.

Nevertheless, all three studies left several important questions unanswered. First, it remained unclear whether conscientiousness moderates the effects of self-compassion on the severity of the problems men face in their relationships. Given that selfcompassion and conscientiousness interact to predict men's motivation and behavior, they should interact to predict the severity of the problems that they experience over the course of their relationships. Second, these studies did not address the implications of self-compassion for intimates' ultimate evaluations of their relationship. If self-compassion is actually harmful to the relationships of men low in conscientiousness, the implications of their selfcompassion for their relationship functioning should translate into an interactive effect on relationship satisfaction. Alternatively, perhaps the intrapersonal benefits of self-compassion (e.g., enhanced self-esteem) are so powerful that they help even selfcompassionate men who are low in conscientiousness maintain positive evaluations of their relationships despite the problems that may accumulate from the lack of motivation to address those problems.

# Study 4

Study 4 examined whether self-compassion and conscientiousness interact to predict changes in the relationship outcomes over the first several years of marriage. Specifically, a different sample of newlywed couples than the one described in Study 2 reported the severity of their relationship problems and their overall satisfaction with the relationship every 6 to 8 months for the first 5 years of their marriages. In line with the findings that selfcompassion predicts more motivation to correct interpersonal mistakes (Studies 1 and 3) and more relationship-maintenance behaviors (Studies 2 and 3) among men who are high in conscientiousness but less motivation and fewer maintenance behaviors among men low in conscientiousness, we predicted that self-compassion would predict less severe problems over time among spouses high in conscientiousness but predict more severe problems over time among spouses low in conscientiousness. Furthermore, given that changes in problems are inversely associated with changes in satisfaction (McNulty et al., 2008), we additionally predicted that self-compassion would predict higher levels of satisfaction over time among spouses high in conscientiousness but would predict lower levels of satisfaction over time among spouses low in conscientiousness and that those effects would be mediated by the predicted changes in problem severity. Given the theoretical reasons to expect these interactive effects to emerge more strongly among men than among women and that the interactive effects that emerged in Studies 1-3 emerged only among men and not among women, we again tested for gender differences in these interactive effects.

#### Method

**Participants.** Participants were drawn from a broader study of 72 newlywed couples who reported their marital satisfaction and the severity of their marital problems up to eight times over the

first 5 years of marriage.<sup>3</sup> The 51 husbands and 50 wives examined here were the only ones who completed the self-compassion measure, which was administered 3 years after baseline.<sup>4</sup> Participants were recruited through the same means as they were in Study 2 and had to meet the same eligibility requirements, with the one exception that couples with children were included.

At baseline, husbands were 27.92 years old (SD=4.39) and had received 15.15 years (SD=2.48) of education. Ninety percent were Caucasian, and 84% were Christian. Seventy-five percent were employed full time, and 11% were full-time students. Wives were 27.40 years old (SD=6.10) and had received 15.72 years (SD=2.25) of education. Ninety-six percent were Caucasian, and 85% were Christian. Forty-nine percent were employed full time, and 26% were full-time students.

Procedure. At baseline, couples were mailed a packet of questionnaires that included measures of conscientiousness, marital problem severity, and marital satisfaction. Couples completed those questionnaires at home and brought them to a laboratory session. At approximately 6- to 8-month intervals, couples were recontacted and mailed a packet of questionnaires that contained the same measures of problem severity and marital satisfaction, along with a postage-paid return envelope and a letter reminding them to complete the questionnaires separate from one another. During the sixth assessment, approximately 3 years into the study, the packets also contained the self-compassion measure (see footnote 4). Couples were paid \$80 for their baseline assessment and \$50 for participating in each subsequent assessment. Analyses are based on up to eight assessments of marital satisfaction and marital problem severity.

#### Measures.

Self-Compassion Scale. Self-compassion was again assessed using the SCS (K. D. Neff, 2003). Although the scale was administered in the middle of the study, the extremely high test–retest reliability (r=.93; K. D. Neff, 2003) suggests that the levels of self-compassion reported at that time should be similar to the levels of self-compassion that would have been obtained at baseline. Once again, this measure demonstrated high internal consistency. (Coefficient alpha was .89 for husbands and .90 for wives.)

Conscientiousness. Conscientiousness was again assessed using the Conscientiousness subscale of the Big Five Personality Inventory—Short at Time 1 (Goldberg, 1999). This measure demonstrated high internal consistency. (Coefficient alpha was .87 for husbands and .73 for wives.)

<sup>&</sup>lt;sup>3</sup> Although data from this sample have been described in several articles (Baker & McNulty, 2010; Fisher & McNulty, 2008; Frye, McNulty, & Karney, 2008; Little et al., 2010; Luchies, Finkel, McNulty, & Kumashiro, 2010; McNulty, 2008a, 2008b; McNulty & Fisher, 2008; McNulty & Hellmuth, 2008; McNulty & Russell, 2010), there is little overlap between the variables examined in those studies and the variables examined here. The one exception is that McNulty and Russell (2010) described the same trajectories of marital satisfaction. Notably, whereas the current analyses only describe the trajectories of the 51 husbands and 50 wives who reported self-compassion, McNulty and Russell reported the trajectories of all 72 husbands and wives in this sample.

<sup>&</sup>lt;sup>4</sup> We did not assess self-compassion until Wave 6 because that was when we first became interested in the implications of self-compassion for close relationships.

**Marital problems.** The severity of spouses' marital problems was assessed at every wave using a modified version of the Inventory of Marital Problems (Geiss & O'Leary, 1981). This measure asks participants to rate 19 potential problems (e.g., trust, jealousy, sex, children, money management, household management) on an 11-point Likert-type scale ( $1 = not \ a \ problem$ ,  $11 = major \ problem$ ). Participants' reports were averaged to create a mean index of problem severity, with higher scores indicating more severe problems

Marital satisfaction. Marital satisfaction was also assessed at every wave using a version of the Semantic Differential (SMD; Osgood, Suci, & Tannenbaum, 1957). The SMD is a 15-item measure that asks participants to evaluate their relationship according to sets of opposing adjectives (e.g., good–bad, pleasant–unpleasant) on a 7-point scale. Thus, scores on the SMD could range from 15 to 105, with higher scores indicating greater satisfaction with the marriage. This measure demonstrated high internal consistency. (Across all phases, coefficient alpha was above .90 for both husbands and wives.)

# Results

**Descriptive statistics and preliminary analyses.** Descriptive statistics of the independent variables are presented in Table 7. As the table reveals, husbands and wives reported self-compassion and conscientiousness scores that were slightly above the midpoint. Paired-samples t tests revealed that wives reported higher levels of conscientiousness than did husbands, t(71) = 2.10, p = .04, but also that husbands and wives reported similar levels of self-compassion, t(49) = 0.16, p = .87.

Correlations among the independent variables are also presented in Table 7. Several results are worth highlighting. First, among husbands, self-compassion was unrelated to initial marital problems or satisfaction, but conscientiousness was negatively associated with initial marital problems and positively associated with initial marital satisfaction. Second, among wives, self-compassion was negatively associated with initial marital problems but was unrelated to initial marital satisfaction, and wives' conscientiousness was negatively associated with initial marital problems and positively associated with initial marital satisfaction. Husbands' and wives' reports of initial problem severity and initial marital satisfaction were

positively correlated, but their reports of self-compassion and conscientiousness were unrelated.

Describing trajectories of marital satisfaction. Because we were interested in examining the effects of self-compassion and conscientiousness on the development of marital satisfaction over time, the dependent variable in the first analysis was the trajectory of marital satisfaction over the first 4 years of marriage. Thus, we used growth curve analysis (Bryk & Raudenbush, 1987) to estimate the trajectory of satisfaction for 51 husbands and 50 wives who reported their self-compassion at Wave 6 using the HLM 6.08 computer program (Bryk, Raudenbush, & Congdon, 2004). Specifically, the following model was estimated at Level 1, where husbands' and wives' parameters were estimated separately but simultaneously using a multivariate technique suggested by Raudenbush, Brennan, and Barnett (1995):

$$Y_{ij}$$
 (marital satisfaction)
$$= \pi_{1j} \text{ (dummy code for husbands)}$$

$$+ \pi_{2j} \text{ (dummy code for wives)}$$

$$+ \pi_{3j} \text{ (husbands' time of assessment)}$$

$$+ \pi_{4j} \text{ (wives' time of assessment)} + e_{j}. \tag{1}$$

Accordingly,  $Y_{ij}$  is the marital satisfaction of individual j at Time i,  $\pi_{1j}$  is the marital satisfaction of husband j at Time 0 (i.e., the initial satisfaction for husband j),  $\pi_{2j}$  is the marital satisfaction of wife j at Time 0 (i.e., the initial satisfaction for wife j),  $\pi_{3j}$  is the rate of linear change in marital satisfaction of husband j,  $\pi_{4j}$  is the rate of linear change in marital satisfaction of wife j, and  $e_j$  is the residual variance in repeated measurements for spouse j. This model can be understood as a within-subjects regression of an individual's marital satisfaction scores onto time of assessment, where time is defined as the wave of data collection and husbands and wives are examined in the same model.

Mean estimates of the growth curve parameters estimated by Equation 1 indicated that, on average, individuals tended to report relatively high levels of satisfaction initially (husbands' intercept B=94.31, wives' intercept B=94.53), which declined significantly over time, husbands' slope B=-0.62, t(49)=-2.95, p<0.01, r=-0.39; wives' slope B=-0.60, t(45)=2.95, p<0.01, r=-0.39 (see footnote 3). Nevertheless, according to the standard

Table 7
Descriptive Statistics and Correlations Among Independent Variables in Study 4

Variable	1	2	3	4	M	SD
1. Self-compassion	04	.20	.13	42**	3.12	0.59
2. Conscientiousness	.03	.11	.24*	33**	36.78	6.55
3. Initial marital satisfaction	.18	.26*	.37**	61**	95.82	10.75
4. Initial marital problems	14	39**	60**	.38**	2.96	1.18
M	3.12	34.76	93.26	3.07		
SD	0.55	5.58	12.53	1.47		

*Note.* Descriptive statistics and correlations are presented above the diagonal for wives and below the diagonal for husbands; correlations between husbands and wives appear on the diagonal. Scores on self-compassion could have ranged from 1 to 5, conscientiousness from 10 to 50, marital satisfaction from 7 to 105, and marital problems from 1 to 11.

p < .05. \*\* p < .01.

deviations of these parameter estimates (SD of husbands' intercepts = 8.44, SD of husbands' slopes = 0.95; SD of wives' intercepts = 8.83, SD of wives' slopes = 0.88), there was substantial between-subjects variability in all parameters of these trajectories, suggesting that some spouses began the relationship more or less satisfied than others and that some spouses experienced more or less change in their satisfaction than others. The first aim of the current study was to examine whether variability in changes in satisfaction could be explained by the interaction between self-compassion and conscientiousness.

Did conscientiousness moderate the association between self-compassion and changes in satisfaction? To test the hypothesis that self-compassion interacts with conscientiousness to predict changes in satisfaction over time, we regressed the intercept and slope parameters estimated by Equation 1 onto mean-centered self-compassion scores, mean-centered conscientiousness scores, and the Self-Compassion × Conscientiousness interaction in the second level of the multilevel model.

Associations between these variables and initial satisfaction, that is, the intercepts of the trajectories estimated by Equation 1, are reported in Table 8. As can be seen there, among both husbands and wives, neither self-compassion, nor conscientiousness, nor their interaction was significantly associated with initial satisfaction among either husbands or wives.

Associations between these variables and changes in satisfaction, that is, the slopes of the trajectories estimated by Equation 1, are also reported in Table 8. As can be seen there, wives' selfcompassion was positively associated with changes in satisfaction over time, suggesting that self-compassionate wives reported more stable satisfaction over time. In fact, women who were one standard deviation more self-compassionate than the mean demonstrated no declines in their relationship satisfaction over time (B =-0.13, p = .49). Furthermore, as can be seen, this effect did not depend on wives' levels of conscientiousness. Among husbands, in contrast, the Self-Compassion × Conscientiousness interaction significantly predicted changes in satisfaction over time. Notably, consistent with the gender differences demonstrated in Studies 1–3, this interactive effect was stronger than the nonsignificant interactive effect that emerged among wives,  $\chi^2(1, N = 50) =$ 4.12, p = .04.

A plot depicting this interactive effect is depicted in Figure 4A. Consistent with predictions, tests of the simple slopes revealed that self-compassion was positively associated with changes in marital

satisfaction among men one standard deviation above the mean on conscientiousness (B=0.81, p<.05) but negatively associated with changes in marital satisfaction among men one standard deviation below the mean on conscientiousness (B=-0.96, p=.05).

**Describing trajectories of marital problems.** Our next set of analyses examined the predicted mechanism of this effect—changes in problem severity over time. Specifically, we predicted that the lack of motivation and relationship-maintenance behaviors demonstrated in Studies 1–3 among men who were high in self-compassion and low in conscientiousness would lead to greater problem severity over time that would account for the greater declines in satisfaction these men experienced in the current study.

To test this hypothesis, we computed asymmetric confidence intervals for the mediated effect, following the procedures described by MacKinnon, Fritz, Williams, and Lockwood (2007). This procedure required that we conduct two additional sets of analyses. First, we estimated the interactive effects of self-compassion and conscientiousness on the expected mediator—changes in problems—by repeating the analyses we conducted on changes in satisfaction described above, except this time substituting reports of problem severity for reports of marital satisfaction. Second, we estimated the effect of changes in problems on changes in satisfaction, controlling for the interactive effects of self-compassion and conscientiousness.

Before addressing these questions, however, we first described the trajectory of problems as we described the trajectory of satisfaction by estimating the following Level 1 model:

$$Y_{ij}$$
 (marital problem severity)
$$= \pi_{1j} \text{ (dummy code for husbands)}$$

$$+ \pi_{2j} \text{ (dummy code for wives)}$$

$$+ \pi_{3j} \text{ (husbands' time of assessment)}$$

$$+ \pi_{4j} \text{ (wives' time of assessment)} + e_j, \qquad (2)$$

where  $Y_{ij}$  is the marital problem severity of individual j at Time i,  $\pi_{1j}$  is the marital problem severity of husband j at Time 0 (i.e., the initial problem severity for husband j),  $\pi_{2j}$  is the marital problem severity of wife j at Time 0 (i.e., the initial problem severity for

Table 8

Effects of Self-Compassion, Conscientiousness, and Their Interaction on Trajectory of Marital Satisfaction in Study 4

		Intercept				Slope			
	Husbands		Wives		Husbands		Wives		
Measure	В	r	В	r	В	r	В	r	
Self-compassion Conscientiousness Self-Compassion × Conscientiousness	$     \begin{array}{r}       1.46 \\       0.09 \\       -0.80     \end{array} $	.06 .08 20	0.57 $0.18$ $-0.01$	.04 .14 01	-0.08 $0.00$ $0.16$	.04 .01 .38**	0.92 $-0.03$ $0.01$	.42** .22 .05	

*Note.* For the t test, df = 46 for all effects.

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

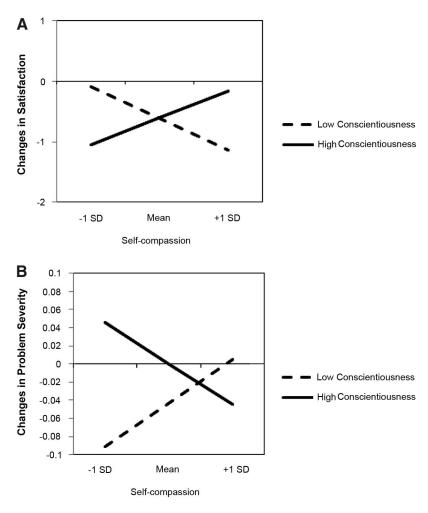


Figure 4. Interactive effects of men's self-compassion and conscientiousness on changes in men's marital satisfaction (A) and changes in the severity of men's marital problems (B).

wife j),  $\pi_{3j}$  is the rate of linear change in marital problem severity of husband j,  $\pi_{4j}$  is the rate of linear change in marital problem severity of wife j, and  $e_j$  is the residual variance in repeated measurements for spouse j.

Mean estimates of the growth curve parameters estimated by Equation 2 indicated that, on average, individuals tended to report levels of initial problem severity that were relatively low but significantly different from zero, husbands' intercept B =3.05, SE = .19, t(49) = 15.92, p < .001; wives' intercept B = .0012.95, SE = .17, t(49) = 17.63, p < .001, and remained stable over time, on average, husbands' slope B = -0.02, SE = .02, t(49) = -0.75, ns; wives' slope B = 0.02, SE = .02, t(49) =0.80, ns. Nevertheless, according to the standard deviations of these parameter estimates (SD of husbands' intercepts = 1.21, SD of husbands' slopes = 0.11; SD of wives' intercepts = 1.02, SD of wives' slopes = 0.10), there was substantial betweensubjects variability in all parameters of these trajectories, suggesting that some spouses began the relationship with more or less severe problems than others and that some spouses experienced more or less change in their problems than others. The goal of our second primary analysis was to determine whether

the variability in changes in husbands' problem severity mediated the interactive effects of their self-compassion and conscientiousness on changes in their marital satisfaction.

Were self-compassion and conscientiousness associated with **changes in problems over time?** Next, we conducted the first set of analyses necessary to compute the asymmetric confidence intervals that estimated this mediated effects. Specifically, we tested the hypothesis that husbands' self-compassion interacts with conscientiousness to predict changes in problem severity over time by regressing the intercept and slope parameters estimated by Equation 2 onto mean-centered self-compassion scores, mean-centered conscientiousness scores, and the Self-Compassion × Conscientiousness interaction. Associations between these variables and initial problems, that is, the intercepts of the trajectories estimated by Equation 2, are reported in Table 9. As can be seen, for husbands, the Self-Compassion  $\times$ Conscientiousness interaction significantly predicted initial problem severity. For wives, the Self-Compassion × Conscientiousness interaction did not significantly predict initial problem severity. However, wives' self-compassion was negatively associated with initial problem severity, suggesting that self-

		Inter	rcept			Slope			
	Hus	Husbands		Wives		Husbands		ves .	
Measure	В	r	В	r	В	r	В	r	
Self-compassion	-0.52	28*	-0.66	39**	0.00	.01	-0.04	.21	
Conscientiousness	-0.09	51**	-0.02	20	0.00	.22	0.00	.17	
Self-Compassion × Conscientiousness	0.13	.37**	-0.00	01	-0.02	33*	-0.00	15	

Table 9

Effects of Self-Compassion, Conscientiousness, and Their Interaction on Trajectory of Marital Problems in Study 4

*Note.* For the t test, df = 46 for all effects. \* p < .05. \*\* p < .01.

compassionate wives were more likely to report less severe marital problems.

Associations between these variables and changes in problems are also reported in Table 9. As can be seen there, as was the case regarding changes in satisfaction, the Self-Compassion  $\times$  Conscientiousness interaction did not significantly predict changes in problem severity among wives. Among husbands, in contrast, the Self-Compassion  $\times$  Conscientiousness interaction significantly predicted changes in problem severity over time. This interactive effect trended toward being stronger among husbands than wives,  $\chi^2(1, N = 50) = 2.39, p = .12$ .

A plot depicting this interactive effect is depicted in Figure 4B. Tests of the simple slopes revealed that self-compassion was marginally significantly negatively associated with changes in problem severity among men one standard deviation above the mean on conscientiousness (B = -0.81, p = .07) but trended toward being significantly positively associated with changes in problem severity among men one standard deviation below the mean on conscientiousness (B = 0.09, p = .11).

Did changes in problems mediate the effects of self-compassion and conscientiousness on changes in satisfaction? Next, we conducted the second set of analyses necessary to compute the asymmetric confidence intervals to demonstrate that changes in problems mediated the interactive effects of husbands' self-compassion and conscientiousness on changes in satisfaction. Specifically, we tested the hypothesis that changes in husbands' problems predicted changes in husbands' satisfaction, controlling for the interactive effects of self-compassion and conscientiousness using the following Level 1 model:

# $Y_{ij}$ (marital satisfaction)

- =  $\pi_{1j}$  (dummy code for husbands)
  - +  $\pi_{2j}$  (dummy code for wives)
  - +  $\pi_{3j}$  (husbands' time of assessment)
  - +  $\pi_{4i}$  (wives' time of assessment)
  - +  $\pi_{5i}$  (husbands' problems)

$$+ \pi_{6i}$$
 (wives' problems)  $+ e_{i}$ . (3)

Indeed, changes in husbands' problems were associated with changes in husbands' satisfaction, t(49) = -7.01, p < .01.

Finally, we multiplied these two effects together to obtain an estimate of the mediated effect for husbands (B=0.08) and computed the 95% confidence interval [.01, .15] that indicated that the mediated effect was significant. Notably, consistent with the prediction that changes in problems accounted for the interactive effects of husbands' self-compassion and husbands' conscientiousness on changes in husbands' satisfaction, once the association between marital problems and satisfaction was controlled, the interaction between husbands' self-compassion and conscientiousness was no longer associated with changes in marital satisfaction,  $t(46)=1.01,\,p=.32.$ 

## **General Discussion**

# Study Rationale and Summary of Results

Should intimates respond to their interpersonal mistakes and shortcomings with self-compassion or with self-criticism? The four studies described here provide consistent evidence that the answer to this question depends on those intimates' levels of conscientiousness and gender. Regarding the moderating role of conscientiousness, more self-compassion was associated with greater motivation to correct interpersonal mistakes, observations of more constructive behavior while resolving their wives' relationship problems, reports of more accommodation, and fewer declines in marital satisfaction that were mediated by changes in problem severity among men high in conscientiousness but was associated with less motivation to resolve relational problems, observations of less constructive problem-solving behavior, reports of less accommodation, and greater declines in marital satisfaction that were mediated by changes in problem severity among men low in conscientiousness. Regarding the moderating role of gender, the interactive effects of self-compassion and conscientiousness that emerged among men were either significantly or almost significantly stronger than the corresponding interactive effects that failed to emerge among women in every analysis. Instead, self-compassion was associated with greater motivation to resolve problems and fewer declines in relationship satisfaction among women, regardless of their levels of conscientiousness. Similarly, conscientiousness was associated with greater motivation to resolve relationship problems, observations of more constructive problem-solving behavior, and more accommodation among women, regardless of their levels of self-compassion.

# **Theoretical and Practical Implications**

The current findings have several theoretical and practical implications. First, these findings have important implications for an understanding of the sources of men's and women's motivation to correct their interpersonal mistakes. Among men, less selfcompassion, or more self-criticism, appears to be one important source of such motivation. Specifically, men who lacked dispositional motivation to correct their mistakes and who were selfcritical demonstrated higher levels of motivation to correct their interpersonal mistakes, thus engaged in greater maintenance behaviors, and thus experienced fewer problems and more satisfaction in their relationships than did men who lacked dispositional motivation to correct their mistakes and who were selfcompassionate. As predicted based on the principles of Leary et al.'s (1995) sociometer model, the increased motivation of these self-critical men may have been driven by the low levels of self-esteem that likely resulted from their self-criticism (Leary et al., 2007). Accordingly, researchers may need to reconceptualize their understanding of the implications of self-esteem for relationships. Specifically, although existing theory posits that high levels of self-esteem should benefit relationships (e.g., Murray, Holmes, & Collins, 2006) and although cross-sectional studies have indeed demonstrated positive correlations between self-esteem and positive relationship outcomes like relationship satisfaction (Murray et al., 1996a) and negative correlations between self-esteem and negative relationship outcomes like problem severity (e.g., Hendrick et al., 1988), such benefits may be short-lived. Given that high levels of self-esteem may reduce people's motivation to address their interpersonal mistakes, high levels of self-esteem may be detrimental to relationships over time by allowing problems to accumulate and satisfaction to diminish, at least among men who lack other sources of motivation to address their interpersonal mistakes. Future research may benefit by addressing this possibility directly.

Women, in contrast, were more motivated to address their relationship problems than were men and more likely to engage in maintenance behaviors than men, regardless of their levels of self-compassion or conscientiousness. This gender difference is consistent with theoretical perspectives that posit women have more reasons to be motivated to maintain their relationships than men (e.g., access to resources; Buss & Kenrick, 1998; Eagly & Wood, 1999) and with empirical research (e.g., Del Giudice, 2009; Gottman, 1994; Rusbult, 1987). Furthermore, self-compassion was positively associated with women's motivation to resolve their interpersonal mistakes. One reason for this positive main effect may be that self-compassion actually buffers women against the higher levels of stress that may result from their higher desires to maintain their relationships, just as it appeared to buffer highconscientious men against the potentially stressful implications of their high levels of achievement motivation. Indeed, selfcompassion demonstrated a main effect on the trajectory of women's relationship satisfaction, such that more self-compassionate women experienced no declines in their satisfaction over the first 5 years of their marriages. This effect is rather remarkable given that the very large majority of spouses experience declines in satisfaction over the first few years of marriage (Karney & Bradbury, 1997).

Second, the interactive effects of self-compassion and intrapersonal motivation (i.e., conscientiousness) that emerged here have implications for theories of motivation and research on performance more generally. Specifically, even individual accomplishments that occur in other domains (e.g., academic, athletic, or occupational) may reflect an underlying motivation to be accepted (see Baumeister & Leary, 1995). Accordingly, based on principles of sociometer theory (Leary et al., 1995), a loss of self-esteem due to mistakes in any domain may motivate people to improve their performance in that domain. If so, self-compassion may undermine such motivations and thus be detrimental for performance if not supplemented by other sources of the motivation to achieve. For example, although self-compassion may benefit academic, athletic, and job performance among people already high in achievement motivation, it may hurt performance among people low in achievement motivation. Furthermore, given that women may not experience increased cultural and/or biological motivation in some such domains, the gender differences in the interactive effects of selfcompassion and conscientiousness that emerged here may not emerge in other domains. In fact, in domains in which men may encounter greater cultural and/or biological sources of the motivation to achieve than do women (e.g., athletic, occupation), the interactive effects of self-compassion and intrapersonal motivation may reverse. Future research may benefit by examining these possibilities.

Third, these results highlight a potential drawback of positive thinking in general. The supposed value of positive thinking has been consistently promoted in bestselling books such as Norman Vincent Peale's (1952) classic The Power of Positive Thinking and Rhonda Byrne's (2006) more recent The Secret. The benefits of positivity are also central to various psychological theories, such as Taylor and Brown's (1988) theory of positive illusions and Scheier and Carver's (1992) theory of optimism, and to the positive psychology movement (see Seligman & Csikszentmihalyi, 2000). The results from the current studies join others in challenging the universality of such benefits, however, by demonstrating that the effects of various positive thoughts depend on the context in which those thoughts occur (see McNulty, 2010). For instance, although forgiveness has been associated with numerous positive outcomes on average (for a review, see Fincham, Hall, & Beach, 2006), several studies have demonstrated that forgiveness has negative implications for spouses married to partners who frequently behave negatively (Luchies et al., 2010; McNulty, 2008a).

Finally, the current findings also have important implications for interventions designed to treat and prevent marital distress. Although many clinical interventions (e.g., Ayres, 1988; Seligman, Rashid, & Parks, 2006; Taylor, Kemeny, Reed, Bower, & Gruenewald, 2000) and self-help books (e.g., Altiero, 2007; McQuaig, 1986) espouse the universal benefits of positive thinking, the current findings corroborate recent claims that practitioners need to consider the specific client and specific problem before selecting or utilizing a given therapeutic technique (American Psychological Association Presidential Task Force on Evidence-Based Practice, 2006; McNulty, 2010; Roth & Fonagy, 2005). In particular, the current work demonstrates that, whereas positive thoughts about the self may benefit the relationships of women and conscientious men, positive thoughts about the self may remove important motivation for men who lack more dispositional motivations to correct their interpersonal mistakes. Accordingly, interventions may benefit by teaching less conscientious men to be more critical of themselves.

# **Study Strengths and Limitations**

Several strengths of the current research enhance our confidence in the results reported here. First, the overall pattern of results replicated across four independent samples with conceptually similar but empirically distinct outcome measures, reducing the likelihood that the results were unique to sample or operationalization of the dependent variable. Second, the results replicated across individuals in varying stages of relationships, from dating university students to newlywed couples, ensuring that the results obtained were not unique to individuals at certain stages in their relationships. Third, Study 2 demonstrated the effects of selfcompassion on observed, rather than self-reported, behavior, reducing the likelihood that sentiment override (Weiss, 1980) can account for the results reported here. Fourth, Study 3 experimentally manipulated self-compassion, enhancing our confidence in the role of self-compassion in causing motivation and behavior. Finally, Study 4 used a multiwave, longitudinal design that assessed satisfaction every 6 months for a total of eight assessments and demonstrated the mechanism through which men's selfcompassion and conscientiousness interact to predict changes in relationship satisfaction—changes in the severity of relationship problems.

Nevertheless, several factors limit the interpretation of these results until they can be replicated and extended. First, although self-compassion and conscientiousness may be relatively stable, the extent to which they are expressed may vary from situation to situation (see Mischel & Shoda, 1995) and thus may vary within individuals over time. The current studies did not address such within-person change. Future research may thus benefit by examining whether the between-person differences that emerged in these studies emerge within people as their levels of selfcompassion or conscientiousness vary over time. Second, although Study 3 employed an experimental methodology that demonstrated the causal implications of self-compassion, that study did not use a control group, making it difficult to know whether the effects that emerged were due to high versus neutral levels of self-compassion or high versus neutral levels of self-criticism. Third, none of the studies addressed whether the implications of self-compassion for men's motivation to correct their interpersonal mistakes vary by the severity of those mistakes. Given that failing to address problems may only be detrimental to relationship to the extent that those problems are frequent or severe (see McNulty et al., 2008; McNulty & Russell, 2010), future research may benefit by addressing this issue as well. Finally, although all four studies demonstrated a gender difference in the interactive effects of self-compassion and conscientiousness, none of the studies examined the mechanism of these gender differences. Given that women did demonstrate more motivation to correct their interpersonal mistakes, as would be expected due to the additional cultural and/or biological sources of that motivation, future research may benefit from directly examining if these additional sources of motivation account for the gender differences observed in these studies.

# Conclusion

Although responding to interpersonal mistakes with self-compassion can lead people to experience immediate emotional benefits by also making them feel socially accepted despite such mistakes, self-compassion may leave people feeling less interpersonally motivated to correct their mistakes. Accordingly, the four studies described here indicate that whether self-compassion benefits or harms relationships depends on the presence versus absence of more stable sources of the motivation to correct interpersonal mistakes. Whereas self-compassion benefited the relationships of women and conscientious men, self-compassion harmed the relationships of less conscientious men. As such, theoretical descriptions of the interpersonal implications of self-promoting thoughts may be most complete to the extent that they consider the presence versus absence of stable sources of the motivation to correct interpersonal mistakes.

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