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Diederik A. Stapel, and Lonneke A. J. G. van der Linde

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Tilburg University

In a series of studies, it is demonstrated that different types of self-affirmation procedures produce different effects. Affirming personally important values (value affirmation) increases self-clarity but not self-esteem. Affirming positive qualities of the self (attribute affirmation) increases self-esteem but not self-clarity (Study 1). As a consequence, attribute affirmation (which increases self-esteem) is more effective than value affirmation as a buffer against self-depreciating social comparison information. Attribute-affirmed participants more readily accept the self-evaluative consequences of threatening upward social comparisons than do value-affirmed participants (Study 2). However, value affirmation (which increases self-clarity) is a more effective buffer against dissonance threats. Value-affirmed participants showed less attitude change after writing a counterattitudinal essay than attribute-affirmed participants (Study 3).

Keywords: self-affirmation, self-clarity, self-esteem, cognitive dissonance, social comparison

Every day we find ourselves in situations that are a potential threat to our self-image. We tell a small lie to keep our marriage afloat, we gobble down a chocolate bar while we are on a diet, we are defeated at a game of tennis by someone who obviously is an inferior player. As many studies in clinical, social, and personality psychology have shown, these situations are more threatening for some people than for others (see, e.g., Baumeister, 2005; Swann & Bosson, 2010). What these studies suggest is that people who have a "strong" self (e.g., Koole, Smeets, van Knippenberg, & Dijkster-huis, 1999; Schimel, Arndt, Banko, & Cook, 2004) will be better able to counter these threats than those who do not. People with a strong self may effortlessly employ all kinds of self-maintenance strategies to avoid damage to their self-image. They may tell themselves "It is not bad to lie when it saves your relationship" or think along the lines of "He may have beaten me at tennis, but I am handsome and rich and he is not" (see Festinger, 1957; Tesser, 1988).

Self-Affirmation and Benefits for the Self

In the terminology of self-affirmation theory (Steele, 1988), a strong self is a self-affirmed self, a self that is able to deal with threatening events and information by drawing resources from itself. In the past decades, myriad empirical studies have investigated the consequences of self-affirmation on (social) psychological functioning. These studies show that self-affirmation indeed has all kinds of beneficial effects on the self (for reviews, see Aronson, Cohen, & Nail, 1999; Harris & Epton, 2010; McQueen & Klein, 2006; Sherman & Cohen, 2006; Sherman & Hartson, 2011). For example, self-affirmation activates self-improvement motives (Taylor & Lobel, 1989) and thus increases a preference for learning from upward comparison others rather than laughing at downward comparison others (Spencer, Fein, & Lomore, 2001; Stapel & Schwinghammer, 2010). And similarly, self-affirmation reduces dissonance threats (Steele, 1988; Steele & Liu, 1983), prejudice (Fein & Spencer, 1997), denial of threatening informa-tion (Sherman, Nelson, & Steele, 2000), rebound effects after thought suppression (Koole & van Knippenberg, 2007), biased processing of threatening health information (Harris & Napper, 2005), ego-depletion effects (Schmeichel & Vohs, 2009), terror management effects (Schmeichel & Martens, 2005), and defensive reactions to self-depreciating social comparisons (see Schwing-hammer, Stapel, & Blanton, 2006; Tesser & Cornell, 1991). In-spired by this abundance of affirmation-induced threat reduction effects, a number of theorists have argued that all types of self-affirmation effects draw on the same source and can thus be explained in terms of one overarching mechanism (Steele, 1988; Tesser, 2000). These theorists thus suggest that the self is a bag of self-evaluation maintenance strategies that on the surface may seem to be different but that all serve the common goal of, for example, maintaining self-integrity (Steele, 1988) or sustaining positive affect (Tesser, 2000).

Unfortunately, in the world of empirical self-affirmation studies, it is hard to find evidence for the theoretically appealing view that all self-affirmations "are created equal" (Schimel et al., 2004). Granted, most, if not all, self-affirmations bolster the self, make the self stronger, and consequently make people act less self-defensively, but recent reviews of the literature are unclear con-cerning the mechanisms behind this. Some studies suggest that self-regulation issues may be driving most self-affirmation effects, whereas others suggest these effects are best explained in terms of

Diederik A. Stapel and Lonneke A. J. G. van der Linde, Tilburg Institute for Behavioral Economics Research (TIBER), Social Psychology Depart-ment, Tilburg University, Tilburg, the Netherlands.

Correspondence concerning this article should be addressed to Diederik A. Stapel, Tilburg Institute for Behavioral Economics Research (TIBER), Social Psychology Department, Tilburg University, P.O. Box 90153, 5000 LE Tilburg, the Netherlands. E-mail: d.a.stapel@uvt.nl

construal-level differences. Some studies have presented positive affect as the best candidate to explain self-affirmation effects, but others have shown that self-affirmation does not really affect people's moods. Some investigators suggest that self-esteem is the mediator that bridges affirmation with nondefensiveness, but others have shown that affirmation manipulations often do not affect self-esteem (see Harris & Epton, 2010; McQueen & Klein, 2006; Schmeichel & Vohs, 2009; Sherman & Hartson, 2011; Wakslak & Trope, 2009). In other words, although it is beyond doubt that self-affirmation leads to reductions in self-defensiveness, it is still unclear after more than two decades of empirical research how it does so. What drives self-affirmation effects? We do not know. What is needed then—as many researchers have argued—is self-affirmation studies of what-it-is and how what-it-is affects what-it-does (see Crocker, Niiya, & Mischkowski, 2008; Harris & Epton, 2010; McQueen & Klein, 2006; Napper, Harris, & Epton, 2009; Sherman & Cohen, 2006; Sherman & Hartson, 2011). With the present set of studies, we hope to satisfy this need.

What Drives Self-Affirmation Effects?

In the present article, we argue and demonstrate that when answering the question "What drives self-affirmation effects?" it is essential to distinguish two types of self-affirmation "techniques": *value affirmation* and *attribute affirmation*. As McQueen and Klein (2006, p. 295) suggest in their review of experimental manipulations of self-affirmation techniques, these two self-affirmation types represent the two main flavors in the candy shop of self-affirmation studies (see also Schimel et al., 2004). Value affirmation refers to affirming the self by emphasizing personally important values ("Being religious is important to me"; e.g., Cohen et al., 2007; Harris & Napper, 2005; Steele, 1988; Steele & Liu, 1983; Tesser & Cornell, 1991). Attribute affirmation refers to affirming the self by emphasizing one's qualities ("I am an intelligent person"; e.g., Cohen, Aronson, & Steele, 2000; Harvey & Oswald, 2000; McGuire & McGuire, 1996; Schwinghammer et al., 2006; Steele, Spencer, & Lynch, 1993).

Even though to date value affirmation and attribute affirmation have typically been treated as two relatively similar ways to achieve the same goal, self-affirmation (see Steele, 1988; Tesser, 2000), we argue and demonstrate that in fact these two techniques are very different and therefore have different consequences for different types of self-threats. They affect people's self-images in different ways and thus strengthen the self in different ways. Our logic is based on Campbell et al.'s (1996) insight that "the self" contains a self-defining knowledge component ("Who am I?") that mainly refers to beliefs about *self-clarity* and an evaluative component ("How do I feel about myself?") that refers to the positivity of these self-beliefs, or *self-esteem* (see also Stapel & Suls, 2004, Study 5). Thus, beliefs about the self have at least two core components: one that focuses mainly on self-worth and thus on the positivity of self-views and one that focuses mainly on self-clarity and thus on the structure, consistency, and meaning of self-views. Given that the self can be viewed in terms of these two components, it seems logical to assume that the self can also be affirmed in terms of these components.

We argue that value affirmation increases self-clarity, because through affirming their core values, people are reminded of who they are, what they deem important, and what they stand for. Thus,

as Steele (1988) suggested when positing that value affirmation increases "self-integrity," value affirmation leads people to adopt a more structured, clearer view of the self and does not simply activate an ephemeral positive feeling (see also Steele & Liu, 1983; Wakslak & Trope, 2009). Attribute affirmation, on the other hand, increases self-esteem. When one affirms positive self-descriptions, positive self-images are made salient, which is likely to (temporarily) increase one's feelings of self-worth. Put differently, when affirming one's attributes or characteristics, the focus is on positive *self-evaluations* ("I am intelligent") but when affirming values, principles, and norms, the focus is on self-descriptions and *self-categorizations* ("I value intelligence"; "I respect truly honest people").

If value affirmation and attribute affirmation are indeed different from each other, they are likely to have specific consequences for different self-threats. Value affirmation should be an especially effective buffer against threats to the clarity of the self, such as dissonance threats (e.g., Steele & Liu, 1983), whereas attribute affirmation should be an especially effective buffer against threats to positive self-evaluations, such as threatening social comparisons (e.g., Tesser & Cornell, 1991).

Value Affirmation and Attribute Affirmation

Value affirmation is probably the most widely used affirmation technique in self-affirmation research (McQueen & Klein, 2006). What is value affirmation? A prototypical example can be found in a study by Sherman et al. (2000). In this study, participants were first asked to rank 11 values and personal characteristics (e.g., artistic skills, creativity, relations with friends/family) in order of personal importance. Then they were asked to indicate their most important value and to write an essay describing why this value was important to them. All value affirmation studies use a variation of this technique in which the cognitive accessibility of personally important values is increased (see Crocker et al., 2008; McQueen & Klein, 2006; Napper et al., 2009; Sherman & Cohen, 2006; Schimel et al., 2004).

The second most popular technique that has been used in affirmation studies is what could be called (characteristic, trait, or) attribute affirmation (see McQueen & Klein, 2006). What is attribute affirmation? A prototypical example can be found in research by Koole and van Knippenberg (2007), who gave participants positive feedback about their personality scores as a means of self-affirmation. Participants received a paragraph with positive feedback about their personality that read, for example, "Although you may feel you have a number of personality weaknesses, your personality is fundamentally strong" and "You are very social." All attribute affirmation studies use variations of this technique in which the cognitive accessibility of positive self-definitions is increased. Thus, studies in which participants are asked to list a number of positive aspects of themselves or studies in which they are asked to think about their talents for a few minutes may also be called attribute affirmation studies (e.g., Cohen et al., 2000; Harvey & Oswald, 2000; Schwinghammer et al., 2006; Van den Bos, 2003).

In self-affirmation studies, both value affirmation and attribute affirmation are used abundantly in referring to the same concept, self-affirmation. Thus, the assumption seems to be that they are the same thing and have the same effects. On a very general level,

these affirmation types do refer to the same thing (they make the self stronger) and do have the same type of effects (they reduce defensiveness). However, when one's goal is to find out what drives affirmation-induced defensiveness reduction, the diversity of effects (in strength, direction, and dimension) dictates that one must be more precise. After all, given that self-affirmation (broadly defined) sometimes does and sometimes does not yield mood (or self-esteem or self-clarity) effects, it is unlikely that one straightforward mechanism is driving the occurrence of these effects (see also Crocker et al., 2008). On a more theoretical and less empirical note, elaborating on the importance of, for example, courage or social skills (value affirmation) is obviously quite different from emphasizing, for example, how courageous or social one is (attribute affirmation). Value affirmation is about expressing one's values, principles, and norms. Attribute affirmation is about emphasizing one's positive attributes. We therefore hypothesize that value affirmation should (temporarily) increase self-clarity, whereas attribute affirmation should (temporarily) increase self-esteem. Surprisingly, however, this hypothesis has never been tested. Although several investigators have hinted at the possibility that different types of affirmation techniques may have different effects (e.g., Crocker et al., 2008; McQueen & Klein, 2006; Schimel et al., 2004; Sherman & Cohen, 2006), to date this has not resulted in clear and testable ideas about why and how such differences may occur. With the present investigation, we hope to change this state of affairs.

Affirmations and Defenses

Self-clarity refers to the extent to which the contents of an individual's self-concept are clearly and confidently defined, internally consistent, and temporally stable (Campbell et al., 1996, p. 141). Value affirmation should increase self-clarity because when people elaborate on their personal values, their knowledge of who they are—their self-image—is likely to become clearer. As Tesser (2000, p. 293) stated when writing about value affirmation, "Affirmation can be thought of as becoming clearer about the self— that is, not only who we are but also who we are not." Some indirect support for our hypothesis that value affirmation should increase self-clarity can be found in studies on self-clarity and self-certainty personality measures (see Campbell et al., 1996; Pelham, 1991). In the construction and validation of these measures, these studies give empirical support for the notion that providing reasons for one's values (i.e., reflecting on and affirming one's values) increases clarity about one's beliefs ("I know what I believe in, what I stand for"; see Wakslak & Trope, 2009).

Attribute affirmation should increase self-esteem because when people emphasize their positive qualities, their feeling of self-worth is likely to increase. This notion can also count on empirical support. There are quite a few studies that show a strong relationship between other-generated feedback ("You are very intelligent") as well as self-generated self-boosts ("I know I am intelligent") and self-esteem. For example, Greenberg et al. (1992) showed that people who had just received positive feedback about their personality reported higher levels of self-esteem than participants who had received neutral or negative feedback. Further, a series of studies by Stapel and Johnson (2007) has shown that elaborating on one's positive self-traits ("Think about things you like about yourself") can be sufficient to significantly increase

one's feelings of self-worth (see also Harber, 2005; Koole & van Knippenberg, 2007; McGuire & McGuire, 1996; Schwinghammer et al., 2006; Steele et al., 1993).

In the present research, we heed the lamenting call so often heard in recent investigations of self-affirmation effects (see Sherman & Cohen, 2006) that although "self-affirmation has spawned a host of manipulations, from values affirmation to positive feedback, each of which presumably affirms self-affirmation," the mechanism underlying self-affirmation effects "has remained a mystery" (Crocker et al., 2008, p. 746). Thus, "studies are needed to examine potential mediators" (McQueen & Klein, 2006, p. 307).

The studies we present here are the first to systematically measure what two of the commonest types of self-affirmation techniques actually do. We tested the hypothesis that the effect of value affirmation is much stronger on self-clarity than on self-esteem, whereas the effect of attribute affirmation is much stronger on self-esteem than on self-clarity. More interesting perhaps is our hypothesis that the intrinsic link between, on the one hand, value affirmation and self-clarity and, on the other hand, attribute affirmation and self-esteem has consequences for the kinds of self-threats these types of self-affirmation defend against. Put simply, attribute affirmation should be a good buffer against self-esteem threats ("You are a loser") but not against self-clarity threats ("Who are you, what are you?") because it fuels people's self-esteem more than people's feelings of self-clarity. Following the same logic, value affirmation should be a good buffer against self-clarity (but not self-esteem) threats because it fuels people's feelings of self-clarity rather than people's self-esteem. Let's be more specific.

Value Affirmation, Self-Clarity, and Dissonance

As we know from decades of studies on dissonance effects, the experience of dissonance threatens feelings of self-consistency and self-integrity (see Aronson, 1968; Noordewier & Stapel, 2010). Dissonance occurs when people experience incongruities between cognitions, feelings, values, and/or behaviors. To give an example, it is difficult being a smoker when one knows this has bad consequences for one's health. There are many ways in which one can solve this inconsistency. For example, one can change one's attitude in the direction of the behavior: "Well, smoking isn't so bad. My grandma has been smoking over 40 years now and she is still very healthy." Or one can diminish the importance of the behavior: "It is not that big a deal if I smoke only a few cigarettes a day." But whatever people do, dissonance is "a negative intrapersonal state which motivates the individual to seek and implement a strategy to alleviate this aversive state" (Elliot & Devine, 1994, p. 382; see Festinger, 1957).

We test the hypothesis that through value affirmation, feelings of self-clarity may be increased and thus people may be less concerned with cognitive dissonance. When one has just elaborated on who one is, what one stands for, or what one's important values are—and thus affirmed and clarified one's self-image—the need to act on a new experience of dissonance is likely to be much lower than when one's values have not been affirmed. When one's feelings of self-integrity are high, the experience of dissonance is likely to be less impactful than when one's feelings of self-integrity are relatively low. That is, when one's self-concept is clearly defined; when one knows oneself; when one is aware of

one's values, principles, and norms, one can more easily accept experiencing an incongruity between, for example, a value and a behavior. If value affirmation indeed increases self-clarity, it should buffer against dissonance threats. This argument is supported by Steele (1988, p. 290), who stated that "self-affirming thoughts should make it easier to be objective about other, self-threatening information." Furthermore, although it was framed in more general affirmation terms, the seminal self-affirmation studies by Steele and Liu (1983) empirically support the notion that value affirmation should reduce dissonance threats. Value-affirmed participants did not change their attitudes after they had written a counterattitudinal essay, whereas nonaffirmed participants did.

Attribute Affirmation, Self-Esteem, and Social Comparison Effects

How can we test the hypothesis that attribute affirmation buffers people against self-esteem threats? We think that exposing people to threatening social comparison information after attribute affirmation is an effective way to do this. Typically, people react very defensively when confronted with upward comparison standards (see Stapel & Koomen, 2001; Stapel & Van der Zee, 2006; Tesser, 1988). They may question the status of the comparison standards ("She is not as smart as everyone thinks"), their relevance ("She is a professional model. Why should I compare myself to her?"), or the importance of the social comparison dimension ("Who says this test really measures intelligence. I did not do well, but what does that mean?"). People are very creative in maintaining their positive self-evaluation in the face of threatening social comparison information (see also Schwinghammer et al., 2006; Stapel & Schwinghammer, 2004).

We propose that attribute affirmation is an especially effective tool to help people buffer against such social comparison threats. Being exposed to an upward comparison other poses a potential threat to a positive self-image because it may hurt one's self-esteem ("She is better. I am a loser"; Tesser, 1988). To protect themselves from the effects of upward comparison others, people try not to incorporate such threatening information into their self-image. However, when people are attribute affirmed and thus feel good about themselves, their need to act defensively and deny the consequences of upward comparisons is reduced. Attribute affirmation replenishes the self; it fills one's self-image with extra positive information ("I am attractive, I am intelligent, I am creative"). It is much easier to accept that someone else is better when you have affirmed your positive self-characteristics than when you have not (Stapel & Koomen, 2001; Stapel & Schwinghammer, 2004). Research by Schwinghammer et al. (2006) supports this line of reasoning, showing that receiving positive feedback may act as a buffer against self-depreciating social comparison information. Participants who had received positive feedback about their scores on an important and diagnostic test measuring social skills and ambition processed upward social comparison information about a very successful member of their peer group in a nondefensive manner and incorporated this information more in their self-evaluations ("I am not very successful") than did participants who were not attribute affirmed.

Overview of the Present Studies

We propose that value affirmation increases self-clarity and should thus be an especially effective buffer against self-clarity threats (e.g., feelings of cognitive dissonance) rather than against threats to self-esteem (e.g., exposure to self-depreciating social comparisons). Attribute affirmation, on the other hand, should increase self-esteem and should thus be an especially effective buffer against threats to self-esteem rather than against threats to self-clarity. This logic is tested in three studies. In Study 1, we tested the hypothesis that value affirmation would lead to higher levels of self-clarity but not to higher levels of self-esteem, whereas attribute affirmation would lead to higher levels of self-esteem but not to higher levels of self-clarity. In Study 2, we investigated whether value affirmation and attribute affirmation have different effects on the self-evaluative consequences of threatening social comparison information. We predicted that attribute affirmation would lead to nondefensive responses to upward social comparison, whereas value affirmation would lead to defensive responses to upward social comparison. In Study 3, we investigated whether value affirmation and attribute affirmation have different effects on dissonance threats. We predicted that value affirmation would lead to less attitude change after experienced dissonance than would attribute affirmation.

Study 1

In our first study, we tested the effects of value affirmation, attribute affirmation, and no affirmation conditions on self-esteem and self-clarity measures. Participants first affirmed important values, positive qualities, or nothing and then answered questions related to self-esteem and self-clarity. We predicted that value affirmation would mainly increase self-clarity ratings, whereas attribute affirmation would mainly increase self-esteem ratings.

Method

Participants and design.   Thirty-nine students, who participated for partial course credit, were randomly assigned to a value affirmation, an attribute affirmation, or a no affirmation control condition.

Procedure and materials.   Participants completed a series of ostensibly unrelated questionnaires. The first questionnaire contained the affirmation manipulations; the second contained the dependent measures.

Affirmation manipulations.   In the value affirmation and no affirmation conditions, participants were first instructed to rank the personal importance of a number of values on an 11-point scale ranging from *most important* to *least important* (following Cohen et al., 2000). The values were justice, sense of humor, relationships with friends/family, spontaneity, courage, modesty, musical appreciation, respect, creativity, honesty, and romantic values. Next, in the value affirmation condition, participants were asked to indicate why their highest ranked value was of great importance to them and to describe situations in which that value was very meaningful. In the control condition, participants were asked to describe why and when their ninth-ranked value could be important for an average same-age peer. In the attribute affirmation condition, participants were asked to list and elaborate on two personality

skills or traits in which they excelled compared to their peers (following Stapel & Johnson, 2007).

Dependent variables. After the manipulations all participants completed a filler task (unscrambling scrambled fruit names). Next, participants went on to the next questionnaire. This part contained a three-item self-esteem scale and a three-item self-clarity scale. The self-esteem scale was based on Rosenberg's Self-Esteem Scale (Rosenberg, 1965) and Tafarodi and Swann's Self-Liking/Self-Competence Scale (Tafarodi & Swann, 1995). This scale contained the following items: "At the moment I am very satisfied with myself," "At the moment I tend to not appreciate myself," and "At the moment I feel good about myself." We established in a pilot study ($n = 54$) that this three-item self-esteem measure correlated highly with complete versions of Rosenberg's Self-Esteem Scale ($r = .76$) and Tafarodi and Swann's Self-Liking/Self-Competence Scale ($r = .72$). Self-clarity was measured with the following three items that were derived from Campbell et al.'s (1996) Self-Concept Clarity Scale: "My beliefs about myself often conflict with one another," "My beliefs about myself seem to change very frequently," and "On one day I might have one opinion of myself and on another day I might have a different opinion." In the Results section of all studies reported here, these self-clarity items were reverse-scored, such that higher number indicates more self-clarity. We established in a pilot study ($n = 49$) that our three-item self-clarity measure showed high correlations with the complete version of Campbell et al.'s (1996) Self-Concept Clarity Scale ($r = .81$) All questions were presented on a Likert scale ranging from 1 (*not at all*) to 9 (*very much*). When they had finished, participants were thanked for their participation and were fully debriefed.

Results

Analyses of variance (ANOVA) yielded highly significant effects of condition on self-esteem ($\alpha = .81$), $F(2, 36) = 27.50$, $p < .01$, $\eta^2 = .60$, and self-clarity ($\alpha = .80$), $F(2, 36) = 13.07$, $p < .001$, $\eta^2 = .42$.

Self-esteem. As shown in Table 1, further analyses revealed the predicted effect of condition on self-esteem. Participants in the attribute affirmation condition reported higher self-esteem ($M = 7.67$, $SD = 0.60$) than did participants in the value affirmation condition ($M = 6.17$, $SD = 0.64$), $t(36) = 6.92$, $p < .01$, and participants in the control condition ($M = 6.36$, $SD = 0.37$), $t(36) = 5.93$, $p < .01$. Self-esteem scores in the value affirmation and control conditions did not differ ($Fs < 1$).

Self-clarity. Further analyses also revealed the predicted effect of condition on self-clarity (see Table 1). Participants in the

Table 1

Mean (SD) Self-Esteem and Self-Clarity Scores as a Function of Type of Affirmation

Condition	Self-esteem	Self-clarity
Value affirmation	6.17$_a$ (0.64)	7.10$_b$ (0.44)
Attribute affirmation	7.67$_b$ (0.60)	6.11$_a$ (0.90)
No affirmation	6.36$_a$ (0.37)	5.67$_a$ (0.84)

Note. Higher means indicate more self-esteem and more self-clarity. Means with different subscripts differ at $p < .05$.

value affirmation condition reported higher self-clarity ($M = 7.10$, $SD = 0.44$) than did participants in the attribute affirmation condition ($M = 6.11$, $SD = 0.90$), $t(36) = 3.36$, $p < .01$, and participants in the control condition ($M = 5.67$, $SD = 0.84$), $t(36) = 4.98$, $p < .01$. Self-clarity scores in the attribute affirmation and control conditions did not differ ($ps > .15$).

These results support our predictions. Affirming positive qualities of the self (attribute affirmation) resulted in higher levels of self-esteem but not in more self-clarity, whereas affirming important values (value affirmation) resulted in more self-clarity (see also Wakslak & Trope, 2009) but not in higher levels of self-esteem. Thus, value and attribute affirmation impact the self in different ways. Less central to our main hypothesis but important to note is that these results show that self-esteem and self-clarity measures tap into different parts of people's self-views. This is corroborated by the fact that although there is a statistical relation between these two measures, the correlation is neither exceptionally strong nor high ($r = .28$, two-tailed, $p = .07$).

Study 2

In Study 2, we investigated the effects of value affirmation and attribute affirmation on the self-evaluative consequences of threatening social comparison information. Participants affirmed important values, positive attributes, or nothing (control condition) and then were exposed to either upward comparison information (a description of an attractive, intelligent, creative person) or downward social comparison information (a description of an unattractive, unintelligent, noncreative person). Finally, participants completed a specific self-evaluation measure to measure how the social comparison information affected relevant self-views (self-intelligence, self-creativity).

As previous studies have shown, people react very defensively when confronted with upward comparison standards; they go to great lengths to maintain their positive self-evaluation in the face of threatening social comparison information and thus discount the impact of that information (see Stapel & Koomen, 2001; Stapel & Schwinghammer, 2004; Stapel & Van der Zee, 2006; Tesser, 1988). We predicted that when people are attribute affirmed, they are less likely to discount the meaning of social comparison information and incorporate this information in their self-image. When people are attribute affirmed and thus feel good about themselves, the need to deny the consequences of upward comparisons is reduced. Attribute affirmation fills one's self-image with extra positive information, and this makes it much easier to accept that a comparison other is better on a particular dimension (see Stapel & Koomen, 2001; Stapel & Schwinghammer, 2004). This incorporation of negative self-information is less likely to occur when people are value rather than attribute affirmed. Value affirmation increases self-clarity and gives people a clearer and more structured view of who they are, what they value in life, and what they stand for. Whereas value affirmation strengthens people's self-categorizations, it does not boost the positivity of their self-evaluations. Attribute affirmation, however, gives a boost to the positivity of people's self-evaluations without necessarily affecting the clarity or consistency of these evaluations. Given this logic behind the differences between attribute affirmation and value affirmation, we predicted that in the attribute affirmation condition, exposure to upward social comparisons should result in

self-incorporation of this threatening social information and thus more negative self-image judgments. In the value affirmation and control conditions, more defensive reactions (less incorporation of the negative information in the self-image) should surface.

Method

Participants and design.   Students ($n = 120$) participated for partial course credit and were randomly assigned to one of the conditions of a 3 (affirmation: value vs. attribute vs. none) $\times$ 2 (social comparison: upward vs. downward) between-participants design.

Procedure and materials.   As in Study 1, participants received several ostensibly unrelated questionnaires. The first questionnaire contained the affirmation manipulations we also used in Study 1. Next, they completed the filler task, the self-esteem scale, and the self-clarity scale we used in Study 1. Next, participants received a media categorization questionnaire, in which they had to read a "newspaper article" and write down in which newspaper they thought this article had appeared. In fact, this article contained the social comparison information (see Stapel & Koomen, 2001).

Social comparison information.   All participants read a half-page story about a student, Marcel. In the upward comparison condition, Marcel was described as an attractive, very intelligent, creative person. In the downward comparison condition, Marcel was described as an unattractive, not so smart, boring, uncreative person. A pretest ($n = 45$) had revealed that upward Marcel scored higher on unipolar, 9-point (*not at all* to *very much*) scales measuring intelligence, attractiveness and creativity than did downward Marcel ($ps < .01$).

After they had read and categorized the newspaper article, participants were asked to complete some personal background information items. Participants rated themselves on three traits that were obviously story relevant (intelligent, creative, attractive) and on three traits that were not story relevant (caring, humorous, idealistic) on 9-point scales, ranging from 1 (*not at all*) to 9 (*very much*). Afterward, participants were thanked for their participation and were fully debriefed.

Results

Affirmation manipulation check.   First, we checked whether our value and attribute affirmations again yielded the predicted effect on the self-clarity and self-esteem measures. An ANOVA revealed highly significant effects of affirmation on self-esteem ($\alpha = .81$), $F(2, 114) = 13.05$ $p < .01$, $\eta^2 = .32$ (other $Fs < 1$), and self-clarity ($\alpha = .78$), $F(2, 114) = 19.93$, $p < .01$, $\eta^2 = .52$ (other $Fs < 1$). The correlation between these two measures was $r = .31$, two-tailed, $p < .05$.

Self-esteem.   Participants in the attribute affirmation condition reported higher self-esteem ($M = 7.38$, $SD = 1.28$) than did participants in the value affirmation condition ($M = 5.82$, $SD = 1.22$), $t(117) = 5.97$, $p < .01$, and participants in the control condition ($M = 6.07$, $SD = 1.07$), $t(117) = 5.10$, $p < .01$. Self-esteem scores in the value affirmation and control conditions did not differ ($ps > .25$).

Self-clarity.   Participants in the value affirmation condition reported higher self-clarity ($M = 6.95$, $SD = 1.12$) than both participants in the attribute affirmation condition ($M = 5.97$, $SD =$

1.22), $t(117) = 3.59$, $p < .01$, and participants in the control condition ($M = 5.65$, $SD = 1.19$), $t(117) = 4.99$, $p < .01$. Self-clarity scores in the attribute affirmation and control conditions did not differ ($ps > .23$).

Main analyses.   First, we computed a specific self-image measure based on the three relevant traits ($\alpha = .76$). Next, we conducted ANOVAs. No effects were found on the irrelevant traits ($Fs < 1$). An ANOVA on the specific self-image measure revealed a weak main effect of affirmation, $F(2, 114) = 2.33$, $p = .10$, $\eta^2 = .08$; a main effect of social comparison, $F(1, 114) = 74.39$, $p < .01$, $\eta^2 = .06$; and an interaction effect, $F(2, 114) = 3.98$, $p < .05$, $\eta^2 = .13$.

As can be seen in Table 2 and as predicted, in the upward comparison condition, attribute affirmation participants reported a significantly lower (thus less defensive) self-image ($M = 4.11$, $SD = 1.32$) than did control participants ($M = 5.18$, $SD = 0.85$) and value affirmation participants ($M = 5.35$, $SD = 1.35$; $ps < .05$). As predicted, in the downward comparison condition self-image did not differ between affirmation types ($Fs < 1$) and was relatively high overall.

Next, we conducted analyses to test our hypothesis that the impact of affirmation type in the upward comparison conditions was driven more strongly by self-esteem than by self-clarity. We found that, as expected, within the upward conditions, self-esteem and self-image scores were strongly negatively correlated ($r = -.75$, $p < .01$). This indicated that the higher self-esteem, the more negative (and less defensive) participants' self-image. In the downward social comparison conditions, self-esteem and self-image were not correlated ($r = .18$, $p = .19$). Across the complete design, self-clarity and self-image were not correlated ($r = .15$, $p = .24$).

We next tested the hypothesis that self-esteem scores mediate the effects of attribute affirmation on self-image. We predicted moderated mediation: Affirmation type should affect self-esteem directly, but the effect of self-esteem on self-image should be moderated by social comparison direction. To test this, we conducted a mediation analysis as advocated by Baron and Kenny (1986) and Muller, Judd, and Yzerbyt (2005). In the first step of the analysis, we regressed affirmation, social comparison, and their interaction on self-image. As expected, the Focal Affirmation $\times$ Social Comparison interaction was significant, $t(114) = 1.99$, $p < .05$. In the second step, we regressed affirmation, social comparison, and their interaction on the mediator (self-esteem), which revealed a main effect of affirmation, $t(114) = 2.26$, $p < .05$. Finally, we regressed affirmation, social comparison, self-esteem,

Table 2

Mean (SD) Self-Evaluations as a Function of Affirmation Type and Social Comparison

Condition	Social comparison	
	Downward	Upward
Value affirmation	6.91$_a$ (1.18)	5.35$_b$ (1.35)
Attribute affirmation	6.94$_a$ (1.43)	4.11$_c$ (1.32)
No affirmation	6.57$_a$ (1.17)	5.18$_b$ (0.85)

Note. Higher means indicate more positive self-evaluations. Means with different subscripts differ at $p < .05$.

the Affirmation × Social Comparison interaction, and the Self-Esteem × Social Comparison interaction on self-image. This third step provided evidence for moderated mediation: The Self-Esteem × Social Comparison interaction predicted judgment, $t(114) = 2.19$ $p < .05$, whereas the Affirmation × Social Comparison interaction was not significant ($t < 1$).

These results clearly suggest that attribute-affirmed people more readily accept the self-evaluative consequences of self-depreciating (upward) social comparison information than do value-affirmed people and that the mechanism driving this effect is that attribute affirmation increases self-esteem.[1]

Study 3

Study 2 suggests that attribute affirmation is a more effective buffer against threats to self-esteem (such as upward social comparisons) than is value affirmation. In the present study, we tested the hypothesis that value affirmation is an especially effective buffer against threats to self-clarity (i.e., dissonance threats). We used an induced-compliance dissonance procedure (see Aronson, Blanton, & Cooper, 1995) to test this prediction. After the affirmation manipulations, participants were instructed (under high- or low-choice conditions) to write a counterattitudinal essay in favor of more stringent exams in college. We reasoned that in the high-choice condition, participants would experience dissonance, because this posed an inconsistency between their attitudes and behavior regarding exams. Following our previously outlined hypothesis regarding the different nature of attribute versus value affirmation, we predicted that value affirmation should lead to less attitude change between the high-choice condition and the low-choice condition than should attribute affirmation or no affirmation. Value affirmation should increase people's sense of self-clarity, because when people elaborate on their personal values, their knowledge of who they are, what is important to them, and what they stand for, their self-image (Who am I?) is likely to become clearer. We thus predicted that when people are value affirmed, they are less likely to experience dissonance when engaging in a self-dissonant act (e.g., writing a counterattitudinal essay), because such an act will be seen as less diagnostic or indicative of their "true" self. When you know well who you are and what you stand for, it is easier to discard and discount self-dissonant behavior as irrelevant than when your self-image is less clear, as each act thus may be perceived as meaningful and self-defining (see Bem, 1972). This discounting of self-dissonant behavior is less likely to occur when people are attribute rather than value affirmed. Attribute affirmation strengthens the positivity of people's self-evaluations; it does not clarify, structure, or strengthen people's self-definitions.

Method

Participants and design. Students ($n = 113$) participated for partial course credit and were randomly assigned to one of the conditions of a 3 (affirmation: value vs. attribute vs. none) × 2 (choice: high vs. low) between-participants design.

Procedure and materials. Participants received several ostensibly unrelated questionnaires. The first questionnaire contained the affirmation manipulations and the self-esteem and self-clarity measures from Studies 1 and 2. Next, participants were asked to write an essay about stringent exam norms, which was in fact the dissonance manipulation.

Dissonance manipulation. Our dissonance manipulation was modeled after that in Aronson et al. (1995). Participants were given a questionnaire that consisted of two parts and had a cover story that the study was about stringent exam norms. In the first part, participants were told that the researchers were interested in different opinions about why students would or would not like more stringent exam norms and that participants would be asked to write an essay about their own opinion regarding this issue. Participants were told that there were two versions of the questionnaire: In version 1, participants were asked to write arguments in favor of stringent exams, and in version 2 they were asked to write arguments against stringent exams. In reality, all participants received version 1 and had to write arguments in favor of stringent exams. A pretest had shown that our Dutch student sample had a strong opinion against stringent exam norms. Dutch students like their exams to be easy and nondifferentiating, so most of them will pass them with similar grades. On the next page, participants read that they should check which version they had received.

Next, in the *high choice* (dissonance) condition, participants were told that the different versions were randomly divided and that there was a chance that their personal opinion was not in line with the version they received. If their opinion differed from the arguments they had to write, participants were kindly requested to nevertheless fill out this questionnaire. Also, they were asked to sign a form confirming that they were voluntarily participating in the study. In the *low choice* (no dissonance) condition, participants only checked the version of their questionnaire; nothing was mentioned about differences between personal opinion and the arguments they had to write. Here, participants were asked to sign only for participating in the study. Before they wrote the essay, all participants were asked to indicate whether they personally were in favor of or against more stringent exam norms as an attitude check. This was done to check if the essay really was counterattitudinal. Next, participants went on to write the essay. In the high-choice condition, the title of this part was "Personal opinion concerning stringent exams." In the low-choice condition, the title read "Pro stringent exams arguments." All participants were first asked to give a description of stringent exams and then were asked to write an essay in favor of stringent exams.

Dependent variables. After writing the essay, all participants went on to answer five questions that were related to the essay they had just written. The first two questions were the main dependent variables to measure attitude differences between the conditions. The first question asked to what extent participants would mind if exams at their university became more difficult. The second question asked to what extent participants agreed with the statement "A good exam is an exam that you can only pass when you have studied very hard." The remaining three questions served as manipulation checks and measured how uncomfortable participants were with writing the essay (as an indicator of feelings of disso-

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[1] We note that we tested the robustness of our results by performing a replication of this experiment that involved slightly different comparison information and self-evaluation measures. This study yielded the same pattern of results as the study reported here. The interested reader may write to the first author for more details.

nance; see Elliot & Devine, 1994), whether they felt they had a choice in writing the essay (to check the free choice manipulation), and whether the instructions for writing the essay were clearly defined. All responses were provided on 9-point Likert scales ranging from 1 (*not at all*) to 9 (*very much*). When participants were finished with the questionnaire, they were thanked and fully debriefed.

Results

Affirmation manipulation check. First, we checked whether our value and attribute affirmations again yielded the predicted effect on the self-clarity and self-esteem measures. An ANOVA revealed highly significant effects of affirmation on self-esteem ($\alpha = .84$), $F(2, 107) = 21.29$ $p < .01$, $\eta^2 = .54$ (other $Fs < 1$), and self-clarity ($\alpha = .74$), $F(2, 107) = 27.87$, $p < .01$, $\eta^2 = .68$ (other $Fs < 1$). The correlation between these two measures was $r = .34$, two-tailed, $p < .05$.

Self-esteem. Participants in the attribute affirmation condition reported higher self-esteem ($M = 7.32$, $SD = 1.42$) than did participants in the value affirmation condition ($M = 5.76$, $SD = 1.09$), $t(110) = 5.46$, $p < .01$, and participants in the control condition ($M = 5.77$, $SD = 1.18$), $t(110) = 5.49$, $p < .01$. Self-esteem scores in the value affirmation and control conditions did not differ ($p > .25$).

Self-clarity. Participants in the value affirmation condition reported higher self-clarity ($M = 7.35$, $SD = 0.95$) than did participants in the attribute affirmation condition ($M = 5.75$, $SD = 1.34$), $t(110) = 5.89$, $p < .01$, and participants in the control condition ($M = 5.46$, $SD = 1.17$), $t(110) = 7.07$, $p < .01$. Self-clarity scores in the attribute affirmation and control conditions did not differ ($p > .27$).

Discomfort, choice, clarity manipulation checks. A 3 (affirmation) $\times$ 2 (choice) multivariate analysis of variance was conducted on the three questions regarding discomfort, choice, and clarity of the instructions.

Discomfort. For discomfort, we found a main effect of choice, $F(1, 107) = 118.90$, $p < .001$, $\eta^2 = .52$; type of affirmation, $F(2, 107) = 24.05$, $p < .001$, $\eta^2 = .31$; and the predicted two-way interaction, $F(2, 107) = 24.04$, $p < .001$, $\eta^2 = .31$. Consistent with our predictions, for participants in the value affirmation condition no difference in discomfort was found between high and low choice ($M = 6.67$, $SD = 0.77$ vs. $M = 6.47$, $SD = 1.02$; $Fs < 1$). However, attribute-affirmed participants condition felt more discomfort writing the essay in the high-choice condition ($M = 6.50$, $SD = 0.94$) than in the low-choice condition ($M = 3.71$, $SD = 1.11$), and so did participants in the no affirmation condition ($M = 6.89$, $SD = 0.76$ vs. $M = 4.02$, $SD = 1.04$; $ps < .05$).

Perceived choice and clarity. Furthermore, as expected, participants in the high-choice condition reported experiencing more choice ($M = 6.38$, $SD = 1.00$) than did participants in the low-choice condition ($M = 2.86$, $SD = 0.85$), $F(1, 111) = 403.61$, $p < .001$, $\eta^2 = .78$ (other effects, $ps > .10$). Our manipulations had no effects on the clarity of the instructions ($ps > .10$); all participants indicated that the instructions were very clear to them (grand $M = 7.23$).

Main analysis: Attitude. The two questions measuring participants' current attitude concerning more stringent exams were combined into one attitude measure ($\alpha = .74$). An ANOVA revealed a main effect of choice, $F(1, 107) = 5.89$, $p < .05$, $\eta^2 = .09$, and the predicted two-way interaction, $F(2, 107) = 4.27$, $p < .05$, $\eta^2 = .07$. There was no effect of affirmation ($ps > .35$).

As shown in Table 3, the pattern of the means is as predicted. Value-affirmed participants did not change their attitude more in the high-choice condition ($M = 3.33$, $SD = 1.53$) than the low-choice condition ($M = 3.79$, $SD = 1.03$; $Fs < 1$), whereas attribute-affirmed participants did change their attitude in the direction of more stringent exams more in the high-choice condition ($M = 4.65$, $SD = 1.23$) than the low-choice condition ($M = 3.41$, $SD = 1.28$). For control participants, attitude change was also greater in the high-choice condition ($M = 4.39$, $SD = 1.02$) than the low-choice condition ($M = 3.24$, $SD = 1.41$; $ps < .05$).

We conducted analyses to test our hypothesis that the impact of affirmation type on participants' attitude in the high-choice conditions was driven more strongly by self-clarity than by self-esteem. We found that, as expected, within the high-choice conditions, self-clarity and attitude scores were negatively correlated ($r = -.70$, $p < .01$), indicating that higher self-clarity is associated with low attitude change. Within the low-choice conditions, there was no strong correlation between self-clarity and attitude scores ($r = 19$, $p = .27$). Across the complete design, self-esteem and attitude scores were not correlated ($r = .11$, $p = .64$).

We next tested the hypothesis that self-clarity scores mediate the effects of value affirmation on attitude scores. We predicted moderated mediation: Affirmation type should affect self-clarity directly, but the effect of self-clarity on attitude should be moderated by choice. To test this, we conducted a mediation analysis (see Study 2). In the first step of the analysis, we regressed affirmation, choice, and their interaction on attitude. As expected, the Focal Affirmation $\times$ Social Comparison interaction was significant, $t(107) = 4.12$, $p < .05$. In the second step, we regressed affirmation, choice, and their interaction on the mediator (self-clarity), which revealed a main effect of affirmation, $t(107) = 2.42$ $p < .05$. Finally, we regressed affirmation, choice, self-clarity, the Affirmation $\times$ Choice interaction, and the Self-Clarity $\times$ Choice interaction on attitude. This third step provided evidence for moderated mediation: The Self-Clarity $\times$ Social Comparison interaction predicted judgment, $t(107) = 2.24$ $p < .05$, whereas the Affirmation $\times$ Choice interaction was not significant significant ($t < 1$).

Next, we did a covariance analysis within the high-choice conditions. We found that within these cells the effect of affirmation, $F(2, 53) = 3.77$, $p < .05$, $\eta^2 = .24$, was no longer significant when we included self-clarity as a covariate, $F(2, 53) = 0.48$, $p = .62$;

Table 3

Mean (SD) Attitude Toward More Stringent Exams as a Function of Affirmation Type and Choice

Condition	Choice	
	Low	High
Value affirmation	3.79$_b$ (1.03)	3.33$_b$ (1.53)
Attribute affirmation	3.41$_b$ (1.28)	4.65$_a$ (1.23)
No affirmation	3.24$_b$ (1.41)	4.39$_a$ (1.02)

Note. Higher means indicate a more positive attitude toward more stringent exams. Means with different subscripts differ at $p < .05$.

effect self-clarity on attitude, $t(57) = 6.45$, $p < .01$. When we included self-esteem as a covariate, however, the affirmation effect remained significant, $F(2, 53) = 2.81$, $p < .05$, $\eta^2 = .28$; effect self-esteem on attitude, $t(57) < 1$.

These findings support our predictions. They nicely show that value affirmation but not attribute affirmation increases feelings of self-clarity but not self-esteem. This, in turn, makes it easier for people to accept temporal inconsistencies between their attitude (dislike of stricter exam norms) and their behavior (writing an essay in favor of stricter exam norms).[2]

General Discussion

What drives self-affirmation effects? Although the past few decades have witnessed a large number of studies on how self-affirmation manipulations impact people's mental lives, the question of how they do so has received surprisingly little attention and—unfortunately—often is *assumed* rather than *measured* (see, e.g., Miyake et al., 2010). There is a myriad of studies showing that self-affirmation reduces all kinds of self-defensiveness, but the psychological mechanisms that may be underlying this still go largely undetected. With the current studies, we hope to have changed this state of affairs. We argued and showed in a series of studies that one route to finding out what self-affirmation does is to investigate what it is. We distinguished two basic types of self-affirmation techniques that may look quite similar on the surface and showed that they are actually quite different. Value affirmation and attribute affirmation are both effective ways to affirm the self, but they do so in distinctive ways. Because of this, these two types of affirmation will serve as a good defense against entirely different types of self-threats. Value affirmation boosts self-clarity rather than self-esteem and thus is an effective buffer against self-clarity threats (e.g., dissonance threats). Attribute affirmation boosts self-esteem rather than self-clarity and thus is an effective buffer against self-esteem threats (e.g., social comparison threats).

In the main studies reported in this paper, we compared and contrasted the psychological consequences of value affirmation and attribute affirmation by using specific operationalizations of these two affirmation techniques. In the value affirmation conditions of these studies, participants were asked to rank the personal importance of a number of values (see Cohen et al., 2000), and in the attribute affirmation conditions, they were asked to list and elaborate on two personality skills in which they excelled (see Stapel & Johnson, 2007). It is important to note that in previous studies, several other types of affirmation manipulations have been used to study the psychology of self-affirmation. To further test the validity of our logic that attribute affirmation mainly increases self-esteem and value affirmation mainly increases self-clarity, we performed an extra study. In this study ($n = 198$), we randomly assigned participants to a number of other, less prototypical manipulations that have been used in previous self-affirmation studies and measured self-esteem (*se*) and self-clarity (*sc*) using the same three-item measures we used before (see, e.g., Study 1). And indeed, as we predicted, we found that manipulations that are best labeled as attribute affirmation led to high *se* and low *sc* scores, whereas manipulations that are best labeled as value affirmation led to low *se* and high *sc* scores (relevant *p*s < .05).

Compared to those in a control group (*se* = 6.23, *sc* = 5.76), participants exposed to Schimel et al.'s (2004) intrinsic self-affirmation instruction (value affirmation) scored high on *sc* (7.76) and low on *se* (5.97), whereas participants exposed to Schimel et al.'s extrinsic self-evaluation manipulation (attribute affirmation) scored low on *sc* (6.14) and high on *se* (7.01). Furthermore, participants who were given Ben-Ari, Florian, and Mikulincer's (1999) "think about others who like you" (attribute affirmation) scored low on *sc* (5.87) and high on *se* (7.16). Of note, participants exposed to Wiesenfeld, Brockner, Petzall, Wolf, and Bailey's (2001) instruction to "write about something that made you feel good about yourself or made you understand yourself better," which could be seen as a mix of attribute and value affirmation, scored high on *sc* (7.34) and on *se* (7.39). Similarly, Napper et al.'s (2009) mixed instruction to "focus on important character strengths [attribute affirmation] and virtues [value affirmation] such as wisdom, courage, justice, temperance" resulted in scores that were extremely high on *sc* (7.95) and moderately high on *se* (6.64). McGuire and McGuire's attribute affirmation instruction to "write down as many of your desirable characteristics as you can think of" resulted in scores that were low on *sc* (5.79) and high on *se* (7.32). Koole and van Knippenberg's (2007) attribute-affirming feedback ("Although you may feel you have a number of personality weaknesses, your personality is fundamentally strong") led to scores that were low on *sc* (5.81) and high on *se* (7.42).

These results provide further support for our attribute affirmation/self-esteem and value affirmation/self-clarity logic, and they suggest that it is unlikely that the results we reported in the main experiments of this paper were caused by methodological, paradigm-specific artifacts. Linked to the fact that in our main experiments we showed that attribute affirmation and value affirmation induce different type of self-defensiveness, the findings of this extra study suggest an interesting avenue for future research. That is, given that we know the psychological consequences of attribute versus value affirmation (see Studies 2 and 3) and given that it is relatively easy to categorize a specific affirmation technique as either attribute or value driven (see above), we should be able to predict the specific psychological consequences of specific self-affirmation techniques. Initial attempts that follow this suggestion are quite successful (Stapel, 2010).

To our knowledge, the present research is the first to systematically differentiate between value affirmation and attribute affirmation effects, measure what these two types of affirmation do (increase self-clarity vs. self-esteem, respectively), and study the consequences of this for well-known, social psychological phenomena (reactions to attitude–behavior incongruencies and self-depreciating social comparisons, respectively).

We think that distinguishing value affirmation and attribute affirmation is important, not only for the obvious fact that it helps to deepen our (theoretical) knowledge of the psychology of self-affirmation but also because the distinction may be used to direct affirmation-inspired interventions in applied settings. Recent stud-

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[2] It is important to note that we tested the generalizability of our results by performing an extra experiment in which we asked participants to write (counterattitudinal) essays in favor of unfaithfulness in romantic relationships. This study yielded the same pattern of results as the study reported here. The interested reader may write to the first author for more details.

ies have shown that self-affirmation may be helpful in alleviating self-threats in an increasing number of domains. For example, threatening health risk information (Harris & Epton, 2010; Harris & Napper, 2005; Sherman et al., 2000), social comparisons (Schwinghammer et al., 2006), racism (Adams, Tormala, & O'Brien, 2006; Miyake et al., 2010), resistance to persuasion (Cohen et al., 2000), negotiation (Cohen et al., 2007), ego depletion (Schmeichel & Vohs, 2009), and group judgments (Sherman & Kim, 2005) have all been shown to benefit from self-affirmation. If we want to improve our understanding of how exactly self-affirmation is beneficial and what types of tools should be employed to make self-affirmation as successful as possible, it is important to know what type of self-affirmation is most effective in addressing what type of self-threat.

Self-affirmation researchers (e.g., McQueen & Klein, 2006; Sherman & Cohen, 2006; Steele, 1988) have often argued that self-affirmation should not be equated with boosting people's self-esteem. The present studies show that this argument is valid when it concerns value affirmation. When self-affirmation is achieved via emphasizing one's positive qualities (attribute affirmation), however, self-affirmation does lead to heightened self-esteem. This notion is also supported by Greenberg et al. (1992), who demonstrated that attribute affirmation does increase self-esteem. What is important to note here, however, is that in our studies, as well as in the Greenberg et al. studies, self-esteem was assessed directly after participants engaged in attribute affirmation. Typically, in studies that did not find self-esteem effects after attribute affirmation, self-esteem was measured at the end of the experiment (e.g., Cohen et al., 2000; Koole & van Knippenberg, 2007; Sherman & Kim, 2005; Steele et al., 1993). Of course, affirmation-induced self-esteem effects are then difficult to find. This suggests that self-affirmation-induced self-esteem effects are especially likely when self-affirmation is achieved through affirming attributes (rather than values) and when self-esteem effects are tapped relatively early (rather than relatively late).

The present paper also contributes to the discussion about the relationship between self-clarity and self-esteem. Campbell (1990) demonstrated that people with low self-esteem have lower self-clarity than do people with high self-esteem. Furthermore, Campbell et al. (1996) showed that self-clarity positively correlates with self-esteem. Additionally, Baumgardner (1990) demonstrated that people with low self-esteem show greater confusion about their self-concept. However, Pelham (1991) did not find a strong relationship between self-esteem and self-certainty (a construct that is conceptually related to self-clarity). The current studies also show that, although they are empirically (weakly) related, the self-esteem and self-clarity constructs can be affected independently, such that self-esteem increases without increasing self-clarity and vice versa. An important distinction between our studies and those of Campbell and colleagues, however, is that whereas Campbell and colleagues focused on self-clarity and self-esteem as stable traits, we studied them as temporary states. This suggests that when people have high chronic self-esteem, they are also relatively likely to have a clear view of themselves. However, when it concerns immediate or "sudden" affirmation of the self, as when you affirm some self-attributes explicitly or when your boss tells you that you did a great job, self-esteem may be increased without this being immediately accompanied with increased self-clarity beliefs. Future research may delve into differences in the relation between self-esteem and self-clarity as a function of whether self-esteem and self-clarity refer to chronic or temporal constructs.

Finally, in showing that there are at least two types of self-affirmation, the current studies raise the question, in how many more different and unique ways can the self can be affirmed? According to Campbell et al. (1996), a self-concept contains a knowledge component (Who am I?) and an evaluative component (How do I feel about myself?). The first refers to beliefs about certainty (e.g., Pelham, 1991), stability (e.g., Rosenberg, 1965), consistency (e.g., Gergen & Morse, 1967), clarity (Campbell, 1990), and complexity (e.g., Linville, 1987) about one's specific characteristics, values, roles, and goals. The second refers to the positivity of these self-beliefs and, thus, to self-esteem. The current studies on attribute versus value affirmation and self-esteem versus self-clarity effects suggest that the evaluative component and the knowledge component can each be affirmed independently and can function as specific buffers for specific self-threats. However, self-clarity is only one part of the knowledge about the self. Is it possible that certainty, stability, consistency, and complexity are also affirmed in unique ways and that each functions as a specific buffer for specific self-threats? Perhaps. Linville (1987) argued that self-complexity is a particularly effective buffer against depressive symptoms. She showed that individuals with low self-complexity are more vulnerable to depressive symptoms than are individuals with high self-complexity. Does this mean that a self-complexity affirmation technique will be a more sufficient buffer against depressive symptoms than, for example, a self-clarity affirmation technique? Or should we assume that self-complexity and self-clarity sufficiently overlap to be effective buffers for the same types of threats? We think that these are fascinating questions that future research can address. For now, we have demonstrated that the self can be affirmed in at least two unique ways that each have unique effects.

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