
When Bad Things Happen to Good Feedback: Exacerbating the Need for Self-Justification With Self-Affirmations

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In numerous self-affirmation studies, Claude Steele and colleagues have demonstrated that self-affirmations reduce the need to justify dissonant behavior even when the affirmation is unrelated to the dissonance-evoking action. However, research has not sufficiently examined the impact of reaffirming self-aspects that are related to the dissonance. The authors argue that relevant affirmations of this sort can make salient the standards that are violated in the course of dissonant behavior, thereby increasing dissonance and the need for self-justification. In a laboratory study using the induced-compliance paradigm, it was demonstrated that dissonance can be exacerbated by reaffirming standards that are violated in the course of the dissonant behavior.

In 1957, Festinger proposed that a person holding two inconsistent cognitions would experience the psychological state of cognitive dissonance, which motivates efforts to reduce dissonance and achieve consonance. Numerous theorists have since proposed revisions to Festinger's original theory of dissonance. Typically using the induced-compliance paradigm, they have sought to redefine dissonance by finding the limiting conditions under which counterattitudinal behavior leads to attitude change and when it does not. For instance, Aronson (1968) proposed that dissonance occurs only when a cherished self-concept is threatened. Thus, Nel, Helmreich, and Aronson (1969) had participants advocate a counterattitudinal position to legalize marijuana and demonstrated that it lead to attitude change only in conditions designed to challenge their sense of moral decency.

More recently, Cooper and Fazio (1984) proposed that dissonance is evoked only when an individual feels personally responsible for bringing about an aversive event. In this tradition, Cooper and colleagues have shown that counterattitudinal behavior leads to dissonance only when one freely and knowingly chooses to create an unwanted outcome (e.g., Cooper, 1971; Cooper & Brehm, 1971; Cooper & Worchel, 1970).

Throughout such revisions, however, theorists have agreed with Festinger's (1957) original thesis that dissonance arousal motivates dissonance reduction. Moreover, it has been assumed that such efforts must address the action that originally evoked the dissonance if they are to be effective. Thus, when participants in induced-compliance studies alter their prior attitudes, it has been interpreted as evidence that they are attempting to undo their previous action—as a way of either restoring cognitive consistency (Festinger & Carlsmith, 1959), reinstating a cherished self-belief (Aronson, 1968), or retaining a belief that they have not brought about unwanted consequences (Cooper & Fazio, 1984). Once the evok-

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ing action is disarmed through self-justifying attitude change, dissonance motivation subsides.

A well-reasoned alternative to these traditional approaches has been articulated by Steele and his colleagues (e.g., Steele, 1988). Like others, they have advanced a definition of dissonance that differs from that proposed in Festinger's (1957) original theory. They argue that dissonance is created when one's global self-evaluation is threatened. This self-affirmation theory of dissonance deviates from prior revisions, however, by suggesting that dissonance can be reduced or eliminated through actions that do not directly address the dissonance-evoking action. As Steele and Liu (1983) stated, "Because the disturbing thing about dissonant behavior is its ego threat, any self-affirming activity may reduce dissonance even when it does not resolve or dismiss the particular provoking inconsistency" (p. 18). Research using the induced-compliance paradigm, they argue, has uncovered only self-justifying reactions to dissonance because dissonance researchers have failed to give their participants opportunities to make other responses. Had they provided opportunities to reaffirm, participants would not have to respond by changing their attitudes.

Steele and Liu (1983) demonstrated the ameliorating effect of affirmations with a group of students who had advocated tuition increases. In high-dissonance conditions, participants did not change their attitudes toward the cost of tuition if they were first given an opportunity to reaffirm an important, but unrelated, political and economic value orientation. Steele, Spencer, and Lynch (1993) took this a step further by suggesting that some people possess a high number of affirmational resources that they can use to buffer the self from the threat of future dissonant actions. Affirmational resources are alternative positive self-conceptions that one can have at the ready when the self is threatened in specific situations. In one study (Steele et al., 1993, Study 1), participants were provided with affirmational resources in the form of positive feedback from a bogus personality test. Later, when forced to choose between two attractive record albums, participants did not exhibit the postdecisional spread of alternatives indicative of dissonance arousal.

These results provide interesting evidence consistent with self-affirmation theory because the actions that eliminate the attitude change are completely unrelated to those that evoke the dissonance. It seems remarkable that an individual who has acted in a way that creates unwanted and aversive consequences would lose the motivation to justify such behavior simply by reaffirming important but distinct aspects of the self-concept. As Prentice and Miller (1992) have pointed out, results of this kind provide strong intuitive support for a theory because the independent variables (e.g., political/economic orienta-

tion and personality feedback) seem unlikely to influence the dependent variables (e.g., attitudes toward tuition and preference for record albums) in any meaningful manner were it not for the theoretical backdrop. In this regard, Steele and colleagues eliminate dissonance in what seem to be the most unlikely of ways. Steele, Hopp, and Gonzales (1986, reported in Steele, 1988), for instance, eliminated the postdecisional spread of alternatives among a group of students who valued a scientific orientation simply by allowing them to wear a scientist's lab coat. Such results demonstrate that dissonance motivation can be reduced in ways not originally envisioned by Festinger (1957) or other traditional dissonance theorists.

Dissonance and the Relevant Affirmation

Our research begins by asking what would happen if one were to reaffirm the aspect of the self that is threatened by the dissonant behavior, rather than an aspect that is unrelated to the evoking action. The appeal of self-affirmation theory has been its ability to predict a nonobvious relationship between global affirmations and seemingly unrelated attitudes. However, it does not appear to be necessary that the affirmation and attitude be unrelated. What is crucial is only that the affirmation restores the global self-concept (Steele, 1988). For instance, if one were to induce participants to write counterattitudinal speeches advocating that their school reduce funding to handicapped students, it should not matter if the manipulation reaffirms participants' scientific orientation, economic orientation, or whatever. All that is necessary is that the opportunity reaffirms a valued self-concept. Dissonance is aroused in this situation precisely because a valued dimension has been threatened, and so reaffirming this domain should reduce or eliminate the dissonance as well as affirm other important self-concepts. In the case of reducing funding for handicapped students, advocacy might evoke dissonance because it challenges participants' beliefs that they are good and compassionate people (see Aronson, Blanton, & Cooper, 1995). An irrelevant affirmation should reduce this dissonance because it substitutes for participants' sense of compassion, giving them alternative ways of feeling good about themselves. However, the more direct route to affirmation would be simply to restore their belief in their own compassion. This should eliminate the threat to global self-esteem, thereby reducing the need for self-justification.

Steele and Liu (1981) conducted a study that tested the effects of relevant affirmations in precisely this way. Participants wrote essays requesting a reduction in funding for handicapped students and were then given an opportunity to volunteer time for the blind. In this case, writing the essay was a noncompassionate act, and volun-

teering for the blind provided an opportunity to reaffirm participants' sense of compassion. As predicted, those participants who expected an opportunity to volunteer showed less self-justifying attitude change. These results suggest that relevant affirmations reduce dissonance in much the same way that irrelevant ones do. However, methodological aspects of this study call this interpretation into question.

Participants were informed of the opportunity to volunteer prior to writing the essay, and so they may have framed their subsequent consent to engage in the dissonant behavior as part of the same package as engaging in the pro-attitudinal behavior. For instance, advocating for a tuition hike would fall in most students' latitude of rejection, but advocating both an increase in tuition and a decrease in housing costs would be acceptable to many. In this example, the second opportunity justifies the first, and so it would likely diminish the need to justify the behavior through attitude change. This interpretation is not entirely inconsistent with Steele and Liu's (1981) discussion of their results. They describe a professor who avoids the dissonance of not donating money to a worthy cause by looking ahead to a future opportunity to donate to another. By pairing the decision not to donate to one worthy cause with the renewed decision to donate to another worthy cause, the professor moves the decision not to donate into the latitude of acceptance, so that it no longer evokes dissonance.

It seems possible that a relevant affirmation will exacerbate dissonance if it is not paired to the consent, as in Steele and Liu (1981). Whereas a relevant affirmation may reaffirm individuals' global sense of well-being (e.g., Steele, 1988) or reassure them about a personally violated self-concept (e.g., Aronson, 1968), it can also make salient the personal standard that has been violated in the course of the dissonant act. This will serve to remind individuals of the aversiveness of their dissonant behavior and thereby increase their need for self-justification (e.g., Cooper & Fazio, 1984). Focusing attention in this way on the aspects of a behavior that evoked dissonance is a demonstrated way of boosting the need for dissonance reduction. Carlsmith et al. (1969), for instance, increased the tendency for children to devalue forbidden toys by drawing their attention to their previous decision not to play with the toy. Similarly, Higgins, Rhodewalt, and Zanna (1979) reinstated dissonance after a 2-week delay by reminding participants of their original actions. In an interesting twist on this, Stone, Aronson, Crain, Winslow, and Fried (1994) evoked dissonance by having participants advocate a standard of conduct—in this case, practicing safe sex—and then afterward reminding them of their own past behavior that was discrepant with this standard.

This proposition that dissonance will be exacerbated by focusing on the just-violated standard is compatible with the derivation of cognitive dissonance from Duval and Wicklund's (1972) theory of objective self-awareness. They hold that objective self-awareness leads to an automatic comparison between the self and "standards of correctness" (p. 11). This will motivate self-justification when it focuses attention on previous behaviors that fall short of one's personal standards. Thus, making induced-compliance participants objectively self-aware through self-focus manipulations has been shown to increase self-justifying attitude change (Scheier & Carver, 1980; Wicklund & Duval, 1971).

Indirect evidence that relevant affirmations will exacerbate dissonance was reported by Aronson et al. (1995). They demonstrated that people avoid affirming themselves with relevant feedback once dissonance is evoked. Participants took a bogus personality test and then wrote a counterattitudinal essay similar to the one used in Steele and Liu (1981). Participants advocated a reduction in handicapped services at their university, a dissonant behavior designed to violate their standard of acting compassionately. In this case, however, participants did not anticipate a future possibility of acting compassionately. Instead, the opportunity to reaffirm came only after they had written the noncompassionate essay. Subjects were allowed to reaffirm themselves by reading positive feedback from a bogus personality inventory. Due to time constraints, however, they were asked to choose only a subset of the feedback to view. As predicted, high-dissonance participants avoided reading the compassion feedback. Instead, they chose to reaffirm on dimensions that did not evoke a violated standard, such as their own creativity. This suggests that it is less desirable to reaffirm relevant aspects of the self when irrelevant affirmations are equally available. It does not, however, establish that relevant affirmations would exacerbate dissonance arousal.

The current study expands on this first set of studies by determining whether relevant affirmations exacerbate the need for self-justifying attitude change. Participants advocated a reduction of funding for services for handicapped students at their university and then received positive personality feedback that reaffirmed either their compassion or an unrelated personality attribute. It was predicted that reaffirming participants' compassion after a dissonance-inducing noncompassionate act would exacerbate dissonance.

METHOD

Overview

While waiting for feedback from a personality test, participants wrote a counterattitudinal essay advocating

a cut in funding for services for handicapped students. Half of the participants (high control) were told that they were free not to write the essay, whereas the other half (low control) were led to believe that they had little choice not to write. After completing the essay, participants received no feedback, creative (irrelevant) feedback, or compassionate (relevant) feedback. Hence, the study had a 2 (choice) \times 3 (feedback) factorial design. Participants then provided their opinions on the issue of funding services for handicapped students and responded to some checks on the manipulations. It was predicted that choice and feedback would interact, such that relevant affirmations would increase the need for self-justification, whereas irrelevant affirmations would reduce this motivation.

Participants

Participants were 91 (48 female and 43 male) undergraduates at a large university in New York State who were randomly assigned to one of the six experimental conditions (controlling for gender, $n = 15$ per condition, with $n = 16$ in the creative/high-choice condition). Participants were given course credit in exchange for their time.

Procedure

The personality test. Participants were run individually in a study involving the "validation of a personality test." Experimenter 1 met participants and introduced them to the computerized test. This "personality test" was administered by means of a MEL program (Schneider, 1988) on an IBM-compatible personal computer. A total of 64 single adjectives appeared in succession on the screen, and participants were instructed to type the number that described the extent to which each adjective was self-descriptive. The response scale, which appeared with each adjective, ranged from 1 to 5. Adjectives were selected to give plausible feedback in the domains of compassion (e.g., *sympathetic, considerate, charitable*) or creativity (e.g., *innovative, imaginative, spontaneous, resourceful*).

Counterattitudinal advocacy. Upon completion of the test, Experimenter 1 returned and explained that it would take a few minutes for the computer to analyze and standardize the student's answers. To make sure the time was filled, the experimenter explained that she would let the participant take part in another activity. She claimed not to know any details about this task, except that it was for the University Priorities Committee.

Experimenter 1 then led the participants to another room where she left them with Experimenter 2. The second experimenter explained to the participant that the current task was not part of an experiment or study but was for the Priorities Committee. Ostensibly, this

agency was interested in collecting students' points of view on various issues related to campus life. The psychology department collects information in the proper format, and, in turn, the committee funds psychology research.

Experimenter 2 continued by saying that in the current case, they were using the essay technique, which the student might remember reading about in an introductory psychology class. To "remind" participants, Experimenter 2 explained that the technique involves taking one side or another of an issue and writing an essay—in this case, no more than a page long—producing the strongest and most forceful arguments possible in support of the chosen side. The committee would look over all the essays and try to get an idea of what sorts of things are on students' minds before making a decision. Experimenter 2 then revealed that the committee would like to have a full set of data on a particular issue before the onset of midterms, vacation, finals, or whatever deadline seemed appropriate for the week. This issue concerned funding for services for handicapped students at their university. The committee had to decide on a proposal that would curtail funding for such services that had been earmarked for future years. The experimenter mentioned the kinds of academic and support services that would be cut if the proposal were adopted.

Dissonance manipulation. The experimenter said, "As it happens, we have collected too many essays written against the proposal—that is, saying that we should not cut back the funding." For high-choice (HC) participants, the experimenter continued, "So now the Priorities Committee is requesting students to write on the other side of the issue in order to even out the numbers. What that would mean to you is writing an essay on this sheet from the point of view of a student who advocates supporting the proposal and cutting the funding. Would that be okay?" Participants often resisted at first but then consented after encouragement by the experimenter. For the low-choice (LC) participants, the experimenter continued, "So now what the Priorities Committee needs is more essays written on the other side of the issue—that is, supporting the proposition and arguing that the funding should be cut back. So what you'll be doing is writing from the point of view of a student who takes that side. Do you have any questions?"

Before writing, participants in the HC conditions read and signed a second consent form indicating that they freely chose to write the essay. On the essay form, all participants checked a box to indicate that their essay took the position that the university should "scale back special programs and reduce funding for its physically handicapped students" and then wrote their essay as an elaboration on this point. As soon as the participants began writing, the experimenter interrupted, handed

them each an envelope addressed to the Priorities Committee, and told them to seal their essay inside when done. When participants finished, the experimenter led the participant back to the first room and to Experimenter 1, who was blind to the choice manipulation.

Personality feedback. Experimenter 1 sat the participant at the desk with the original computer and printer. For those in the two affirmation conditions, there was a piece of paper on the printer, ostensibly just printed. Experimenter 1 told participants that this was the printout from the personality test and that they should read it while she went in the other room to prepare some other materials. The results sheet explained that the test in question (the "I.P.L. Version 3") measures "daily life orientations" and that "on the basis of the score, individuals are given one major interpersonal orientation and from 0-2 minor orientations." (Pretesting had indicated that participants regarded the feedback as more credible when phrased this way.) In the relevant-affirmation (RA) condition, participants read that they were "best characterized by one I.P.L. dimension." The text of the characterization then described them as compassionate, using the synonyms *empathetic* and *caring*. Participants in the irrelevant-affirmation (IA) condition read a similar statement, in which they were characterized as creative, using the synonyms *original* and *imaginative*. For subjects in the no-affirmation (NA) condition, no feedback was provided, and Experimenter 1 instructed them to wait while she left the room to prepare other materials.

Dependent variables. When Experimenter 1 left the room to retrieve more materials, Experimenter 2 (who was blind to the feedback manipulation) began timing and entered the room 90 s later. He explained, somewhat out of breath, that he had forgotten to administer a questionnaire. Participants were instructed to take the time now to complete the questionnaire, which asked three questions, concerning (a) attitude toward funding for services for handicapped students ("The university should scale back funding for physically handicapped services," answered on a 31-point scale ranging from *Strongly Disagree* to *Strongly Agree*, with *Indifferent* as the midpoint), (b) essay strength ("How convincing was the essay you wrote?"), and (c) perceived freedom of choice ("How free did you feel to refuse to write an essay in favor of cutting back the programs?"). For the latter two measures, participants circled the appropriate number on a 9-point scale ranging from 1 (*Not at All*) to 9 (*Very Much*).

To prevent participants from believing that the answers to the attitude questionnaire could affect the decision by the Priorities Committee, Experimenter 2 explained that it was for use by the psychology department because they keep records on file of students' real opinions. Moreover, he had them seal the questionnaire

in an envelope addressed to the psychology department so that they would not believe that he would see their responses. Upon completion of the questionnaire, participants were probed for suspicion and fully debriefed by Experimenter 2.

RESULTS

Pretesting

To ensure that the two affirmations were of roughly equal importance to subjects, they were pretested on a set of 30 subjects who read both personality descriptions and rated them for overall self-importance ("As described in the above paragraph, how important is it for you to be considered highly compassionate [creative]?"). Subjects rated both sets of feedback on a 7-point Likert-type scale (ranging from 1 = *not at all important* to 7 = *extremely important*), with order counterbalanced. This revealed no significant difference between affirmations, $p > .30$, with a nonsignificant tendency for the compassion affirmation to be rated as more important than the creative affirmation.

Manipulation Check

To check that participants' perceptions of the choice varied as a function of the dissonance manipulation, responses on the freedom of choice measure were submitted to a 2 (choice: HC or LC) \times 3 (feedback: RA, IA, or NA) ANOVA. The data from one participant who failed to answer the question about decision freedom were eliminated from this analysis. The main effect of the choice manipulation on this measure was highly significant, $F(1, 89) = 212.25$, $p < .001$, showing that participants in the HC condition ($M = 6.13$) perceived greater freedom not to write the essay than those in the LC condition ($M = 2.39$). There were no other significant relations for this measure.

Attitude Change

A 2 (choice) \times 3 (feedback) ANOVA was performed on the attitude measure. The means are presented in Figure 1. This revealed a significant main effect for choice, $F(1, 85) = 30.17$, $p < .001$, showing that HC participants ($M = 9.39$) reported more favorable attitudes than LC participants ($M = 5.78$) toward the proposition that funding for the handicapped students should be curtailed. The main effect for feedback on attitude was also significant, $F(2, 85) = 7.68$, $p \leq .001$, showing that participants in the RA condition had the most favorable attitude toward the funding cut ($M = 9.07$), followed by those in the NA condition ($M = 7.90$), and finally by those in the IA condition ($M = 5.90$).

These main effects were qualified by a significant interaction between feedback and choice, $F(2, 85) =$

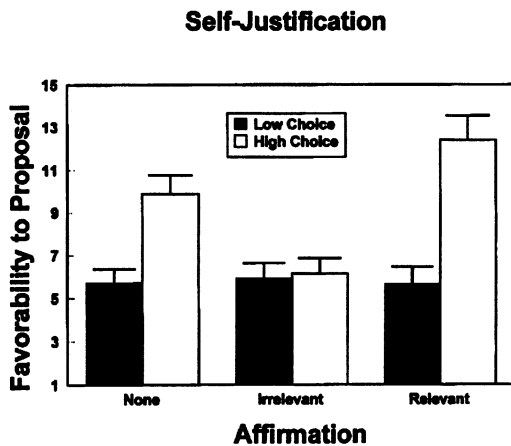


Figure 1 Attitude toward the proposal to reduce funding for handicapped students.

NOTE: Higher numbers indicate more favorable attitudes and greater self-justification.

7.21, $p < .002$. Simple effects analyses were conducted to test for difference in attitude between the HC and LC participants in each feedback condition. Significantly more positive attitudes toward cuts in funding in the HC than LC condition would suggest that dissonance motivation was still present after the feedback manipulation (cf. Goethals & Cooper, 1972). As predicted, choice moderated the attitude toward funding for handicapped students in the NA condition, $t(85) = 3.54$, $p < .005$, and the RA condition, $t(85) = 5.54$, $p < .001$, but not in the IA condition, $t(85) = 0.35$, *ns*. In other words, dissonance (high choice) resulted in self-justifying attitude change after no feedback or compassion feedback but not after creativity feedback. This suggests that the irrelevant affirmation reduced or eliminated the dissonance, whereas the relevant affirmation at least did not eliminate the dissonance.

Evidence that the relevant affirmation actually exacerbated dissonance motivation can be found by contrasting the attitude of HC participants in the RA condition with those in the NA condition. Planned comparisons revealed that participants in the RA condition ($M = 12.40$) reported more self-justifying attitude change than did those in the NA condition ($M = 9.87$), $t(85) = 2.17$, $p < .025$. In contrast, participants in the IA condition ($M = 6.13$) showed less self-justification than the participants in the NA condition, $t(85) = 2.21$, $p < .025$.

A weighted contrast testing the hypothesized pattern of means was created by setting the four no-dissonance cells (all LC conditions plus the HC/IA condition) equal to one another, with the HC/NA condition greater than the four no-dissonance conditions and the HC/RA condition greater than all other conditions. The grand mean

and main effects were removed from this data pattern to create a set of contrast weights that tests for the hypothesized interaction pattern. This provided a highly significant prediction of the pattern of means, $F(1, 85) = 14.34$, $p < .001$. Moreover, the residual variance was nonsignificant, $F(1, 85) < 1$, indicating that the prediction sufficiently accounted for all variance attributable to the significant interaction.

Misremembering the Behavior?

These results suggest that the noncompassionate behavior evoked more dissonance when the affirmation evoked the just-violated self-standard. Alternatively, the feedback may have biased the memory of the behavior, making participants remember their behavior as more extreme following compassion feedback. For instance, compassion feedback may have caused participants to infer that they had written more forceful essays or may have lead them to remember more freedom not to write their essays (although we find the reverse predictions more plausible). However, 2 (choice) \times 3 (feedback) ANOVAs on self-reported essay strength and freedom not to write the essay revealed only a significant effect of choice on perceived freedom, as reported in the manipulation check above. Moreover, covarying out perceived strength of the essay and perceived freedom not to write the essay did not affect the results on the attitude measure. As before, choice, feedback and the first-order interaction were all highly significant, $ps < .001$, and the adjusted means revealed the same pattern of results as before. This indicates that perceptions of the essay did not mediate the effect of feedback on attitudes toward funding for handicapped students.

DISCUSSION

In our study, participants were induced to write counterattitudinal essays against funding for handicapped students under varying levels of choice. In the absence of any feedback, HC participants changed their attitude toward the funding cuts more than did LC participants, suggesting that the experimental task aroused dissonance for those in the HC condition. Consistent with both dissonance arousal and self-affirmation theory, this need to self-justify disappeared when participants were given an affirmation that was unrelated to their advocacy. Participants who were reaffirmed as creative people showed no more attitude change in the HC (high-dissonance) condition than they did in the LC (low-dissonance) condition. Our results deviate from self-affirmation findings, however, when relevant affirmations were given. When participants in the high-dissonance condition were reaffirmed for being compassionate people, a dimension that was threatened when

they advocated against handicapped students, they reported attitudes that were even more favorable than those reported by high-dissonance participants who were not reaffirmed. This suggests that relevant affirmations exacerbated the dissonance experienced after HC advocacy. Moreover, it is clear that the increased attitude change was not merely an effect of receiving information about compassion, because the increased attitude change occurred only in the HC condition. Participants in the LC condition, who thus did not experience high levels of dissonance, were not affected by exposure to the compassion information.

Our interpretation of these results is that reaffirming participants' sense of compassion confronted them with the personal standard they had violated in the course of writing their essays. This drew attention to the dissonant aspects of their own behavior and thereby made their action more aversive, which, in turn, increased the magnitude of the dissonance. An alternative interpretation is that compassion feedback is not as reaffirming to students as the creativity feedback and thus did not have the power to address dissonance motivation. However, pretesting does not support this interpretation. In fact, compassion feedback was found to be nonsignificantly more important than creativity feedback. Furthermore, an affirmation account would explain only why compassion feedback failed to reduce dissonance, not why it increased the need for self-justification. Self-affirmation theory does not predict that an otherwise self-enhancing experience could increase dissonance. That positive feedback resulted in psychological distress bears some similarity to work by Strauman and Higgins (1987). They found that priming positive self-aspects will evoke a negative mood if it activates a discrepancy between the actual self and an important self-standard. Similar results come from Aronson and Carlsmith (1962). They exacerbated dissonance by giving success feedback to individuals with negative self-expectations. Like the current results, these studies illustrate that positive or reaffirming information can evoke psychological distress when it forces attention on violated standards.

Our results seem to contradict Steele and Liu (1981), who found less self-justification following a relevant affirmation. As already discussed, it is unclear if their manipulation reaffirmed participants' sense of compassion or instead helped them reframe the behavior. However, the differences between these two studies were not tested empirically, and so other possibilities should be explored. One potential explanation is that relevant affirmations must be stronger when they confront the threatened domain directly than when they address irrelevant domains. In the current study, for example, participants start out with a threatened sense of compassion, and so restoring their sense of global self-worth by

reaffirming compassion may require a manipulation capable of overcoming this initial compassion deficit. If so, the Steele and Liu (1981) manipulation worked because it used a more powerful manipulation, one in which subjects volunteer their time and energy for a valuable cause. The difficulty with this explanation, however, is that it does not explain why a relevant affirmation might exacerbate dissonance, as it does in the current study.

A second explanation for the difference in results is that the Steele and Liu (1981) procedure may have worked as an irrelevant affirmation. The decision to volunteer can affirm a number of positive self-aspects and not just one's sense of compassion. Thus, participants may have used the decision to volunteer as a way of reaffirming their sense of themselves as helpful, cooperative, or capable people but not as individuals who value compassionate behavior. In fact, our previous study (Aronson et al., 1995) suggests that people seek out the irrelevant affirmations available in a situation while actively avoiding the relevant ones. Thus, someone who has just acted in a noncompassionate manner may use volunteering to reaffirm a sense of self-efficacy or helpfulness, whereas someone experiencing dissonance for other reasons might use this same behavior as a way of reaffirming compassion. In the current study, participants were confronted with clear and unambiguous feedback from a personality test that reaffirmed only a relevant self-aspect. Under these circumstances, the affirmation appears to exacerbate dissonance.

Revising Affirmation Theory

Although future research will have to address the critical differences between these two studies, the current results still present a challenge for affirmation theory. From an affirmation perspective, dissonance is aroused when an important aspect of the self is threatened and reduced when an important aspect of the self is affirmed. Therefore, dissonance should be eliminated by reaffirming the self-aspect that aroused the dissonance. Our results indicate that reaffirming a threatened domain can have the effect of exacerbating dissonance. What are the implications of these results for self-affirmation theory? It seems that there are at least two possibilities.

Dual motives. One possibility is that dissonance motivation creates a constrained need for self-affirmation. People will seek self-affirmations so long as they do not make it harder to justify a dissonant behavior. This interpretation would retain the self-affirmation theory definition of dissonance as a threat to the global self-concept (Steele, 1988), but it places situational constraints on the type of behaviors that can restore feelings of self-worth. One way of incorporating this finding into current self-affirmation theory is to allow the importance of a self-

aspect to be defined in the situation. Thus, most individuals consider it important to be compassionate, and so reaffirming this self-aspect will be a reasonable way of reaffirming the self in most situations. However, following a noncompassionate behavior, compassion becomes less important (to the point of being actively avoided) and thus less reaffirming. At the same time, sources of esteem that do not invoke compassion become more important and thus more able to reaffirm. This is a noteworthy addition to past affirmation work, which has typically stressed how individuals do not concern themselves with the particulars of their dissonant behavior and instead affirm themselves on the basis of stable self-conceptions.

A constrained need for reaffirmation suggests a degree of competition between dual motives of reaffirmation and self-justification. This would occur when the best opportunity to reaffirm makes a dissonant action harder to justify. If so, a common response to dissonance may be not just to seek irrelevant affirmations but to find opportunities of reaffirming in self-justifying ways. Evidence for this response was found by Aronson et al. (1995). In addition to avoiding information about their compassion, participants who advocated reduced funding for handicapped students sought out information about their own objectivity. This affirmation could be used by participants both as a boost to global feelings of self-worth and as a justification for counterattitudinal advocacy. As objective people, these participants could argue, they should be willing at least to explore the arguments for the opposing side.

Justification motive. A second interpretation of the results is more critical of self-affirmation theory—that dissonance motivation does not create a generalized need to reaffirm global self-conceptions. This would explain the failure of relevant affirmations to reduce dissonance. What is needed for this to be tenable is an explanation of the well-documented ability of irrelevant affirmations to erase the need to self-justify. One plausible explanation is that standard affirmation manipulations are highly engaging and enjoyable experiences that disrupt delicate laboratory manipulations. Affirmations could do this either by causing distraction and forgetting (Elkin & Leippe, 1986) or by blocking and repairing the negative mood that seems to drive dissonance motivation (see Higgins et al., 1979; Rhodewalt & Comer, 1979). These two processes could be interrelated, such that affirmations distract subjects, which then undermines negative mood induction.

In contrast, relevant affirmations would focus attention back on the dissonant aspects of the situation, thereby magnifying the felt discomfort. From this perspective, the very features of affirmations that help them reduce dissonance when they are irrelevant (i.e., that

they are meaningful and engaging experiences that pull attention away from the dissonant behavior) will exacerbate dissonance when they are relevant (i.e., that they are meaningful and engaging experiences that push attention back onto the dissonant behavior). Such an interpretation of these findings suggests that irrelevant affirmations treat only the “symptoms” of dissonance motivation—namely, the psychological distress—but do not “cure” dissonance insofar as they do not disarm the aversive consequence that caused the distress in the first place.

The two studies that have addressed the mood and distraction accounts most directly have found no evidence that either process mediates the effect of affirmations on self-justification (Steele & Liu, 1983, Study 2; Steele et al., 1993, Study 3). However, both studies draw conclusions from null results, and so more work is needed before such explanations can be dismissed. One informative line of research would be investigating the impact affirmations have on nonthreatening mood manipulations (e.g., sad films, emotion primes, etc.). If affirmations can block or repair a negative mood following manipulations that do not involve self-threat, results would argue against a self-affirmation interpretation of dissonance arousal. On the other hand, if affirmations affect participants only under conditions involving threats to the self, the weight of the evidence would point more toward the affirmation model of dissonance.

Regardless, it is important to remember that irrelevant self-affirmations, for whatever reason, do eliminate dissonance motivation. As the evidence suggests that dissonance can lead to dysphoria and psychological distress (Higgins et al., 1979; Zanna, Higgins, & Taves, 1976), this might be reason enough for someone to seek out positive affirmations. Future research will have to determine whether self-affirmations reduce dissonance by addressing part of the threat inherent to dissonance arousal or by drawing attention away from it. We believe that a good place to start is exploring more fully the role relevant affirmations play in the dissonance arousal and reduction process.

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