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Self and Identity, 2011, 10 (3), 352–362
http://www.psypress.com/sai
ISSN: 1529-8868 print/1529-8876 online
DOI: 10.1080/15298868.2011.558404

Psychology Press
Taylor & Francis Group

Self-compassion, self-regulation, and health

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Self-compassion—treating oneself with kindness, care, and concern in the face of negative life events—may promote the successful self-regulation of health-related behaviors. Self-compassion can promote self-regulation by lowering defensiveness, reducing the emotional states and self-blame that interfere with self-regulation, and increasing compliance with medical recommendations. Furthermore, because they cope better with stressful events, people high in self-compassion may be less depleted by illness and injury and, thus, have greater self-regulatory resources to devote to self-care. Framing medical problems and their treatment in ways that foster self-compassion may enhance people's ability to manage their health-related behavior and deal with medical problems.

Keywords: Health; Self-compassion; Self-regulation.

Many health problems arise directly from people's behavioral choices and, thus, are at least partially controllable. Yet, despite the fact that up to 40% of morbidity can be traced to controllable factors (Levesque et al., 2007), people often do not behave in ways that could improve their health and extend their lives. For example, healthy eating and regular exercise are linked to lower risk of heart disease, diabetes, and obesity, but many people fail to eat and exercise in ways that would lower their risk for these problems (Clark, 1997; Heslop et al., 2001). Likewise, the use of condoms lowers the risk of sexually transmitted diseases, and many cancers can be detected with screening tests, but many people do not practice safe sex or get screened for cancer (Danaei et al., 2005; Svenson, Ostegren, Merlo, & Rastam, 2002). Despite the fact that simple actions such as these could improve their health and quality of life, people engage in behaviors that directly threaten their health and fail to engage in behaviors that would promote it. Failures of self-regulation are a general and widespread problem (Baumeister, Heatherton, & Tice, 1994), but failing to manage health-related behaviors can have particularly pernicious consequences.

Most models of self-regulation agree that, in its most simple form, self-regulation involves setting a goal, engaging in goal-directed behavior, monitoring progress toward the goal, and adjusting one's behavior when sufficient progress towards the goal is not being made (Baumeister & Heatherton, 1996; Cameron & Leventhal, 2003; Carver & Sheier, 1981). A variety of practical factors may limit a person's ability to self-regulate successfully with respect to health-promoting behaviors, including insufficient time, knowledge, or access to health-promoting resources. Yet, even with sufficient time, knowledge, and resources, people may have difficulty

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regulating their health-related behaviors. The purpose of this article is to explore how self-compassion, a recently identified predictor of coping and well-being, may play a role in effective self-regulation. As we will see, each of the steps involved in effective self-regulation may be influenced by how compassionately people treat themselves when facing distressing situations such as those that are associated with medical problems.

Self-compassion

Ironically, people who experience negative events often treat themselves far more critically and unkindly than they would treat a loved one in similar circumstances. Self-compassion, as the label implies, involves treating oneself with the same kind of care and concern with which one treats loved ones who are experiencing difficulties. Neff (2003a) conceptualized self-compassion as composed of three facets—self-kindness (vs. self-judgment), common humanity (vs. isolation), and mindfulness (vs. over-identification). When life circumstances are problematic or painful, self-compassionate people respond with self-kindness and are comforting rather than judgmental. Common humanity involves recognizing that difficulties are a normal part of life. By seeing that everyone experiences suffering, self-compassionate people regard their problems in a broad perspective that minimizes feelings of isolation. Finally, mindfulness refers to having a balanced approach to one's cognitions and emotions, neither downplaying nor over-identifying with one's negative thoughts and feelings.

Studies show that self-compassion is associated with many indices of psychological well-being (see Neff, 2009, for a review). People who are high in self-compassion respond less strongly to negative events, have higher positive affect and better mental health, and report greater life satisfaction than people who are low in self-compassion (Allen & Leary, 2010; Leary, Tate, Adams, Allen, & Hancock, 2007; Neff, 2003b; Neff, Kirkpatrick, & Rude, 2007).

Most research has focused on the moderating effects of self-compassion on reactions to academic and social events, but there are strong reasons to suspect that self-compassion may have important implications for health-related behaviors as well. When a loved one is ill or injured, people offer support and kindness, take care of the person who is indisposed, and encourage the patient to rest and to follow doctors' orders. Yet, when ill themselves, people often ignore doctors' recommendations, fume about the inconvenience of being incapacitated, and blame themselves for the illness or injury (Putnam, Finney, Barkley, & Bonner, 1994). These counterproductive reactions undermine their own physical and emotional well-being. In contrast, people who are higher in self-compassion should treat themselves with care and concern when they are sick or hurt, and their compassionate reactions should enhance their ability to self-regulate in ways that promote their physical and psychological well-being.

Self-regulation

Self-compassion should facilitate each step in the process of self-regulation identified by Baumeister and Heatherton (1996). Specifically, people higher in self-compassion should more effectively select health goals, engage in behaviors to reach their goals (including seeking medical treatment and adhering to treatment recommendations), monitor their goal progress, and adjust their behavior or goals when sufficient

progress is not being made. Self-compassion should also aid in emotional regulation when dealing with disease, illness, and injury. In the following sections, we explore the role of self-compassion in the self-regulation of health-promoting behaviors.

Setting Goals

To behave in ways that promote health, people must have a goal or reference point to work toward, such as the goal of eating five servings of fruits and vegetables every day, maintaining a healthy weight, or getting an annual physical exam. Self-regulation research suggests that inappropriate goals constitute a major cause of behavioral misregulation (Baumeister & Heatherton, 1996).

In the context of regulating health-relevant behaviors, lower order goals, such as losing weight or eating more vegetables, are a means to achieving higher order goals, such being healthy. Although little research has examined the goals of self-compassionate people directly, evidence suggests that self-compassion is probably unrelated to people's broad, higher level goals. For example, self-compassion is not related to the tendency to set high personal standards (Neff, 2003b) nor to the value that people place on being healthy (Terry, Leary, & Mehta, 2010a). However, although they may have similar higher order goals with respect to health, people who are low versus high in self-compassion may differ in the specific lower order behavioral goals that they adopt and in the reasons that they adopt those goals.

Ironically, the pursuit of health can undermine well-being when people's lower order health goals are unrealistic. Based on what is known about self-compassion, we hypothesize that self-compassion is associated with adopting more realistic and safer health-related goals. For example, although increased muscle strength promotes health, many people injure themselves by having a lower-level goal that involves lifting more weight than they can manage safely. A self-compassionate approach would promote comfort and satisfaction with realistic lower order goals, because self-compassionate people will recognize they can improve over time, and thus not feel pressured to engage in extreme or dangerous health goals.

Furthermore, self-compassion is associated with setting goals that are targeted toward enhancing one's well-being and happiness as opposed to goals that focus on bolstering feelings of self-worth or making impressions on other people (Neff, Hsieh, & Dejitterat, 2005; Neff et al., 2007). In a study of women's reasons for exercising, Magnus (2007) found that higher self-compassion was associated with stronger endorsement of exercise goals involving the intrinsic benefits of exercise and weaker endorsement of extrinsic and ego-related goals. Just as compassionate people want the best for their loved ones, self-compassionate people set healthier goals for themselves that are oriented toward promoting their personal growth and well-being.

Taking Action: Seeking and Following Medical Treatment

After selecting a desired health outcome, successful self-regulation requires people to engage in behaviors that move them toward the goal. In the context of health-related self-regulation, these behaviors include seeking medical treatment and adhering to medical recommendations.

Some writers have expressed concern that self-compassion might undermine people's motivation to improve themselves and their lives. If people feel good no matter what happens, what incentive do they have to make changes? Contrary to the notion that self-compassion promotes self-indulgence or passivity, self-compassio-

nate people take greater responsibility for their actions than people low in self-compassion do (Leary et al., 2007), and self-compassion is associated with greater personal initiative (Neff, Rude, & Kirkpatrick, 2006). Self-compassion should be related to greater efforts to control behaviors that have implications for one's health and well-being.

Seeking medical attention. A central aspect of health promotion involves seeking medical attention when one has reason to believe that a health professional can provide information or treatment that will facilitate one's well-being, such as going to the emergency room when one experiences chest pains, being tested for sexually transmitted diseases if one exhibits relevant symptoms, and seeking psychotherapy when one feels overwhelmed by depression. In an initial look at the relationship between self-compassion and seeking medical attention (Terry et al., 2010a), we asked participants how they would respond to variety of physical symptoms (such as a persistent headache, vomiting blood, and a potentially broken bone). Participants who were high in self-compassion indicated not only that they would be more likely to see a doctor but also that they would seek medical attention sooner (as measured in the number of days that they would wait after first experiencing the symptoms). Just as compassionate people encourage loved ones to see a doctor when needed, self-compassionate people do the same thing for themselves.

One deterrent to seeking medical care involves self-presentational concerns if the illness or injury might convey an unflattering image of the person to medical staff or to friends and family members who learn that the person sought medical attention. Some illnesses and injuries are stigmatized so that many people hesitate to seek help for problems with sexual organs and function (such as erectile dysfunction and vaginismus), sexually transmitted diseases, symptoms involving the rectum or anus, psychological difficulties, and injuries that were sustained in the course of doing something embarrassing (Barth, Cook, Downs, Switzer, & Fischogg, 2002).

Self-presentational reasons for avoiding medical testing and treatment are fueled by two concerns that may be attenuated by self-compassion. First, people probably overestimate the uniqueness of their medical problems and fail to realize how common such problems are. For example, getting tested for an STD could be viewed either as a commonplace and responsible action or as indication that one is promiscuous or not sufficiently careful. To the extent that self-compassion involves an acknowledgement that whatever problems one has are common and shared with millions of others, self-compassionate people should be less troubled by the sense that their medical problems are unusual.

Second, evidence suggests that self-compassion is associated with lower feelings of embarrassment and shame when experiencing or recalling failure (Leary et al., 2007). Likewise, elderly people who are high in self-compassion are less distressed by the prospect of other people knowing that they need assistance with mobility (Allen, Goldwasser, & Leary, 2010). To the extent that self-compassion attenuates concerns with other people's judgments, self-compassionate people should be less deterred from seeking medical help out of a concern with how others will view them.

Treatment adherence. When people are ill or injured, the need to self-regulate usually does not end when they seek treatment. In fact, even more concerted self-regulation may be needed to follow doctor's orders, take medicine regularly, and make lifestyle changes that are needed to improve one's health. After all, most medical regimens are unpleasant, time-consuming, or costly, requiring people to

make themselves do things that they find unpleasant or refrain from behaviors that they find enjoyable.

People often fail to follow their physician's instructions (Putnam et al., 1994), for example by not taking medicines as directed or pushing themselves too hard physically. Medical adherence rates are estimated at less than 50%, and researchers have had difficulty identifying factors that are reliably linked to adherence (Vermeire, Hearnshaw, Van Royen, & Denekens, 2001). However, self-compassion may be linked to medical adherence by two paths. First, self-compassion is positively associated with conscientiousness (Neff et al., 2006). Research suggests that conscientiousness can promote medical adherence (Christensen & Smith, 1995; Cloninger, 2005). Second, research suggests that negative feelings involving shame, self-blame, non-acceptance, or anger about one's medical problem can compromise people's ability to self-regulate and thereby undermine treatment adherence (Brion & Menke, 2008). A self-compassionate approach should minimize such feelings, thereby promoting compliance with medical recommendations. Consistent with this hypothesis, participants who were experiencing an illness or injury reported that they tried harder to follow the recommendations of their doctors the higher they were in self-compassion (Terry et al., 2010a). Ongoing research is investigating the role of self-compassion in treatment adherence of people with HIV (Brion & Leary, 2011)—a critical population to investigate because of the importance of adherence to anti-retroviral therapy in the management of HIV (Masquelier et al., 2005).

When instituting a behavior change, people occasionally backslide to the old, unwanted behavior, such as when someone trying to quit smoking has a cigarette or someone on a diet indulges cravings for chocolate cake. Initial evidence suggests the ability to reengage in self-regulation after an initial self-regulatory failure is related to self-compassion. For example, when people trying to quit smoking forgive themselves for having a cigarette, they are less likely to return to being a full-time smoker as opposed to those who feel guilty (Curry, Marlatt, & Gordon, 1987). These findings suggest that self-forgiveness, which is strongly related to self-compassion and, like self-compassion, involves self-kindness as opposed to self-criticism, is influential in behavioral changes that promote a healthy lifestyle. Beyond the role of self-forgiveness, a broader self-compassionate approach, including mindful acceptance of emotions and recognizing that many people struggle with backsliding when trying to quit a bad habit, should facilitate long-term behavioral change. In fact, dieters who were induced to feel self-compassionate after indulging in calorie-rich food were better able to regulate their eating at a later opportunity (Adams & Leary, 2007). Similarly, evidence from a study investigating the effects of a self-compassionate intervention on smokers who were trying to quit suggests that self-compassionate imagery provides a useful tool for increasing self-regulatory strength. Specifically, invoking self-compassionate imagery when faced with the urge to smoke reduced daily smoking, especially for those people who were highly self-critical and less committed to quitting (Kelly, Zuroff, Foa, & Gilbert, 2010).

Attention and Evaluation

As people pursue health-related goals, successful self-regulation requires that they attend to and evaluate their behavior and health on an ongoing basis. Mindfulness, one of the three features of self-compassion identified by Neff (2003b), may play a role in the attentional component of self-regulation (Shapiro & Schwartz, 1999). People who are mindful pay attention to their experiences in a non-judgmental,

patient, and accepting manner. These qualities of mindfulness promote self-regulation by eliminating impediments that can arise when people's attention is derailed by judgmental, defensive, or otherwise non-self-compassionate thoughts (Greeson & Brantley, 2009; Shapiro & Schwartz, 1999).

In addition to its effects on self-regulation generally, mindfulness can promote mental and physical health for people experiencing problems that are specifically associated with anxiety. Anxiety disorders are characterized by cognitive misregulation when people focus their attention on the upsetting sensations associated with their symptoms, which then increases their anxiety and fuels further anxiety attacks. A mindful, self-compassionate approach allows people to attend to the possibility of future anxiety in a non-judgmental way that avoids magnifying any anxiety they may experience. Additionally, mindfulness promotes processing anxiety and other negative emotions in ways that are balanced rather than reactive, allowing people to focus on effective strategies of self-regulation rather than being distracted by distressing subjective experiences (Greeson & Brantley, 2009).

Most models of self-regulation assume that perceiving a discrepancy between their goals and outcomes motivates people to reduce the discrepancy and move toward the goal. However, in some instances, adaptive self-regulation requires people to disengage from a goal that they have difficulty attaining (Scheier & Carver, 2003; Wrosch, Scheier, Miller, Schultz, & Carver, 2003). Evidence for a relationship between self-compassion and judicious goal disengagement is mixed, with one study showing a positive correlation and another showing no relationship (Neely, Schallert, Mohammed, Roberts, & Chen, 2009). However, we hypothesize that having self-compassion facilitates disengagement from unproductive health-related goals because self-compassionate people focus more directly on goals that directly promote their well-being. Furthermore, evidence suggests that self-compassion is positively associated with goal reengagement; self-compassionate people respond to failures to reach goals by focusing on alternative goals (Neely et al., 2009). For example, if seeking a health-related goal, such as losing a specific amount of weight, becomes detrimental to well-being or is unachievable, a self-compassionate person may pursue an alternative, healthier goal.

In brief, self-compassionate people appear to monitor their behaviors and goals in a more straightforward, nonjudgmental, and nondefensive fashion that allows them to make better decisions regarding goal pursuit (Neff et al., 2005). And, when goal assessment suggests that the goal cannot be achieved, self-compassionate people should more successfully switch to alternative goals.

Emotional Regulation

Self-regulation can be derailed by negative emotions at every step of the process (Baumeister & Heatherton, 1996). Yet, medical tests, visits to the doctor, long-term management of chronic illnesses, rehabilitation regimens, and healthy lifestyle changes are often difficult, unpleasant, and stressful. People who manage their negative emotions with respect to their medical problems and treatments should thus regulate health-promoting behaviors more effectively than those who become overwhelmed by their emotions.

Neff et al. (2005) suggested that emotional regulation is a defining characteristic of self-compassion. In a variety of domains—personal rejection, unfavorable evaluations, and academic and interpersonal difficulties—self-compassion is associated with lower depression and anxiety and greater coping (Allen & Leary, 2010; Neff,

2003b, Leary et al., 2007). For example, self-compassionate students weather problems they experience during their first semester of college with less homesickness and depression (Terry, Leary, & Mehta, 2010b). In the health domain, self-compassionate people reported less depression, anxiety, irritation, loneliness, and anger than less self-compassionate people when experiencing problems ranging from minor illnesses to serious diseases and physical injuries (Terry et al., 2010a). Importantly, low and high self-compassion people perceived their medical problems as equally serious, but high self-compassion people managed their emotions more successfully than people who were low in self-compassion.

Regulating one's emotions can drain people's self-regulatory resources. For instance, people who are asked to engage in emotional suppression or amplification have less self-regulatory resources available for later tasks (Baumeister, Bratslavsky, Muraven, & Tice, 1998; Schmeichel, 2007). However, people who are high in self-compassion do not suppress their emotional reactions (Neff et al., 2007). Rather, they experience negative events in a more mindful, less reactive manner and, because they experience less negative affect, they do not deplete self-regulatory resources trying to manage their emotions. As a result, their resources are available for other self-regulatory tasks, including adhering to medical regimens, instituting positive behavioral changes, or monitoring their progress toward health goals.

Any factor that lowers harmful negative affect[1] should promote more judicious health-related decisions because highly charged emotions can lead to poorer decision making (Bruyneel, Dewitte, Franses, & Dekimpe, 2009). In addition to the fact that managing negative affect depletes self-regulatory strength and undermines people's ability to consider their options, people implicitly use affect as information that can influence how they weigh their options (Schwarz & Clore, 2003). For example, people who are ill or injured often must choose between treatment plans, such as selecting surgery or physical therapy, and excessive negative affect may influence their decision by casting a pall on how optimistic they are about their options. Self-compassion is positively associated with optimism (Neff et al., 2006) and optimism is an important factor in the self-regulation of health-promoting behaviors (Scheier & Carver, 2003). Taken together, self-compassion should promote more effective decisions.

Self-regulation can occur when people lose focus on their long-term goals either through using distraction to avoid negative affect or when they experience difficulty transcending the current situation (Baumeister & Heatherton, 1996). First, distraction reduces people's ability to self-regulate by drawing their attention away from monitoring health goals and goal-relevant behaviors. Additionally, many behaviors that people use for distraction—such as excessive eating and alcohol consumption—are poor health choices that can amplify existing health problems or contribute to new ones (Baumeister & Heatherton, 1996). Second, people in the throes of strong emotion often have trouble seeing beyond the immediate situation and lose focus on their long-term goals (Tice, Bratslavsky, & Baumeister, 2001). In the case of an injury or illness, people who are low in self-compassion may focus on their negative feelings and the medical problem that is producing them as opposed to long-term health goals and the steps they must take to recover (Baumeister & Heatherton, 1996). Coping with illnesses or injuries in a self-compassionate manner should create less need for unhealthy forms of distraction and help people maintain focus on long-term goals.

People may feel responsible for their health problems either because the illnesses or injury was self-inflicted or because they perceive their behaviors played a causal

role. For example, people may be ill or injured because they failed to take certain precautions (such as using seatbelts, helmets, condoms, or sunscreen) or because they did not take care of themselves adequately over a period of time (as in cases of obesity, heavy alcohol use, or tobacco-related cancers). In cases such as these, people must deal both with their medical problem and with the anger, blame, or shame they experience for the role that they played in it. Initial evidence suggests that self-compassion may play a role in managing the self-focused emotions that arise when ill or injured. A two-week self-compassion intervention lowered shame in participants struggling with severe acne (Kelly, Zuroff, & Shapira, 2009). Additionally, after the experience of a traumatic event, such as being the victim of sexual assault, victims often struggle with feelings of self-blame. People are more likely to blame themselves for negative, traumatic events when they perceive that they could have avoided the event (Davis, Lehman, Silver, Wortman, & Ellard, 1996). Self-compassionate people, by focusing on feelings of common humanity, should focus less on how they were uniquely to blame for what happened to them.

Additionally, self-blame can be behavioral, blaming oneself for engaging or not engaging in a specific behavior, or characterological, placing blame on oneself as the kind of person that brings negative events upon oneself (Janoff-Bulman, 1979). Behavioral self-blame can be consistent with self-compassionate perspective. People can imagine that many other people would have made a similar behavioral choice and that this negative event could have happened to anyone. Said another way, we believe self-compassionate people will take responsibility for their role in their health problems without experiencing the detrimental effects of rumination or characterological self-blame.

Conclusion

The effective self-regulation of health-promoting behaviors requires setting appropriate goals, engaging in goal-directed behavior, monitoring goal progress, and adjusting one's behavior and goals as needed. Self-compassion may facilitate healthy behavior by helping people to monitor their health goals with less distraction and defensiveness, consider their situation with equanimity, disengage from goals that are not in their best interests, seek medical help when needed, adhere to treatment recommendations, and regulate negative affect.

Additional research on the links between self-compassion, self-regulation, and health is likely to be mutually beneficial for two reasons. First, although most research to date has focused on individual differences in self-compassion, we suspect that interventions that induce a self-compassionate perspective may help people manage their health more effectively. For example, medical personnel could frame explanations and recommendations to patients in ways that encourage self-kindness, a sense of common humanity vis-à-vis the patient's illness or treatment, and a mindful, nonjudgmental way of approaching the problem. Self-compassion may be a useful way to enhance self-regulation in ways that promote health and adaptive reactions to health problems and future research can explore this possibility.

Second, research on self-compassion is in its infancy, and health-related domains provide fertile ground for future investigations of self-compassion. In this article, we have focused primarily on psychological variables that are related to self-compassion, such as self-blame and self-forgiveness, yet more research is needed on the relation between a broad, self-compassionate perspective and health-related behaviors. Self-compassion may be a strong, conceptual framework within which to

consider many health problems as well as a rich source of ideas for future research on the psychology of health and illness. Studying the role of self-compassion in how people manage specific health behaviors can provide valuable information about the processes by which self-compassion may help people behave in ways that promote their health and well-being.

Note

1. Although we focus on how negative affect can reduce effective decision making, drain self-regulatory resources, or promote unhealthy behaviors due to distraction, we should note that negative affect is not always harmful. For example, research on breast cancer has demonstrated that low levels of worry about one's health can increase medical test seeking (see Hay, McCaul, & Magnan, 2006, for a meta-analysis). We use *harmful negative affect* to refer to negative affect that is likely detrimental to effective decision making and health-seeking behaviors.

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