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Effects of Self-affirmation on Coping and Motivational Systems

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Abstract

Self-affirmation theory proposes that people's beliefs and behaviors are motivated by a desire to view the self as moral, adaptive, and capable (Aronson, Cohen, & Nail, 1999; Steele, 1988). Researchers have found that allowing one to affirm the self-concept decreases defensiveness toward threatening health information including greater acceptance of the information and greater intentions to change a health behavior. However, few studies have examined possible reasons self-affirmation has these effects. In this study, college students were randomly assigned to either a self-affirmed condition in which they wrote an essay about their most important personal value or a non-affirmed condition in which they wrote about a non-personal value. Participants then responded to a hypothetical health scenario and completed coping, personality and other individual difference measures. We examined effects of the self-affirmation on coping responses and motivation, as well as whether personality moderated these responses.

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Self-affirmation Theory as proposed by Steele (1988) states that defensive biases occur when a person's global self-worth is threatened (p. 289). McQueen and Klein (2006) said, "Self-affirmation is the active affirmation of some other important aspect of one's self-concept that is unrelated to a self-threat," (p. 292). The ultimate goal of self-affirmation is to sustain the integrity of the self. This is achieved by directly diminishing or eliminating the threat, removing the perception of the threat, or reducing the perception that the threat threatens self-integrity (Steele, 1988). Several studies have investigated how self-affirmation can reduce the effects of defensive biases (Harris & Naper, 2008; Reed & Aspinwall, 1998; Sherman & Cohen, 2002; Sherman, et al., 2000). Self–affirmed individuals are more likely to believe information that they would normally view as threatening, and as a result change their beliefs and even their behavior to be consistent with recommended information (Sherman & Cohen, 2000). Previous research has shown that when s individuals are presented with threatening health-risk information and self-affirmed, they may change their behavior. For example coffee drinkers are more likely to report a reduction in caffeine consumption; (Sherman, Nelson, & Steele, 2000) unhealthy eaters report an increase in fruit and vegetable consumption; (Eptona & Harrisa, 2008) and smokers a reduction in smoking (Harris, Mayle, Mabbott, & Napper, 2007). Research has shown that self-affirmation can lead to behavior change in different domains, but it has not yet examined how affirmation may lead to this behavior change such as effects related to coping and motivational tendencies.

Coping is defined as the cognitive and behavioral efforts to master, endure, or reduce external and internal demands and conflicts among them. Such coping efforts serve two main

functions: the management or alteration of the source of stress (problem-focused coping) and the regulation of stressful emotions (emotion-focused coping) (Folkman & Lazarus, 1980). We examined whether self-affirmation encourages people to use more problem-focused coping or more emotion-focused coping strategies. Engaging in a more problem-focused approach to solve problems is consistent with self-affirmation's effects on health behavior, like self-affirmation problem-focused coping reduces inconsistency to maintain integrity of the self (Steele, 1988). However, no studies to date have tested this idea. To examine this question, we presented participants with a hypothetical scenario and then we had them respond to the COPE scale by (Carver, 1987).

Self-affirmation may also increase openness and lead to behavior change following threatening information by affecting one's motivational inhibition. Carver and White (1994) proposed that we have two motivational systems, a behavior inhibition system (BIS) and a behavior approach system (BAS). The behavior inhibition system leads to avoidance motivation and negative affect whereas behavior approach leads to approach motivation and positive affect. A person who is behavior approach motivated is more driven and goal oriented to get what they want whereas a person who is behavior inhibited is likely to try and avoid and stay away from anything that may cause unpleasant feelings (Gray & McNaughton, 2000). Research has shown that when participants are given a threatening scenario questionnaire measuring human defensiveness which includes twelve items like, "You are walking alone in an isolated but familiar area when a menacing stranger suddenly jumps out of the bushes to attack you" and ten response options such as hide, freeze, run away, or attack (see Blanchard et al., 2001) there is evidence that the BIS scale correlates significantly with defensive behavior (Perkins & Corr, 2006). This may suggest that when processing health risk information, people are likely in a BIS

state of mind. Given these findings, it is possible that one way self-affirmation is effective is through changing one's motivation from a behavioral inhibitory system to a behavioral approach oriented system.

Method

Participants

Participants were 66 Grand Valley State University undergraduate students. In exchange for their participation participants were either given research credit towards their enrolled course or they received $10. Participants included 25 males and 41 females their average age was 22.

Procedure

Participants were recruited by either signing up online as part of course research participation requirement or via an e-mail asking them to participate. When they came to the laboratory, they were told by an experimenter that they would be completing a study that would require them to read and respond to a hypothetical scenario and rank their values. They were told that in general we were interested in how their values corresponded to their responses on the scenario. Participants were randomly assigned to an affirmed or non-affirmed condition via the value-ranking task (Sherman et al., 2000). All participants ranked their personal values and then wrote about their most important value (self-affimed) or a lesser value (non-affirmed). After participants completed the affirmation task, they read and responded to a hypothetical health scenario about being diagnosed with cancer. They answered questions about how they would cope with this threat and also responded to motivational questions. Participants also completed demographics, personality, and other individual difference measures (e.g., self-esteem). Participants were then debriefed and thanked for their participation.

Measures

Self-affirmation manipulation. The self-affirmation values task was adapted from Sherman, Nelson, & Steele, 2000. All participants ranked eleven personal values (e.g., sense of humor, relations with friends/family, social skills, creativity, and athletics). Then they wrote about why their top ranked value is important to them (self-affirmed) or why their ninth ranked value may be important to another student (non-affirmed).

Coping Scenario and the Brief COPE scale. To assess coping with a hypothetical health threat, we first had participants read a the scenario *"*Please imagine that you were diagnosed with cancer three months ago… the following items ask what you would do to cope with this problem… Make your answers as true FOR YOU as you can." Participants then completed the COPE scale (Carver, 1987) which includes several subscales. Example of items include: "Say to myself "this isn't real", for behavioral disengagement "Give up trying to deal with it", and self-blame "Blame myself for things that happened". All responses are on a 4-point agreement scales, from "I would not do this at all" to "I would do this a lot".

Positive and negative affect scales (PANAS). The scale measures how a participant is feeling at the moment. There are 20 items each is a type of feeling such as excited, interested, alert and ashamed. Participants rate on a 5-point scale ranging from 1 = *very slightly or not at all* to 5 = *extremely* to indicate the extent to which they felt at the current moment (Watson & Tellegen, 1988).

*Behavior inhibition system and behavior approach system (BIS/BAS).*The BAS scale consists of thirteen items divided up into three subscales like this one, "I crave excitement and new sensations" and "If I see a chance to get something I want I move on it right away." The BIS scale consists of seven items like this on, "I feel pretty worried or upset when I think or know

someone is mad at me" and "Criticism or scolding hurts me quite a bit". Participants rate themselves on a scale of one (not true of me) to four (very true of me) on all statements (Carver & White, 1994).

Results

Table 1 presents the means and standard deviations for primary outcomes. Results showed significant differences between self-affirmed and non-affirmed participants in the coping subscale of denial and motivation. Participants who were self-affirmed were less likely to report they would deny their problems diagnosis. Affirmed and non-affirmed participants did not differ for other coping subscales such as planning, humor, and acceptance. Affirmed participants also scored higher than non-affirmed participants on the BAS scale, suggesting they were more behavior approached oriented. Non-affirmed participants scored higher on the BIS scales suggesting that they were more behaviorally inhibited. Affirmed and non-affirmed participants did not differ for behavioral inhibition. There were marginally significant differences for behavioral disengagement and positive affect suggesting that those in the affirmed condition were less likely to report disengagement (e.g., giving up trying to cope) and more likely to report a positive mood.

We also examined self-esteem, optimism, rational thinking, and experimental thinking as moderators of the condition effect, self-affirmation and coping. However, these things failed to moderate the associations between self-affirmation and coping.

Discussion

Self-affirmation has been shown to reduce defensiveness to threatening health information and encourage greater behavior change (Crocker, Niiya, & Mischkowski, 2008; Harris & Napper, 2005; Kunda, 1987; Sherman et al., 2000). In this study, we examined

additional variables that may relate to those effects. Our findings showed that participants who were able to affirm the self reported they would be less likely to deny a cancer diagnosis. These participants were also more likely than non-affirmed participants to be in an approach motivation mindset. The findings suggest that self-affirmation may influence openness and behavior via coping cognition and motivational mindsets, but further follow-up experimental research is needed to confirm these variables as mediators of the effects. A follow-up study design may include different health threatening coping scenarios (i.e. imagine you were diagnosed with a sexually transmitted disease) and then see if the scenario yields the same results on coping with denial and behavioral disengagement. Once research can find out how and why self-affirmation works we can better use it to promote health-behavior change.

Table 1

Means and Standard Deviations of Primary Outcomes

	Self-affirmed		Non-affirmed	
Variable	**Mean**	**SD**	**Mean**	**SD**
Denial *	**1.49**	**0.55**	**1.95**	**0.86**
Behavioral Disengagement †	**1.30**	**0.47**	**1.53**	**0.64**
Self-blame	**1.66**	**0.74**	**1.97**	**0.97**
Positive affect †	**2.56**	**0.85**	**2.21**	**2.60**
Negative affect	**1.38**	**0.44**	**1.41**	**0.41**
Behavioral Approach System*	**1.88**	**0.53**	**2.19**	**0.57**
Behavioral Inhibition System*	**2.30**	**0.64**	**2.21**	**0.61**

Note.* † *p<.10* *p<.05* **p<.001

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