Self-Compassion Increases Self-Improvement Motivation

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Abstract

Can treating oneself with compassion after making a mistake increase self-improvement motivation? In four experiments, the authors examined the hypothesis that self-compassion motivates people to improve personal weaknesses, moral transgressions, and test performance. Participants in a self-compassion condition, compared to a self-esteem control condition and either no intervention or a positive distraction control condition, expressed greater incremental beliefs about a personal weakness (Experiment 1); reported greater motivation to make amends and avoid repeating a recent moral transgression (Experiment 2); spent more time studying for a difficult test following an initial failure (Experiment 3); exhibited a preference for upward social comparison after reflecting on a personal weakness (Experiment 4); and reported greater motivation to change the weakness (Experiment 4). These findings suggest that, somewhat paradoxically, taking an accepting approach to personal failure may make people more motivated to improve themselves.

Keywords

self-compassion, self-improvement, motivation, effort, self-esteem

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Self-compassion is seen as an especially adaptive self-attitude due to its positive association with multiple aspects of psychological well-being. Researchers have raised a concern, however, that self-compassion might at times increase complacency and undermine motivation to correct mistakes (e.g., Baker & McNulty, 2011). We propose that self-compassion may actually increase self-improvement motivation given that it encourages people to confront their mistakes and weaknesses without either self-deprecation or defensive self-enhancement.

Self-Compassion

Self-compassion has been defined as a self-attitude that involves treating oneself with warmth and understanding in difficult times and recognizing that making mistakes is part of being human (Neff, 2003a). Self-compassion is associated with numerous aspects of well-being, including higher levels of positive affect, optimism, and happiness (Neff, Rude, & Kirkpatrick, 2007), lower levels of anxiety and depression (Neff, 2003b), and better romantic relationship functioning, at least for women and conscientious men (Baker & McNulty, 2011).

Self-compassion has been distinguished from self-esteem conceptually and empirically. Unlike self-esteem, self-compassion is nonevaluative. In other words, you can be compassionate toward yourself even if you don't feel very good about yourself, just as you can be compassionate toward another person even if you disapprove of their actions. In addition, a self-compassionate approach avoids both extremes of self-deprecation and self-enhancement characteristic of low and high self-esteem, respectively. Research suggests that self-compassionate people react to lab-based stressors in more balanced ways, showing lower levels of negative affect as well as more realistic self-appraisals (Leary, Tate, Adams, Allen, & Hancock, 2007; Neff, Kirkpatrick, & Rude, 2007). Self-compassion also predicts greater self-worth stability and lower narcissism than self-esteem (Neff, 2003b; Neff & Vonk, 2009).

Self-Compassion and Self-Improvement

Prior research suggests that self-compassion is related to multiple aspects of well-being, but its role in self-improvement motivation is less clear. Does self-compassion help people

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grow and learn from their mistakes, or does it make them complacent and unmotivated to change?

On one hand, self-compassion might hinder self-improvement efforts by making people lazy and overly willing to let themselves "off the hook." Researchers have questioned whether self-compassion might interfere with self-improvement by curtailing self-criticism, a component of perfectionism, given that perfectionism is positively associated with achievement (Baker & McNulty, 2011; Witcher, Alexander, Onwuebuzie, Collins, & Witcher, 2007). Other research suggests, however, that the most adaptive forms of perfectionism are those that involve high personal standards but not self-criticism (Blatt, 1995; Grzegorek, Slaney, Franze, & Rice, 2004; Rice & Stuart, 2010). Although self-compassion is associated with lower self-criticism, it is not incompatible with holding high personal standards (Neff, 2003b).

Research on self-forgiveness similarly suggests that being too easy on oneself can have costs, such as reduced empathy (Hall & Fincham, 2008) and reduced engagement in reparative behaviors (Exline, Root, Yadavalli, Martin, & Fisher, 2011). On the whole, however, self-forgiveness is seen as a healthy process, promoting repentance and other prosocial behaviors, as long as self-forgivers take responsibility for their actions and experience remorse (Fisher & Exline, 2006). Leary et al. (2007) showed that inducing self-compassion, which is related to self-forgiveness but is a broader construct, led participants to take more, rather than less, responsibility for their role in a negative event. Overall, then, although some have raised the possibility that self-compassion can be detrimental to personal growth, there are reasons to suspect this might not be the case.

In fact, we hypothesized that self-compassion may actually facilitate self-improvement. Why would this be? Self-compassion is associated with realistic self-appraisal (Leary et al., 2007), which in turn predicts growth-related outcomes (Kim, Chiu, & Zou, 2010). In this way, self-compassion stands in contrast to self-enhancement, a common response to self-threatening information (Campbell & Sedikides, 1999; Sedikides, Gaertner, & Toguchi, 2003). Although self-enhancement may benefit certain aspects of well-being (e.g., Taylor & Brown, 1988), research suggests that it is less helpful when it comes to learning and growth (e.g., Baumeister, Campbell, Kreuger, & Vohs, 2003; Kim et al., 2010; Kwan, John, Robin, & Kuang, 2008; Robins & Beer, 2001; Tice & Baumeister, 1990). For example, Kwan et al. (2008) found that self-enhancement was associated with greater defensiveness, lower resilience, and poor academic performance. It should be noted, however, that evidence for the effect of self-enhancement on growth is mixed, as some suggest that it may be beneficial (e.g., Alicke & Sedikides, 2009).

Responding to self-image threats with self-deprecation, on the other hand, seems to be no better for self-improvement (e.g., Fisher & Exline, 2006; Lyubomirsky, Tucker, Caldwell, & Berg, 1999; Powers, Koestner, Lacaille, Kwan, & Zuroff, 2011; Powers, Koestner, & Zuroff, 2007; Rice & Stuart, 2010). For example, self-criticism is negatively associated with goal progress due to its positive association with rumination and procrastination (Powers et al., 2011). Examining both sides at once, Kim et al. (2010) found that both inflated and deflated self-assessments of academic performance led to self-handicapping and poor future performance.

Realistic self-appraisal is not an easy task, however, especially when the reality is harsh. We hypothesized that the atmosphere of warmth and understanding generated by self-compassion may help people acknowledge a need for improvement without sinking into despair or feeling overwhelmed by anxiety about the possibility of failure (Neff, Hseih, & Dejitthirat, 2005). Research in the forgiveness literature lends support to this idea, suggesting that forgiveness generally reduces the likelihood of repeat offenses, in part because it helps the transgressor feel like relationship repair is possible (Wallace, Exline, & Baumeister, 2008). We hypothesized that the benefits of self-compassion may operate similarly, opening up the possibility of change and self-improvement in a nonthreatening way.

Finally, prior research has linked self-compassion to traits and behaviors that are related to self-improvement. In the academic domain, trait self-compassion was found to be positively associated with self-efficacy (Iskender, 2009) and negatively associated with procrastination (Williams, Stark, & Foster, 2008). Self-compassionate individuals have also been found to hold greater mastery as opposed to performance goals, a relationship mediated by self-compassionate participants' lower fear of failure and greater perceived competence (Neff et al., 2005). In addition, as mentioned previously, a lab experiment showed that participants who were induced to feel self-compassion as opposed to self-esteem were more willing to acknowledge their role in a negative event (Leary et al., 2007, Study 5). In the health domain, one study showed that trait self-compassion is positively correlated with intrinsic exercise motivation (Magnus, Kowalski, & McHugh, 2010), and inducing self-compassion has been shown to (a) attenuate overeating after a dieting "failure" among participants prone to disordered eating behaviors (Adams & Leary, 2007) and (b) reduce smoking for a subset of participants (Kelly, Zuroff, Foa, & Gilbert, 2009). In romantic relationships, trait self-compassion is positively correlated with motivation to correct interpersonal mistakes among men high in conscientiousness and among women (Baker & McNulty, 2011, Studies 1 and 3).

The Present Experiments

Research suggests that self-compassion is associated with holding realistic self-appraisals (Leary et al., 2007), which in turn have been linked to self-improvement motivation. Building on this work, as well as a recent thread of findings

suggesting that self-compassion is associated with self-improvement-related traits and behaviors, the present series of studies systematically tested the hypothesis that self-compassion increases self-improvement motivation. Whereas the majority of past work bearing on the link between self-compassion and self-improvement has been either correlational or has focused on a single domain (e.g., smoking behavior), in the current studies we experimentally manipulated self-compassion and examined its effects on self-improvement across multiple domains, including domains that have not yet been assessed experimentally or at all. Finally, because self-compassion and self-esteem are closely related both conceptually and empirically, we included a self-esteem control condition across experiments to assess the unique effects of self-compassion—a feature of the current research absent in nearly all prior work in this area (for an exception, see Leary et al., 2007, Study 5).

More concretely, across four experiments, we tested the hypothesis that self-compassion increases the belief that shortcomings can be changed (Experiment 1), the desire to make amends and avoid repeating a moral transgression (Experiment 2), effort in studying for a subsequent test following an initial failure (Experiment 3), preference for upward social comparison (Experiment 4), and motivation to improve a personal weakness (Experiment 4). In Experiments 1, 2, and 4, self-compassion was induced by having participants write a paragraph to themselves expressing kindness and understanding regarding their transgression or weakness. In Experiment 3, self-compassion was induced via a statement embedded in the instructions following an initial test. Because previous research suggests that positive mood can increase self-improvement motivation (e.g., Fishbach & Labroo, 2007; Raghunathan & Trope, 2002), we controlled for the effects of post-manipualtion positive affect. Across experiments, we expected greater self-improvement motivation among participants in the self-compassion condition compared to participants in the two control conditions (self-esteem and either no intervention or positive distraction).

Experiment 1

In the first experiment, we examined whether self-compassion increases a mind-set that is theoretically and empirically related to self-improvement: incremental beliefs. Incremental beliefs entail a view that some aspect of the self (e.g., intelligence, personality, or in this case a personal weakness) is changeable as opposed to fixed and immutable (Dweck, Chiu, & Hong, 1995; Dweck & Leggett, 1988). A large body of research suggests that incremental beliefs are positively related to growth-related behaviors. For example, people who believe that their intelligence level can be changed are more likely to seek out challenging tasks and to respond to academic failures in constructive ways, adopting learning goals and striving for self-improvement (Diener & Dweck, 1978, 1980; Elliott & Dweck, 1988; Rhodewalt, 1994; Robins & Pals, 2002).

Method

Participants. A total of 69 undergraduates (52% female) participated for course credit. Of them, 1 participant was excluded from the analyses for noncompliance with the manipulation instructions, leaving a final sample of 68. Fifty-one percent of participants identified as Asian American, 16% as European American, 13% as Latino/a, and 10% as "Other." Four participants' demographics information was missing. Participants ranged in age from 18 to 43 years ($M = 20.9$, $SD = 4.1$).

Procedure. Participants were told that the purpose of the study was to understand the different ways that people think about personal weaknesses. Participants first identified, in one to two sentences, what they considered to be their biggest weakness or shortcoming. Because self-compassion is most relevant in situations that elicit feelings of shame and self-criticism (Neff, 2003a), the instructions emphasized that participants should select a weakness that made them feel bad about themselves.

Next, participants were randomly assigned to one of three conditions. In the self-compassion reflection condition, participants were instructed to write for 3 min in response to the following prompt: "Imagine that you are talking to yourself about this weakness from a compassionate and understanding perspective. What would you say?" (adapted from Leary et al., 2007, Study 5). In the first control condition, a self-esteem reflection, participants were instructed to "Imagine that you are talking to yourself about this weakness from a perspective of validating your positive (rather than negative) qualities." The self-esteem reflection instructions were similar to the self-compassion instructions in that they asked participants to address themselves and to reflect on the weakness they identified, but the emphasis was on self-validation rather than self-compassion. This allowed us to ensure that our manipulation was isolating something specific to self-compassion, not just positive self-talk in general. In a second control condition, participants did not receive any reflection instructions after identifying a personal weakness.

After completing the manipulation, participants filled out a brief measure of positive affect. Following the stem, "Right now, how much do you feel . . . ," positive affect was assessed with three items: content, sad (reverse), and upset (reverse; $\alpha = .69$; $M = 5.28$, $SD = 1.15$). Ratings were made using a 7-point scale (1 = *not at all*, 7 = *a lot*).

Finally, participants spent 5 min responding in writing to two prompts. They were asked to describe (a) whether they've ever done anything to change their weakness and (b) where they think it comes from. Two independent coders rated the degree to which these statements contained evidence of incremental beliefs or the belief that their weakness was malleable and could be changed, as opposed to seeing it as fixed and unchangeable (Dweck, 1999).

Although the prompts did not directly ask about this aspect of the weakness, they provided an opportunity for participants to make statements regarding the malleability of their weakness (e.g., "It's just inborn, there's nothing I can do"—low incremental; "With hard work I know I can change it"—high incremental). A score of 0 indicated an absence of incremental beliefs, 1 indicated some evidence of incremental beliefs, and 2 indicated strong evidence of incremental beliefs. The two coders' ratings were averaged to create a composite score ($\alpha = .53$; $M = .65$, $SD = .48$).[1] At the end of the experiment, participants completed demographic questions and a suspicion probe and then were debriefed.

Results and Discussion

Most of the weaknesses that participants selected involved social difficulties (e.g., lack of confidence, social anxiety, shyness, insecurity in relationships). No one selected a weakness that could not hypothetically be changed in some way or an undesired physical attribute. In response to the suspicion probe, no one guessed the hypothesis that viewing a personal weakness in a certain way might affect one's belief in its malleability. Neither gender nor ethnicity interacted with condition to predict self-compassion in this or any of the subsequent studies, so these variables will not be discussed further.

Incremental beliefs were significantly different across conditions, $F(2, 65) = 3.64$, $p < .05$, $\eta_p^2 = .10$, with a greater number of these beliefs expressed in the self-compassion condition ($M = .89$, $SD = .55$, $n = 22$) compared to the self-esteem condition ($M = .58$, $SD = .44$, $n = 26$) and no intervention condition ($M = .55$, $SD = .36$, $n = 20$). Follow-up contrasts between self-compassion and self-esteem, $\eta_p^2 = .09$, and between self-compassion and no intervention, $\eta_p^2 = .12$, were significant ($ps < .05$). Thus, as predicted, participants who were instructed to take a self-compassionate approach toward a personal weakness viewed that weakness as more changeable than participants instructed to take a self-esteem-enhancing approach or no approach.[2]

Positive affect did not differ significantly across conditions ($p > .7$), and when we controlled for the effect of this variable on incremental beliefs, the effect of condition remained significant ($p < .05$). Thus, the effect of self-compassion on self-improvement motivation could not be explained by differences in positive affect.

Experiment 2

Experiment 1's results suggest that self-compassion helps participants view personal weaknesses as more changeable, but it does not bear directly on motivation to change. In Experiment 2, we examined the effects of self-compassion on transgression-related self-improvement motivation, such as desire to make amends and commitment to avoid repeating a moral transgression. Examining self-compassion for a moral transgression allowed us to assess whether the benefits of self-compassion would generalize to a potentially more severe and ego-threatening context. It is important to note that participants in this study were instructed to think about a transgression that made them feel guilt and remorse. It is unlikely that self-compassion would be either relevant or helpful for a transgression that a person does not feel bad about.

Method

Participants. A total of 100 undergraduates (66% female) participated in an online survey for course credit. Of them, one was excluded for noncompliance with the transgression identification instructions, and eight were excluded because they indicated in a questionnaire at the end of the study that they had clicked responses at random, leaving a final sample of 91. Thirty-three percent of of participants identified as Asian American, 37% as European American, 11% as Latino/a, and the remainder as "Other." Participants ranged in age from 18 to 33 years ($M = 20.6$, $SD = 2.6$).

Procedure. Participants were told that the purpose of the study was to understand how people think about different kinds of personal events. Participants first described a recent moral transgression. The specific instructions read as follows:

"Please recall a time in your recent past when you did something you felt was wrong and as a result experienced guilt, remorse, and regret. For example, this could be a time when you cheated on a significant another or on an exam, betrayed a friend's trust, or did something else that was harmful or potentially harmful to yourself or others. Try to think of the *most recent* experience of this kind that made you feel bad about yourself and *still* makes you feel bad when you think about it."

Participants were informed that their responses would be anonymous.

Next, participants were randomly assigned to one of three conditions: self-compassion, self-esteem control, or positive distraction control. The self-compassion and self-esteem instructions were similar to those used in Experiment 1. The self-compassion instructions were worded as follows:

"In this section, you will be asked to reflect back on the event you wrote about from a compassionate perspective. In the space below, please write a paragraph to yourself (as if you are addressing yourself) expressing kindness and understanding regarding the event you described above."

The self-esteem instructions were worded as follows: "In the space below, please write a paragraph describing

your positive qualities. For example, what personal attributes and accomplishments are you proud of?" Participants in the positive distraction control condition were asked to describe a hobby they enjoyed. We used this new control condition so that we could compare the effects of self-compassion with that of a positive distraction, which could confer similar mood benefits. Following the manipulation, positive affect ($\alpha = .75$; $M = 4.93$, $SD = 1.08$) was assessed with the same items used in Experiment 1, with the addition of the item "happy."

Participants next filled out a questionnaire assessing their desire to make amends and their commitment to not repeat the transgression in the future. On a scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), participants rated the extent to which they agreed with the following items regarding their transgression: "I am committed to not repeating this behavior (or anything like it) again," "I will do my best to never do something like this again," "I wish I could go back and erase what happened," "I want to confess" (if applicable), "I want to apologize" (if applicable), "Realistically, it is likely that I will do something like this again in the future" (reverse), and "I feel no need to make amends" (reverse). The scale was internally consistent ($\alpha = .75$; $M = 4.49$, $SD = 1.12$).[3]

At the end of the experiment, participants completed demographic questions and a suspicion probe and then were debriefed.

Results and Discussion

The majority of participants' transgressions involved romantic infidelity, academic misconduct, dishonesty, betrayal of trust, or hurting someone they cared about. A few participants mentioned illegal behavior. In response to the suspicion probe, no one guessed the hypothesis that viewing a transgression in a certain way might affect one's motivation to improve oneself or make amends.

Self-improvement motivation differed significantly across conditions, $F(2, 88) = 4.38$, $p < .05$, $\eta_p^2 = .09$, with higher motivation reported in the self-compassion condition ($M = 4.97$, $SD = 1.04$, $n = 31$) compared to the self-esteem condition ($M = 4.11$, $SD = 1.27$, $n = 29$) and positive distraction condition ($M = 4.36$, $SD = 1.18$, $n = 31$). Follow-up contrasts between self-compassion and self-esteem, $\eta_p^2 = .13$, and between self-compassion and positive distraction, $\eta_p^2 = .07$, were significant ($ps < .05$). Thus, as predicted, participants who were instructed to take a self-compassionate approach toward a transgression that they felt bad about were more motivated to make amends and avoid repeating the transgression in the future than participants instructed to take a self-esteem-focused approach or to engage in a positive distraction task.

Positive affect did not differ across conditions ($p > .4$), and when we controlled for this variable, the effect of condition on self-improvement remained significant ($p < .05$).

Experiment 3

The results of Experiments 1 and 2 indicated that self-compassion increases self-improvement motivation (Experiment 2) and related mind-sets (i.e., incremental beliefs; Experiment 1). In Experiment 3, we examined whether self-compassion following a failure experience would increase self-improvement *behavior*. Self-improvement behavior was operationalized as time spent studying difficult vocabulary words for a second test following the initial failure. Time spent working on a difficult task is often used to measure persistence and other self-improvement-related behaviors (e.g., Di Paula & Campbell, 2002; Williams & DeSteno, 2008). In this experiment, we did not want participants to know that the initial test was intended to make them feel bad about themselves, so we used a more subtle self-compassion prime embedded in the instructions that followed the first test.

Method

Participants. A total of 103 undergraduates (62% female) participated for course credit. Of them, 17 were excluded because they indicated that they were not fluent in English (fluency in English was important for this experiment because it focused on verbal test performance), leaving a final sample of 86. Forty-seven percent of participants identified as Asian American, 21% as European American, 12% as Latino/a, and the remainder as "Other." Participants ranged in age from 18 to 23 ($M = 19.77$, $SD = 1.27$).

Procedure. Participants were told that the purpose of the study was to understand the relationship between test performance and personality. Participants first took a difficult test (a 10-item version of a Graduate Record Examination [GRE] antonyms test, pilot tested for difficulty), received the correct answers, and then had an opportunity to study a list of words and definitions that would be on a subsequent 10-item antonyms test. Participants could study these words for as long as they wanted, and study time was used as a measure of improvement motivation. Immediately preceding the presentation of the study words, participants read an instructions screen that contained the manipulation. Participants randomly assigned to the self-compassion condition saw an additional statement embedded in the instructions that read,

"If you had difficulty with the test you just took, you're not alone. It's common for students to have difficulty with tests like this. If you feel bad about how you did, try not to be too hard on yourself."

This method of manipulating self-compassion was adapted from Adams and Leary (2007). Participants assigned to the self-esteem control condition saw an additional statement that read, "If you had difficulty with the test you just took, try not to feel bad about yourself—you must

be intelligent if you got into Berkeley." Participants in the no intervention control condition saw no additional statements.

Following the manipulation, participants filled out a brief questionnaire about their perceptions of the first test (i.e., difficulty, perceived performance) and their expectations for how well they would perform on the second test. Finally, participants completed the second 10-item test. The words used on both tests were pilot tested to ensure that most undergraduates would find them difficult and perform poorly (i.e., experience failure). At the end of the experiment, participants completed demographic questions and a suspicion probe and then were debriefed.

Results and Discussion

In response to the suspicion probe, no one guessed the hypothesis that viewing test failure in a certain way might affect study time or effort. Participants scored an average of 4 out of 10 (40%) on the initial test (SD = 1.96), indicating that most participants performed poorly. Scores ranged from 0 to 9 (though only one participant scored a 9 and excluding them did not change the results). As predicted, study time for the second test differed significantly across conditions, $F(2, 83) = 3.12$, $p < .05$, $\eta_p^2 = .07$, with longer times in the self-compassion condition (M = 306.5 s, SD = 236.95 s, n = 29) compared to the self-esteem condition (M = 229.9 s, SD = 119.15 s, n = 27) and no intervention condition (M = 203.2 s, SD = 101.09 s, n = 30). Follow-up contrasts between self-compassion and self-esteem were marginal ($p = .085$, $\eta_p^2 = .04$) and were significant between self-compassion and no intervention ($p < .05$, $\eta_p^2 = .08$). Neither initial test performance (actual or perceived), perceptions of test difficulty, nor performance expectations differed significantly across conditions (ps > .6), and controlling for these variables did not reduce the effect of condition on study time (ps < .05).

Study time was positively correlated with performance on the second test ($r = .37$, $p < .01$). Performance on the second test did not differ significantly across conditions, $p > .6$, but the pattern of results suggested that participants in the self-compassion condition scored slightly higher (M = 7.4, SD = 2.06) than those in each of the control conditions (M = 6.9 and 7.0, SD = 2.21 and 1.95). Thus, although in this experiment self-compassion did not directly lead to improved performance, it did increase study time, which in turn predicted higher test scores. To the extent that sustained self-improvement motivation leads to better performance over time (e.g., Duckworth, Peterson, Matthews, & Kelly, 2007), repeatedly taking a self-compassionate approach to failure should ultimately lead to better performance through its effect on self-improvement motivation.

Experiment 4

The results of Experiment 3 indicated that self-compassion influenced self-improvement behavior (study time) in addition to mind-set (Experiment 1) and motivation (Experiment 2). In Experiment 4, we wanted to extend these results to a different behavioral domain, social comparison preferences. Research suggests that choosing to engage in upward social comparison (or more specifically, to seek contact with those who seem better off than the self) tends to reflect self-improvement motives (Collins, 1996; Taylor & Lobel, 1989). Whereas downward comparison can increase self-esteem, upward contact can provide hope, information, and inspiration (e.g., Taylor & Lobel, 1989; van den Borne, Pruyn, & van den Heuvel, 1987). For Experiment 4, we recruited participants from across the United States to increase the generalizability of our findings.

Method

Participants. A total of 78 adults from across the United States (81% female) participated in an online survey for a chance at receiving a raffle gift certificate. Of them, two participants were excluded because they discussed a mental illness as their personal weakness, two were excluded because they guessed the exact hypothesis (one was in the self-compassion condition and one in the self-esteem condition), and one participant was excluded because he or she was presented with all three manipulations due to a technical glitch, leaving a final total of 73 participants. Fifty-two percent of participants identified as Asian American, 15% as European American, 6% as Latino/a, 4% as Native American, and the remainder as "Other." Participants ranged in age from 18 to 62 (M = 32.3, SD = 12.4).

Procedure. Participants were told that the purpose of the study was to understand the different ways that people think about personal weaknesses. As in Experiment 1, participants first identified a personal weakness (this time, however, they were explicitly instructed to select a weakness that could hypothetically be changed) and then were randomly assigned to one of three conditions: self-compassion, self-esteem control, or positive distraction control. The self-compassion instructions were worded as follows:

"In this next section, we would like you to write a paragraph to yourself expressing compassion and understanding regarding the personal weakness you described above. In other words, try to take a caring and concerned approach, rather than a critical one."

The self-esteem instructions were worded as follows:

"In this next section, we would like you to write a paragraph to yourself describing aspects of yourself that you consider to be positive qualities, in contrast to the aspect you described above. In other words, try to focus on the positives and the things that you are proud of."

In the positive distraction condition, participants were asked to describe a hobby they enjoyed doing in their spare time.

Following the manipulation, positive affect was assessed with the single item "content" ($M = 3.10$, $SD = 1.18$). Ratings were made using a 5-point scale (1 = *not at all*, 5 = *a lot*).

Although the manipulation was face-valid (i.e., participants were asked to write to themselves in a compassionate way), we included a brief measure of state self-compassion to serve as a manipulation check ($\alpha = .77$; $M = 4.17$, $SD = .83$). The scale included the following four items: "I'm being understanding toward myself," "I'm treating myself with caring and kindness," "I'm trying to take a balanced view of things," and "I see my weakness as part of being human" (adapted from Neff, 2003b).

Next, for the social comparison preferences measure, participants were asked to imagine that they had the opportunity to interact socially with one of three people: (a) "Someone who has had a personal weakness similar to your own but who has worked successfully at overcoming it" (upward), (b) "Someone who has a personal weakness similar to your own" (lateral), or (c) "Someone who has a personal weakness similar to but more severe than your own" (downward). We designed this task so that the upward social comparison option would be more directly related to self-improvement regarding the weakness.

Finally, participants filled out a self-report measure of motivation to improve their weakness that included the following seven items: "I want to learn and improve myself," "I want to find opportunities that will challenge me and help me grow as a person," "I feel capable of making positive changes," "I would like to discover new strategies for improving myself," "I feel confident that I can make positive changes," "It's up to me whether or not I continue to have this weakness," and "I don't think there is much I can do to change this weakness" (reverse). Ratings were made using a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*). The scale was internally consistent ($\alpha = .80$; $M = 4.06$, $SD = .58$).

Results and Discussion

As in Experiment 1, most of the weaknesses that participants selected involved social difficulties. No one selected a weakness that could not hypothetically be changed in some way. The self-compassion manipulation check differed significantly across conditions, $F(2, 70) = 3.33$, $p < .05$, $\eta_p^2 = .10$, with higher scores on the state self-compassion scale in the self-compassion condition ($M = 4.58$, $SD = .87$, $n = 19$) compared to the self-esteem condition ($M = 3.98$, $SD = .84$, $n = 32$) and positive distraction condition ($M = 4.10$, $SD = .63$, $n = 27$). The follow-up contrast between self-compassion and self-esteem was marginal ($p = .057$; $\eta_p^2 = .13$) and between self-compassion and positive distraction was significant ($p < .05$, $\eta_p^2 = .16$).

The majority of social comparison preferences were either upward (62%) or lateral (31.5%).[4] Because we were specifically interested in the tendency to make upward comparisons, we focused the analysis on upward versus non-upward (i.e., lateral or downward) comparisons. Participants in the self-compassion condition were the most likely to engage in upward social comparison as opposed to downward or lateral social comparison. That is, they were more likely to select a hypothetical interaction partner who had successfully worked through a similar weakness (as opposed to someone who had a similar or worse weakness), compared to participants in the control conditions, $\chi^2(2, n = 73) = 6.91$, $p < .05$, $\eta_p^2 = .06$. When we limited the sample to examine contrasts between conditions, the comparison between self-compassion and positive distraction was significant, $\chi^2(2, n = 43) = 6.77$, $p < .01$, $\eta_p^2 = .10$ and the comparison between self-compassion and self-esteem was in the expected direction, although not significant, $\chi^2(2, n = 48) = 2.18$, $p = .14$, $\eta_p^2 = .03$. Frequencies are presented in Table 1. Supplementary analyses revealed that the observed frequencies of upward compared with non-upward within the self-compassion condition, $\chi^2(1) = 8.00$, $p < .01$, but not within the other two conditions ($ps > .1$), differed significantly from expected values (set at equal proportions within each cell relative to total cell size).

Table 1. Social Comparison Preferences by Condition—Experiment 4

	Upward	Lateral	Downward
Self-compassion	15	1	2
Self-esteem control	19	10	1
Positive distraction control	11	12	2

Self-reported self-improvement motivation differed significantly across conditions, $F(2, 70) = 4.00$, $p < .05$, $\eta_p^2 = .11$, with higher motivation in the self-compassion condition ($M = 4.37$, $SD = .43$) compared with the self-esteem condition ($M = 4.00$, $SD = .48$) and positive distraction condition ($M = 3.90$, $SD = .66$). Follow-up contrasts between self-compassion and self-esteem, and between self-compassion and positive distraction, were significant ($ps < .05$). Thus, conceptually replicating Experiment 2's results, participants who were instructed to take a self-compassionate approach toward a personal weakness were more motivated to change that weakness than participants instructed to take a self-esteem-enhancing approach or to engage in a positive distraction task.[5]

Finally, positive affect did not differ significantly across conditions ($p > .1$), and when we controlled for the effect of this variable on self-improvement motivation, the effect of the condition remained significant ($p < .05$).

General Discussion

Across four experiments, we found support for the hypothesis that responding to a moral transgression, personal weakness, or test failure with self-compassion subsequently makes people more motivated to improve themselves and their performance. These experiments are among the first to show that self-compassion leads to increased self-improvement

motivation and does so across a range of domains and populations. Self-compassion is unique in that it provides a safe and nonjudgmental context to confront negative aspects of the self and strive to better them. Unlike other approaches to failure that tend to undermine personal growth by encouraging inflated or deflated self-assessments (e.g., Kim et al., 2010) rather than realistic self-appraisals (Leary et al., 2007), our results suggest that self-compassion is a more effective method of motivating change.

The results of Experiments 1 and 4 indicated that participants who took a self-compassionate approach to a personal weakness, compared with those in a self-esteem, no intervention (Experiment 1), or positive distraction (Experiment 4) control condition, viewed their weakness as more malleable (Experiment 1), reported greater self-improvement motivation (Experiment 4), and were particularly likely to choose interaction partners who had successfully worked through a similar weakness (i.e., upward social comparison; Experiment 4).

Experiment 2 showed that participants who reflected on a recent moral transgression with self-compassion, compared with those in a self-esteem or positive distraction control condition, consequently reported more self-improvement motivation, such as desire to make amends and commitment to not repeat a similar transgression in the future. This finding parallels research showing that interpersonal forgiveness generally reduces the likelihood of repeat offenses (Wallace, Baumeister, & Exline, 2008) and suggests that self-compassion may similarly help people see that their moral failings do not have to define them. However, future research would be needed to examine whether this increased motivation to improve translates into changes in behavior over time. Furthermore, it would be important to examine the effects of self-compassion in the context of transgressions that are more severe than those typical of undergraduates, such as extreme acts of cruelty and violence.

Experiment 3 showed that a subtle reminder to be self-compassionate about a lab-based test failure, compared with a self-esteem reminder or no reminder, led participants to spend more time studying for a subsequent test, a commonly used measure of effort and persistence (e.g., Di Paula & Campbell, 2002; Williams & DeSteno, 2008). Study time was positively correlated with test performance, indicating that self-compassion may indirectly increase performance through its effect on study time, though a direct effect was only trending in the predicted direction. Thus, as noted, our results suggest that taking a self-compassionate approach to failure may increase performance over time to the extent that it increases effort (e.g., Duckworth et al., 2007).

In all four studies, self-compassion was significantly more helpful than engaging in positive distraction (Experiments 2 and 4) or doing nothing (Experiments 1 and 3). In Experiments 1 and 2, and for the self-report self-improvement scale in Experiment 4, self-compassion was significantly more helpful then self-esteem. For the study time (Experiment 3) and social comparison (Experiment 4) measures, this difference was marginal or approaching significance. Overall, the pattern of results suggests that the effects of self-compassion and self-esteem, though both strong predictors of many aspects of well-being, may differ when it comes to self-improvement motivation. Prior research indicates that in some cases positive illusions can improve health and well-being (e.g., Taylor & Brown, 1988), but in the context of learning and growth, its self-protective function may be less useful, as accurate self-appraisal is often necessary to motivate change (e.g., Kim et al., 2010). Like self-esteem, self-compassion may serve as a buffer against debilitating self-criticism, but unlike self-esteem, it does not require inflated self-evaluations that may hinder self-improvement motivation.

Theoretical accounts of self-compassion have emphasized the important differences between self-compassion and self-esteem particularly when it comes to personal growth (Neff, 2003a), and some studies have controlled for trait self-esteem (e.g., Leary et al., 2007; Neff, 2003b; Neff & Vonk, 2009). With the exception of one study (Leary et al., 2007, Study 5), however, the present experiments are the first to systematically include a self-esteem control condition, allowing us to determine whether self-compassion and self-esteem do indeed have distinct effects in this context. The self-esteem manipulations used in Experiments 2 and 4 are similar to self-affirmation manipulations that involve affirming personal attributes (e.g. Cohen, Aronson, & Steele, 2000; Steele, Spencer, & Lynch, 1993), which allow our results to generalize to this widely studied and often beneficial form of self-validation. It is unclear, however, how self-compassion might compare with affirming a personal value, another form of self-affirmation.

These experiments examined the influence of self-compassion in the context of a salient personal weakness, transgression, or failure, but they did not address the question of whether self-compassion motivates people to actively seek out negative information about themselves when it is not salient to begin with. Although self-compassion is primarily relevant in response to salient negative self-aspects, making it difficult to experimentally examine this hypothesis, future research could assess downstream consequences for information-seeking behavior in a separate domain or could employ correlational methods.

These findings extend the self-compassion literature by clarifying the unique role of self-compassion in promoting self-improvement, suggesting that it may be beneficial across a diverse range of domains. In addition, they address a central question regarding self-improvement—namely, how to confront shortcomings without becoming paralyzed by harsh self-criticism on one hand or by defensive self-enhancement on the other. Self-compassion may be one solution.

Furthermore, these findings have implications for enhancing coping skills in educational settings. Self-compassion may help students respond to failure in a way that facilitates growth and improvement without leading to debilitating negative affect. Further research is needed to determine

whether self-compassion leads to sustained changes in behavior over time, however. For example, would repeatedly responding with self-compassion to failure and poor performance lead students to develop better study habits and perform better over the course of a semester?

In sum, the present findings suggest that self-compassion may indeed represent a useful alternative to other common responses to failure and personal weakness. Resolving to make changes can be scary, as roadblocks and setbacks are inevitable along the way. From a self-compassionate perspective, however, there is less to fear.

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Notes

1. To examine whether participants in the self-esteem condition might have focused less on their weakness during the reflection task, despite the instructions in both conditions to address oneself regarding the weakness, we coded the open-ended responses for number of references to the weakness. Average number of references was slightly higher in the self-compassion condition compared with the self-esteem condition, but the difference was nonsignificant. Most critically, controlling for this frequency variable did not reduce the effect of condition on incremental beliefs, suggesting that the effect was likely not driven by differential focus on the weakness.
2. We acknowledge that the interrater reliability was low. It has been argued that alphas less than .70 should not necessarily be discounted, however, when the pattern of results is generalizable across coders (John & Benet-Martinez, 2000), which was the case in this experiment. Thus, although the low reliability is clearly a limitation, we believe that the results are still meaningful, especially when considered in light of the four sets of findings as a whole.
3. For the apology and confession items, a "not applicable" response option was included, coded as system missing. Out of 90 participants, 10 selected this option for apology and 16 selected it for confession. Their scores on these items were not included in the self-improvement composite.
4. The low number of downward preferences may be due to the fact that participants were asked what kind of person they would most want to *interact* with, not evaluate themselves against. Previous research suggests that downward comparisons are more desirable in evaluative contexts, whereas upward comparisons tend to be preferred in the context of information and affiliation (Taylor & Lobel, 1989).
5. A mediation test conducted following the guidelines described by Preacher and Hayes (2004, 2008) revealed that scores on the state self-compassion manipulation check fully mediated the effect of the self-compassion condition, compared with the self-esteem condition, on self-improvement motivation. State self-compassion was not a candidate for mediation of the contrast between the self-compassion and positive distraction condition, however, because this effect was not fully reduced by the introduction of the potential mediator.

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