Self-Image Resilience and Dissonance: The Role of Affirmational Resources

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It was predicted that high self-esteem Ss (HSEs) would rationalize an esteem-threatening decision less than low self-esteem Ss (LSEs), because HSEs presumably had more favorable self-concepts with which to affirm, and thus repair, their overall sense of self-integrity. This prediction was supported in 2 experiments within the "free-choice" dissonance paradigm—one that manipulated self-esteem through personality feedback and the other that varied it through selection of HSEs and LSEs, but only when Ss were made to focus on their self-concepts. A 3rd experiment countered an alternative explanation of the results in terms of mood effects that may have accompanied the experimental manipulations. The results were discussed in terms of the following: (a) their support for a resources theory of individual differences in resilience to self-image threats—an extension of self-affirmation theory, (b) their implications for self-esteem functioning, and (c) their implications for the continuing debate over self-enhancement versus self-consistency motivation.

It is an everyday observance that some people are more resilient to self-image threat than others, that is, their perception of self-adequacy, and the emotions that vary with it, are more impervious to self-image-threatening events. We all fluctuate in this respect, being more resilient in some settings than in others, or at some times more than at others, but there do seem to be reliable individual differences in this capacity (Spencer, Josephs, & Steele, in press). At any rate, it is a purpose of the present research to test whether this is so, whether such differences exist, and thereby, to take a first step in examining a theory of individual differences in resilience to self-image threat.

This theory is derived from theories of self-evaluation (e.g., Greenberg, Pyszczynski, Solomon, & Rosenblatt, 1990; Tesser, 1988; Tesser & Cornell, 1991), most particularly from self-affirmation theory (Liu & Steele, 1986; Steele, 1988; Steele & Liu, 1983) and its postulation of a self system for maintaining a perception of global integrity, that is, of overall moral and adaptive adequacy (Spencer et al., in press). This theory assumes that the self-affirming, image-maintaining process is begun by anything that threatens this image, from the negative judgments of others to one's own behavior (e.g., a contradiction of one's values) and that it is carried out, through constant interpretations and reinterpretations of one's experience and the world, until that image is restored. It is a system of rationalization and self-justification. And in doing these things, it can produce substantial shifts in attitude and even in behavior. It is important to

stress that the goal of the system is maintenance of an overall image of self-integrity and not necessarily the dismissal of each image threat that comes along. Thus, in response to a particular threat, one has the option of leaving the threat unrationalized —that is, accepting the threat without countering it or its implications—and affirming some other important aspect of the self that reinforces overall self-adequacy. This feature of the system gives it flexibility. Consider the image-maintaining flexibility of the cigarette smoker. When virtually every rationalization for smoking has been disqualified by society, the smoker can still cope with the threat to his or her sense of competence and self-control by affirming something that demonstrates his or her overall self-adequacy, for example, recalling a parent-of-the-year award or working harder to gain a yearly sales bonus.

Steele and Liu (1983) demonstrated this flexibility by showing, for example, that subjects are less rationalizing of self-threatening inconsistencies (e.g., freely choosing to write a counterattitudinal essay) after they have affirmed worth-conferring self-values, even when those values are unrelated to the threat (e.g. Steele & Liu, 1983). Tesser and Cornell (1991) have recently provided a compelling demonstration of this flexibility. They showed that self-image distress from an unfavorable social comparison was eliminated by a value affirmation of the sort that reduced dissonance in the Steele and Liu experiments, and correspondingly, that the self-image distress arising from a dissonant act was eliminated by recalling a favorable social comparison experience. Self-affirmations of one sort neutralized self-image distresses of a different sort. Such interchangeability dramatically demonstrates the flexibility of the self-evaluative system, and, we believe, is mediated through the effect of the affirmations on subjects' overall sense of self-integrity.

The present research examines whether this flexibility also fosters individual differences in threat resilience: If people can quell their reactions to specific self-image threats by recruiting self-knowledge and other beliefs that, although unrelated to the

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threat, affirm their overall adequacy, then people with more favorable self-concepts may be more resilient to specific self-image threats than people with less favorable self-concepts. By *favorability of self-concept*, we mean the level of one's self-esteem, one's global self-evaluation as determined by the balance of positive-to-negative self-knowledge (in important domains of life), the nature of one's attachments, the beliefs one holds that affect self-evaluation (e.g., that all people are created equal), and so on. Considerable research has demonstrated that people with high self-esteem have more positive, clearer views of themselves than people with low self-esteem (e.g., Baumeister, Tice, & Hutton, 1989; Brown, 1986; Campbell, 1990; Markus & Wurf, 1987). Presumably, the more positive one's general self-concept, the easier it is to recruit standing self-images capable of affirming overall self-adequacy, and therefore the less one should need to counter specific threats to maintain a global sense of adequacy. Consider, for example, the subject whose self-image is threatened by having freely written a public essay against a tuition hike at her school, something she deeply opposes. In confronting this threat, she can try to rationalize the action, as has been observed in many dissonance experiments (Cooper & Fazio, 1984), or she can access other things about herself that confer overall worth, as has been shown in self-affirmation experiments (Spencer et al., in press; Steele, 1988; Tesser & Cornell, 1991). The point here is that if she has higher self-esteem, and thus presumably a more favorable profile of worth-conferring self-aspects, she should feel less pressure to rationalize the self-implications of this threat because her image of global self-integrity depends less on doing so. In contrast, if she has lower self-esteem, and thus fewer worth-conferring self-aspects, she may feel more pressure to rationalize the act because her image of global self-integrity at that moment depends more on her dismissing its self-image implications.[1]

Another purpose of this research is to compare this reasoning with an alternative view of how self-esteem mediates reactions to psychological inconsistency. Assuming that the disturbing thing about a dissonant act is its inconsistency with one's self-concept, Aronson (1969) made an argument opposite to our own: A dissonance-provoking act should cause more consistency-restoring self-justification among high- than among low-esteem people because the act would be more inconsistent with a positive than a negative self-concept. A similar implication can be derived from Swann's (1983) theory of self-verification. At issue are two conceptions of how the self-concept mediates reactions to self-image threat. The consistency view holds that one's general level of self-esteem operates as a standard against which the evaluative consistency of an act is assessed. The more inconsistent an act is with that standard, the more pressure there will be to justify it as a means of restoring self-evaluative consistency. In contrast, we assume that following a self-image threat, people are not concerned with consistency, but with restoring a general image of self-integrity. In this view, the level of self-esteem represents the level of self-image resources a person can apply to maintaining this image in the face of threat. Thus, a dissonance-provoking act should cause less self-justification among high- than low-esteem people, because high-esteem people have more resources with which to maintain this image.

The present research pits these views against each other in the classic "free-choice" dissonance paradigm, in which subjects make a choice between closely evaluated alternatives (record albums). Rationalization of the choice is measured as the amount they change their evaluation of the alternatives after the choice, specifically, the amount they increase their post-choice rating of the chosen alternative and decrease their post-choice rating of the nonchosen alternative, that is, the "spread of alternatives," as it is called in the dissonance literature.

For self-consistency theorists (e.g., Aronson, 1969), the feature of this paradigm that arouses dissonance is the inconsistency between the negative consequences of the choice (the negative features of the chosen alternative and the positive features of the nonchosen alternative) and a positive self-concept. Thus, if a need for psychological consistency motivates self-justifying change in this paradigm, high-esteem subjects should rationalize the choice more (show a greater spread of alternatives) than low-esteem subjects, because the inconsistency caused by the choice is greatest for them. For us, however, the feature of this paradigm that motivates choice rationalization is not self-inconsistency, but that the negative consequences of the choice challenge the subject's competence as a decision maker and thus his overall image of self-adequacy. The self-image threat inherent in this choice is not that it conveys something negative about the subject or induces failure, as is the typical operationalization of self-esteem threat (e.g., Brockner, 1979; Campbell & Fairey, 1985; McFarlin & Blascovich, 1981). Rather, it raises a question about the subject's decision competence that if not resolved favorably could threaten an image of self-integrity—an interpretation supported by earlier research in our laboratory (Steele, Hopp, & Gonzales, 1988). Given our powers of decision rationalization, this is a minor threat, but it is nonetheless sufficient to motivate rationalization, the primary dependent measure in this paradigm. Thus, if a need to maintain an image of self-adequacy motivates self-justifying change in this paradigm, high-esteem subjects, presumably having more standing resources with which to affirm that image, should be more resilient to the self-image threat inherent in the choice and thus rationalize it less than low-esteem subjects.

In the first experiment, using the basic free-choice paradigm (e.g., Brehm, 1956), the independent variables were chronic self-esteem (high and low scorers on a self-esteem scale) and a ma-

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[1] We might note here that these predictions make clear a critical difference between our resources model of self-image resilience and another model of self-resilience recently proposed by Linville (1987). The Linville model, which also differs from ours by addressing all types of threat to the self, not just self-image threat, argues that threat resilience depends on the number and differentiation of self-aspects (the complexity of the self-concept), not the integrity-conferring capacity of those self-aspects (the complexity of the self-concept). Thus, the Linville model would not predict self-esteem differences in resilience to self-image threat, as esteem differences are at least largely independent of differences in self-complexity. Whereas both models relate aspects of the self-concept to the phenomenon of resilience to self-threat, they differ in which aspect of the self-concept they focus on as the important mediator: self-complexity in the Linville model and the strength of one's affirmational resources in ours.

nipulation of subjects' self-image of affirmational resources (implemented as positive, neutral, and negative personality feedback). We predicted that subjects high in either chronic self-esteem or acutely perceived affirmational resources would show less self-justifying attitude change in this paradigm than subjects low in self-esteem or perceived resources. And, of course, the self-consistency predictions were the opposite.

Study 1

Method

Overview and Design

The experiment was presented to subjects as a marketing study concerned with the relationship between personality and music preference. It was conducted in two sessions. In the first, subjects completed the California Psychological Inventory (CPI) in a group setting ostensibly as a measure of personality. Approximately a week later they returned to complete a series of Music Preference questionnaires, whereupon they underwent the basic procedures of the free-choice dissonance paradigm: They first rated the desirability of 10 popular record albums, ranked the albums as to preference, were offered a choice between their 5th- and 6th-ranked album as a "bonus gift," and then rerated the full set of 10 albums. Subjects could rationalize their record choice on the posttest by increasing their earlier rating of the chosen album and decreasing their earlier rating of the rejected album. The extent of this change constituted the primary dependent measure. Subjects' acute perception of their affirmational resources was manipulated by giving them, as the experiment began, false feedback (positive, negative, or neutral) about their performance on the CPI that they had taken earlier. Chronic self-esteem was measured by the Self-Acceptance (Sa) subscale of the CPI, and a median split was used to assign subjects to the high- and low-esteem groups. These factors constituted a 2×3 factorial design with two levels of chronic self-esteem and three levels of manipulated self-image; self-justifying attitude change was the primary dependent measure.

Subjects

The subjects were 114 University of Washington introductory psychology students: 75 women and 54 men. Of the 150 subjects initially recruited, 10 were not included in the experiment because they lacked familiarity with the type of music used as the stimulus materials, 11 were discarded because they did not believe the offer of a free record album, and 15 were excluded for scoring precisely on the sample median of the self-esteem measure. These 36 subjects were fairly evenly distributed over the three feedback conditions.

Procedure

Session 1. During the first session, subjects were administered the CPI in groups of approximately 30 ostensibly to collect personality information for correlation with their later record choices. The CPI is a 480-item scale that asks subjects to agree or disagree with statements such as "I have few fears compared to my friends," and "I have often met people who were supposed to be experts who were no better than I." We chose this scale because its range and style of items (focused on a wide variety of personal perceptions and beliefs) make it plausible that the scale measures personality in the broadest sense, and because it includes a 34-item Sa subscale designed to "identify individuals who would manifest a comfortable and imperturbable sense of personal worth . . ." (Gough, 1987) that could be used to classify subjects as to

their chronic level of self-esteem. This scale has been shown to correlate highly with the Janis-Field Feelings of Inadequacy Self-Esteem scale ($r = .67$; Hamilton, 1971) and, in a recent University of Michigan sample, with the Rosenberg Self-Esteem Scale ($r = .57$; Larrick, 1991). The median score on this scale for this sample was 23, which resulted in the assignment of 60 subjects to the high- and 54 subjects to the low-self-esteem conditions. The mean Sa score for the high-esteem subjects was 26.48 with a range of 24–32, whereas the mean Sa score for the low-self-esteem subjects was 19.13 with a range of 12–22.

Subjects were told the test would be scored by professional psychologists, that the marketing researchers would not have access to any scores by name, and that they could see their scores during the second session, for which they were scheduled before leaving the first.

Session 2. When participants returned (individually) for the second session approximately 1 week later, under the guise of allowing them to see their personality test results, they were given a sealed envelope containing the bogus personality feedback used to manipulate self-esteem. After being shown to a small room, 10 min were allotted for inspection of this material. To enhance credibility, the feedback was designed to look as official as possible (e.g., providing a name and credentials of the test analyst, a graph plotting scores, and so on) and was based on the "Barnum effect" principle (cf. Snyder, 1974) that people will accept personality descriptions containing general statements ostensibly based on a reliable test. Subjects were randomly assigned to one of three feedback conditions. The positive-feedback material described the test results as indicating that the subject was "clear-thinking," "resourceful," "not without personality weaknesses . . . but able to get along well in the world," and so on. The negative-feedback condition described the subject as "passive in action," "narrow of interests," "over influenced by the opinions of others," "lacking in good self-insight," and so on. In the no-feedback condition, subjects were told that their reports had not yet been evaluated due to a heavy backlog of work at the psychology clinic.

Next, all subjects were given a list of 10 popular record albums and asked to rate their desirability on an unmarked 165-mm scale labeled *extremely undesirable* at the left end and *extremely desirable* at the right end. They were then asked to rank the 10 records in order of their relative desirability, with the most desirable album as 1 and the least desirable as 10. After the rankings, subjects were offered a choice between 2 of the albums as a bonus for participating in the study. They were shown the albums while they made their choice. Without justification, the experimenter had subjects choose between their fifth- and sixth-ranked albums, thus assuring that the choice was between closely valued alternatives. Also, because these two albums were usually rated toward the middle of the scale on the pretest, there was room for subjects to increase or decrease their ratings on the posttest. After the choice, subjects were handed the chosen album and a brief filler questionnaire containing general demographic questions consistent with the guise of a marketing survey. So that subjects would have ample time to justify their choice, they were allotted 10 min between the choice and the administration of the posttest rating scale. (Research by Walster & Festinger, 1962, has shown that choice-justifying behavior emerges only several minutes after the choice has been made.) After this interval, the experimenter returned with another set of rating and ranking sheets listing the same albums in a different order and copies of all 10 albums. These measures, both for rating and reranking, were identical to those used in the pretest. Explaining that "we'd like you to look over the albums, to make sure that you are familiar with the musicians and the songs that appear on each album," the experimenter asked the subject to rerate the albums. After the reevaluation of the albums, an extensive debriefing was conducted. Subjects' suspicions were sought, and the purpose of the study was explained, after which they were asked to "donate" the album they had been given back to the

study on the premise of limited experimental resources. Most subjects agreed, but the few who didn't were allowed to keep their albums. Most important, subjects were assured that the results of the personality test were preprogrammed and had no relationship to their actual personalities. The necessity of deception was explained, and subjects were advised to remind themselves of the falseness of the feedback over the next few days or whenever they recalled the experiment—a "process" debriefing procedure suggested by Ross, Lepper, & Hubbard (1975).

Results

We reasoned that subjects higher in chronic or manipulated self-image would have a better sense of their integrity-restoring resources and thus would engage in less rationalization of their choice than subjects lower in chronic or manipulated self-image. Recall that rationalization was measured as self-justifying change, the spread of alternatives, that is, the amount subjects increased their rating of the chosen album plus the amount they decreased their rating of the nonchosen album. In this 2 (self-esteem) × 3 (feedback) design, we predicted two main effects, one for chronic self-esteem, with high-esteem subjects showing less self-justifying attitude change than low-esteem subjects, and one for self-image feedback, with more positive feedback producing less self-justifying change than negative feedback. Consistency theory, reasoning that the negative consequences of the choice are more inconsistent with a positive than a negative self-image, predicted opposite main effects.
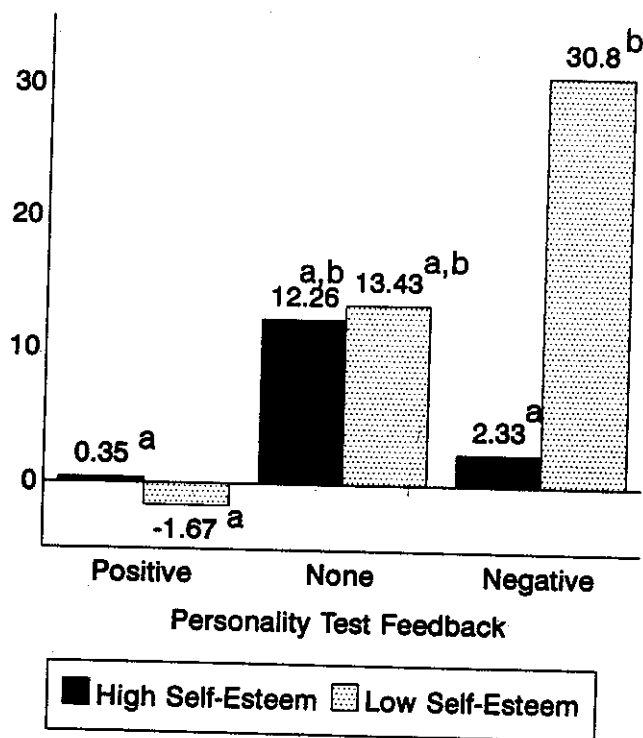

Figure 1. Spread of alternatives as a function of self-esteem and personality test feedback. (Means with different superscripts differ at $p < .05$, Newman-Keuls test.)

Neither prediction gained unequivocal support. The 2 × 3 analysis of variance of these data yielded a marginal main effect for self-image feedback, $F(2, 108) = 2.82$, $p < .09$, an even weaker main effect for chronic self-esteem, $F(1, 108) = 2.71$, $p < .14$, and perhaps most problematic, a near-significant Self-Esteem × Feedback interaction, $F(2, 108) = 2.82$, $p < .06$. The condition means, along with subscripts indicating which means differ from each other, are presented in Figure 1. To better understand these results, we examined the condition contrasts that comprised this interactive pattern.

Of first note, contrary to both theories, the level of chronic self-esteem had no effect on the amount of rationalization in the no-feedback conditions of this experiment. Although, when taken together, these two conditions did produce self-justifying attitude change significantly greater than zero, $t(39) = 2.10$, $p < .05$, there was simply no effect for subjects' level of chronic self-esteem, $t < 1$. The positive feedback condition, however, totally eliminated rationalization among both high- and low-esteem subjects. This result fits our resources model in that an affirmation of global self-integrity should reduce the need to justify the particular record choice, and it contradicts the opposing view that the greater inconsistency in this condition (between the negative consequences of the choice and subjects' boosted image of their resources) should cause greater change. In the negative feedback condition, chronic esteem had a dramatic effect on rationalization: High-esteem subjects showed no rationalization, whereas low-esteem subjects showed particularly great rationalization, $t(14) = 2.95$, $p < .001$. According to our resources logic, the negative feedback, as a diminution of the subject's resources, should force more justification of the record choice as the best available means of restoring esteem; according to consistency theory, this feedback should cause less justification because a diminished self-image is more consistent with the dissonant elements of the choice. The low-esteem subjects conformed dramatically to the resource prediction, showing an unusually great amount of change, whereas the high-esteem subjects, if one accepts that the negative feedback diminished their image of their self-evaluative resources, can be seen as conforming to self-consistency predictions.

We might further note that this experiment replicated the general finding that low self-esteem people are more responsive to self-evaluative feedback. The simple main effect for feedback within the low-esteem group reached significance, $F(2, 108) = 4.02$, $p < .03$, showing what Brockner (1983) called the greater "plasticity" of low-esteem people.

Discussion

Neither theory won unambiguous support in this experiment. We believe that self-consistency theory fared worse. The major count against it is that when feedback bolstered subjects' self-image, thus making it maximally inconsistent with the dissonant elements of the decision, they showed no self-justifying change, not even among subjects chronically high in esteem. If self-consistency is important, these subjects should have made a substantial attempt to justify their decision. Also, low-esteem subjects who had their self-image even further diminished by negative feedback, making their self-images more consistent

with the dissonant elements of the decision, showed substantial self-justifying change, more than any other group. They should have shown minimal change if a need for self-consistency motivated them.

Several results did fit our resources model: positive feedback, presumably by augmenting subjects' perceived resources, eliminated all need to rationalize the record choice, and negative feedback, presumably by diminishing perceived resources, greatly increased rationalization among low-esteem subjects. Still, several results contradicted this reasoning. In the no-feedback condition, low-esteem subjects showed no more change than high-esteem subjects when resources logic predicted that, because they had fewer resources with which to affirm their global worth after a threat, low-esteem subjects should have showed more change. And, in the negative-feedback condition, high-esteem subjects showed no rationalizing change when the theory predicted they would. That is, the negative feedback presumably diminished their self-image, which should have made them more likely to restore global worth by rationalizing away the threatening implications of this particular decision.

In taking stock, we felt that the results of this experiment rather uniformly opposed the self-consistency interpretation of the dissonance–self-esteem relationship, but that they supported our self-affirmation-resources model, even to the kindest eye, only equivocally. The problem is the last two findings. If the level of one's affirmational resources affects how much one is pressured to restore worth by rationalizing particular image threats, then certainly high-esteem subjects should have rationalized the record choice less than low-esteem subjects in the no-feedback condition. And, with somewhat less certainty, high-esteem subjects who had the image of their resources diminished in the negative-feedback condition should have shown some significant degree of rationalization. They did not.

There is, however, a self-affirmation explanation of these findings. A central proposition of the theory is that after a self-image threat, people will affirm their self-adequacy through whatever means is most available or salient (Steele, 1988). Conceivably, the different feedback conditions made different means of self-affirmation salient in this experiment. The conditions in which subjects received feedback, for example, may have forced subjects' attention inward, making their self-concepts and affirmational resources more salient to them and thus more available for use in the affirmation effort after the record choice. The no-feedback conditions may have left subjects' attention focused outward toward the opportunity to rerate the record albums, and thus rationalize their choice, as the most salient route to postdecisional affirmation. This may explain why subjects' chronic level of self-esteem had no effect on rationalization in that condition. The lack of any experience in that condition to bring their self-concepts "on-line" may have left them relatively unmindful of their affirmational resources and preempted the possibility of individual differences in these resources affecting rationalization of the choice. The same logic can explain why high-esteem subjects in the negative-feedback condition showed little self-justifying change. The feedback may have made these subjects access their larger, very positive self-concepts, which, once accessed, affirmed their global adequacy, made the feedback less believable, and made rationalizing the record choice less important.

Here then is a results-reconciling extension of the self-esteem resources model put forward in the introduction: that in order for these resources to have their hypothesized effect on affirmational processes, they must be salient, in what Markus and Wurf (1987) have called the "working self-concept." After real-life self-image threats, a person's attention will be directed, most likely, toward the provoking threat. Thus, the first attempts at self-affirmation are likely to be focused on this threat, diminishing it and rationalizing it. Nonetheless, eventually other factors may conspire to make one's characterological resources more salient and thus part of the affirmation process. Events that direct attention toward the self—even the passage of time without having dismissed the threat—may focus attention on one's self-evaluating resources, bringing them into the affirmation process. For a person with many esteem resources, this awareness is likely to help restore a favorable self-image, making it less important to resolve the provoking threat. For a person with fewer or less secure esteem resources, this awareness will be less restorative, making it more necessary to gain affirmation through some dismissal of the provoking threat (Spencer et al., in press). For example, consider a person who gets insulted at an office cocktail party. As the evening wears on and other events and conversations make salient different self-knowledge, she is likely to rebound rather quickly if this knowledge affirms her overall adequacy. But if it does not, she may suffer until she has rationalized away the provoking insult.

This interpretation of Study 1 leads to a straightforward prediction: Simply making subjects aware of their self-concepts during the record choice procedure, even in the absence of self-esteem feedback, should be enough to produce the predicted effect of self-esteem on self-justifying change. High-esteem subjects, reminded of their resources, can use them to restore global worth and thus feel less pressure to rationalize the record choice. Low-esteem subjects, reminded of their lesser resources, should feel more pressure to restore global worth through rationalization of their choice. Note that a self-consistency view of dissonance processes would again predict the opposite: Reminding subjects of their self-concepts should only vivify the greater self-concept-to-behavior inconsistency of the high-esteem subjects and the lesser self-concept-to-behavior inconsistency of the low-esteem subjects.

Study 2 was designed to test this prediction. We used the same record choice procedure described for Study 1. In a 2 × 2 design, we crossed chronic self-esteem with the variable of whether subjects' attention was directed toward their self-evaluative resources before the record choice. We predicted that in the no-resource-focus condition, high- and low-esteem subjects would show no difference in rationalization of the record choice: They would both show the standard dissonance effect, replicating the results of this condition in Study 1. But in the resource-focus condition, with their characterological resources on-line, low-self-esteem subjects were predicted to show significantly more change than high-esteem subjects.

Study 2

Method

The subjects were 61 University of Michigan introductory psychology students: 32 women and 29 men. As noted, the procedures for this

experiment generally followed those of Study 1, with several exceptions. All subjects had been tested on the Rosenberg Self-Esteem Scale (Rosenberg, 1965) in an earlier mass administration to introductory psychology students. A median split ($Mdn = 40$) on this scale for the sample was used to assign subjects to high- and low-self-esteem conditions, placing 30 subjects in each. One subject was eliminated for being on the sample median. The mean Rosenberg score for low-esteem subjects was 34.5, with a range of 18 to 39, and the mean Rosenberg score for high-esteem subjects was 44.9, with a range of 41 to 50. To effect the resource-focus manipulation, approximately half of the subjects in each self-esteem condition completed the Rosenberg scale again when they arrived for the experiment, just before the record-choice procedure. The items on this scale require subjects to access directly their global self-esteem as well as many constituent self-concepts and thus should make their self-evaluative resources more salient. As a rationale for completing this scale, subjects were simply told, "In order to get some background information we would like you to fill out this questionnaire before we begin." Also, marching in step with the times, this experiment used compact discs of popular singles rather than vinyl record albums as the stimulus items for the choice portion of the experiment. At the point of the choice, subjects were told that the discs were being given as part of a promotion by the record company sponsoring the research. Postexperimental interviews revealed that no subject suspected that he or she might not get the disc. Attitudes toward the discs in this study were measured both at pretest and posttest on a 9-point scale varying from *very desirable* (1) to *very undesirable* (9).

Results and Discussion

This experiment replicated the basic spreading of alternatives dissonance effect (increasing one's pretest evaluation of the chosen disc and decreasing one's pretest evaluation of the nonchosen disc), as indicated by significant self-justifying change in the no-resource-focus condition when collapsed over self-esteem, $t(28) = 3.17$, $p < .004$, when high-esteem subjects were considered alone, $t(12) = 2.31$, $p < .04$, and by marginally significant change when low-esteem subjects were considered alone, $t(15) = 1.95$, $p < .07$.

The critical prediction was that when focused on their self-evaluative resources, low-esteem subjects would rationalize their disc choice significantly more than high-esteem subjects, but when not focused on their resources, they would not. As the means in Figure 2 show, this is precisely what happened. The Self-Esteem × Resource Focus interaction testing this effect reached significance, $F(1, 57) = 4.05$, $p < .05$. When focused on their self-evaluative resources, high-esteem subjects showed no self-justifying change whatsoever, whereas low-esteem subjects showed significant absolute change, $t(13) = 3.47$, $p < .001$, and significantly more change than the high-esteem subjects, $F(1, 57) = 7.38$, $p < .01$.[2] There was also a near-significant self-esteem main effect for chronic self-esteem, $F(1, 57) = 3.91$, $p = .05$, but it was due entirely to the effect of self-esteem in the resource-focus condition and thus had to be interpreted in light of the significant interaction effect.

On the basis of these results and those of Study 1, we would like to conclude that (a) individual differences in self-esteem resources can influence self-affirmation processes; (b) more of these resources make it less important to diminish a specific self-image threat, and fewer of them make it more important to diminish such a threat; and (c) these effects are most likely to
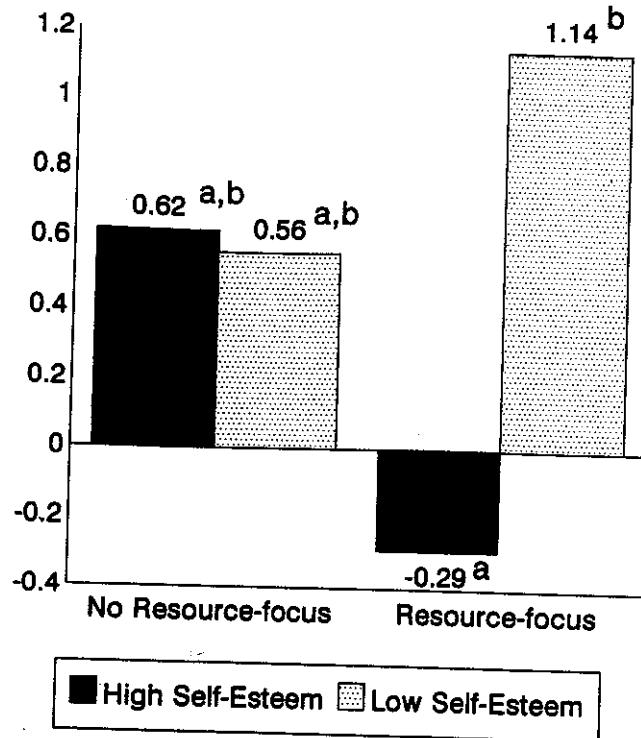

Figure 2. Spread of alternatives as a function of self-esteem and resource focus. (Means with different superscripts differ at $p < .05$, Newman Keuls test.)

occur when some factor (e.g., being self-focused, the passage of time, and so on) has made salient one's general level of resources.

We are, however, perhaps one alternative explanation away from making these conclusions as forcefully as we would like. Conceivably, our results stemmed from an effect of conditions on subjects' mood or affect, not on their efforts to self-affirm. It has been shown in the forced compliance paradigm, for example, that factors that influence affect only, without in any way resolving the provoking dissonance (e.g., watching a humorous cartoon or drinking beer) can reduce self-justifying change (Cooper, Fazio, & Rhodewalt, 1978; Steele, Southwick, & Critchlow, 1981). This is presumed to happen because these

[2] So that the replicability of the resource-focus effect and its generalizability over different measures of self-esteem could be established, the resource-focus cells of this experiment were replicated at the University of Washington. Procedures were identical to those described in the resource-focus condition of this experiment except that subjects were assigned to high and low self-esteem conditions on the basis of the Sa subscale of the CPI (administered in an earlier mass testing) that was used in Study 1. Here, too, low-esteem subjects ($n = 16$) showed substantially and significantly more self-justifying change than high-esteem subjects ($n = 19$), $t(33) = 2.45$, $p < .02$, who showed no significant change. The means for the high- and low-esteem groups, respectively, were 8.1 and 39.5 on the same 165-mm scale described in Study 1.

activities either directly reduce the negative arousal stemming from the dissonant act or because they cause this arousal—a highly undifferentiated form of arousal (Cooper & Fazio, 1984) —to be misconstrued as positive arousal stemming from the activity. In either event, the disassociation of negative arousal from the dissonant act reduces dissonance motivation and subsequent self-justifying attitude change (Cooper & Fazio, 1984).

Conceivably our manipulations affected rationalization in the free-choice paradigm in the same way, by affecting the amount of negative arousal associated with the choice, rather than by affecting the self-affirmation process, as we have argued. The positive feedback in Study 1 and the self-focus procedure for high-esteem subjects in Study 2 could have enhanced subjects' affect, thereby reducing the negative arousal associated with the choice, and, in turn, the amount of dissonance-reducing change. Similarly, the negative feedback in Study 1 and the self-focus procedure for low-esteem subjects in Study 2, could have worsened subjects' affect before the choice, increasing the negative arousal associated with the choice, and, in turn, increasing their dissonance-reducing change. (That this did not happen among high-esteem subjects in the negative feedback condition of Study 1 may be attributable to those subjects' not believing the feedback.) Presumably, of course, the feedback and self-focus manipulations occurred far enough in advance of the record choice that subjects would not confuse affect caused by these manipulations with affect caused by the choice. Nonetheless, the possibility remains that these self-affirming and self-threatening procedures affected self-justifying change through their effects on subjects' affect rather than through their effects on self-affirmational processing. If this is so, then some procedure that affects mood but does not affect affirmational processes should produce similar patterns of self-justifying change in this paradigm. We conducted a third study to test this possibility.

Study 3

This experiment took the form of a simple two-group design in which, just before undergoing the record rating and choice procedure, one group of subjects underwent a positive-mood induction and the other underwent a negative-mood induction. Both mood inductions were unrelated to subjects' self-concepts. If mood-altering experiences, in the absence of affirmational effects, are sufficient to produce self-justifying change in this paradigm, then subjects in the positive-mood condition should show less attitude change than subjects in the negative-mood condition.

Method

The subjects were 33 University of Washington introductory psychology students: 21 women and 12 men. The record rating and choice portion of this experiment followed the general procedures of Study 1 except that subjects were told, as part of the marketing guise of linking personality to record preference, that a goal of the research was to learn whether their reactions to differing mood-arousing experiences could predict record attractiveness. Under this guise, subjects underwent one of two mood-induction procedures taken from Kuykendall and Keating (1990) just before rating the records. In the positive-mood condition, they read and briefly meditated on an essay entitled "Meeting Them More Than Half Way" taken from a popular magazine that described a joyful, meaningful reunion of two long-separated couples. In the negative mood condition, subjects read a weekly news magazine essay entitled "Babies Born With AIDS." Immediately after these mood-induction procedures, subjects completed a single 9-point mood scale as a check of the effectiveness of the mood manipulation. Also, just after the record choice (vinyl records were again used in this experiment) and before the second record rating, subjects completed another mood scale (Mehrabian & Russell, 1974), an 18-item scale with three 6-item subscales measuring subjects' immediate feelings of pleasantness, dominance, and arousal. As in Study 1, attitudes were measured on a 165-mm scale.

Results and Discussion

This experiment tested whether a mood manipulation that did not have affirmational effects could produce differences in self-justifying attitude change within this free-choice procedure. The mood manipulation significantly affected subjects' mood as measured by the single-item scale that followed the manipulation itself. Subjects in the negative-mood condition rated their mood as significantly more negative than subjects in the positive-mood condition, $F(1, 31) = 64.85$, $p < .001$ (the means were 3.5 and 7.4, respectively, on a scale for which the most positive mood was 9 and the most negative was 1). These conditions, however, did not differ in the amount subjects spread the alternatives in justification of their record choice. In fact, positive-mood subjects engaged in slightly more self-justifying change ($M = 15.12$) than negative-mood subjects ($M = 10.4$), although nonsignificantly more. When taken together, these two conditions did produce significant self-justifying attitude change, $t(32) = 2.79$, $p < .01$.

Examination of the Mehrabian and Russell mood scale taken just after the record choice, however, complicated this picture. The mood manipulation had no effect on the overall scale ($t < 1$), but there was a marginally significant effect of the mood manipulation on the pleasantness subscale (the subscale most relevant to the mood manipulation), such that subjects in the positive-mood condition had a more pleasant mood than subjects in the negative-mood condition ($M = 21.89$ and 17.80, respectively), $t(32) = 1.35$, $p = .09$. Perhaps the effect of the mood manipulation was somewhat dissipated by this point in the procedure. Nonetheless, the mood-condition effect may not have sensitively tested whether mood differences cause differences in self-justifying change.

To provide a sterner test, we performed an internal analysis in which we compared the amount of self-justifying attitude change for people above and below the median on the complete Mehrabian scale (their means on this scale were 95.12 and 60.44, respectively, where 18 indicated the most positive and 180 the most negative overall mood). This analysis, too, produced no effect of mood on self-justification. In fact, again, subjects with positive moods showed slightly (though not significantly) more change ($M = 16.87$) than subjects with more negative moods ($M = 8.56$). We also compared the amount of self-justifying attitude change for people above and below the median on the pleasantness subscale of the Mehrabian (their means on this scale were 13.06 and 27.06, respectively, where 6

indicates the most positive mood and 54 the most negative mood). This analysis, too, produced no effect of mood on self-justification, although negative-mood subjects ($M = 17.12$) did show slightly (although not significantly) more self-justifying attitude change than positive-mood subjects ($M = 10.06$, $t < 1$). These same analyses were performed on the Mehrabian dominance and arousal subscales, and again there were no significant effects for mood.

Taken together, these findings provide strong evidence that quite substantial variations in mood, when they do not stem from self-affirmational effects, do not affect self-justifying attitude change within the present version of the free-choice procedure. Also, although these findings cannot rule out the mood alternative explanation completely (they are essentially null findings) they do make it substantially less plausible that the effects of the feedback and self-focus manipulations in Studies 1 and 2 were mediated by their effects on subjects' affect. Even substantial affect (mood) differences, unrelated to self-affirmational effects, had no effect on self-justifying attitude change in this paradigm. Thus it is very unlikely that it was these effects of the feedback and self-focus manipulations that mediated their effect on self-justifying attitude change in the earlier studies.[3]

General Discussion

We assume the process of self-affirmation is begun by a threat to one's image of self-integrity and that it runs its course until that image is restored, guided largely by what affirmational opportunities are available and effective, including the possibility of applying one's standing self-esteem resources to the task. This last possibility is one source of individual differences in resilience to such threat: People with more such resources have more routes to affirmation than people with fewer resources and thus should feel less pressure to counter (through rationalization, denial, etc.) the specific provoking threat itself. The present experiments support this idea by showing that individual differences in self-esteem resources can affect the affirmation process; when reminded of these resources, people with more of them showed less rationalization of the self-image-threatening decision than people with fewer of them.

However, it is important that the findings also suggest that people may not immediately access esteem resources in affirming a threatened self-image. Both high- and low-esteem subjects in the no-feedback condition of Study 1 and the no-reminding condition of Study 2 rationalized the choice itself, apparently without considering the general state of their esteem resources. For these resources to be used in affirmation, something apparently has to prime them, bring them on-line—as, we believe, did our feedback procedures in Study 1 and our resource-focus procedure in Study 2—or the affirmation search has to persist long enough that it turns to standing resources as a recourse. As noted, we assume that in real life such factors as the elapse of time, or the failure to resolve the provoking threat, eventually direct us to use standing esteem resources in affirmation. (Thus, although self-affirmation theory allows for the possibility of coping with a particular self-image threat by affirming an unrelated [but valued] aspect of the self, it does not argue that

this is necessarily the first response to such threat.) Nonetheless, the present findings establish that once salient, esteem resources can influence the affirmation process and thus that such resources may be an important source of individual differences in resilience to self-image threat.[4]

The data also eliminate an alternative explanation of how salient esteem resources might have affected self-justifying attitude change in these studies. We know, for example, that mood can affect self-justifying change in the forced compliance paradigm (cf. Cooper & Fazio, 1984). Thus, it might be argued that

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[3] Because the instructions in this experiment informed subjects that we were interested in the effect of mood-arousing experiences on their record rating, one could argue that the null effect of mood in this experiment resulted from subjects' somehow discounting the mood manipulation and thus nullifying its effect on their record ratings. Other research does show that people are capable of discounting the effect of mood-influencing manipulations and events on their judgments, but this happens only when their attention has been directed toward some situational cue to which the mood can be misattributed and only when the manipulated mood is negative (Schwarz & Clore, 1983). This experiment offered no situational cue to which the mood could be misattributed. Moreover, to discount one's mood so that it would not affect attitude change in this experiment, subjects would have to either resist (dampen down) the feelings associated with the mood—a possibility that does not fit the substantial differences in self-reported affect between the mood groups compared in this experiment—or they would have to have the idea that their mood could influence the spread of alternatives (not just their ratings, but the change in their ratings) and then counteract that influence. Considerable evidence suggests that subjects in this paradigm are not even aware that their attitudes change (e.g., Nisbett & Wilson, 1977). Thus, it is unlikely that they would have the awareness and theories of how mood could influence attitude change that would enable them to consciously discount its influence.

[4] We should note that some of the early experiments examining the effect of self-esteem on dissonance processes report findings more consistent with the self-consistency prediction. For example, Gerard, Blevans, and Malcolm (1964) and Glass (1964) found that subjects whose self-esteem had presumably been elevated by favorable feedback on a performance or personality test showed more dissonance-reducing attitude change than subjects whose self-esteem had been lowered by these means. Gerard et al. used the free-choice paradigm and Glass used the induced-compliance paradigm. A definitive reconciliation of these findings with our own is, of course, difficult without further research. Nonetheless, several differences can be noted. Perhaps most important, self-esteem in these studies was a manipulated factor. High-esteem subjects differed from low-esteem subjects in the self-aspects made salient by the manipulation, or in self-aspects imputed to the subject by the manipulation for perhaps the first time (e.g., labeling the subject a good judge of art, as was the self-esteem enhancement in Gerard et al.). In our experiments—in particular, in the self-focus conditions of Study 2 that produced the critical effects—self-esteem was a dispositional factor. It seems likely to us that manipulated self-enhancements, often quite superficial in nature, are unlikely to have the same affirmational capacity, that is, capacity to diffuse the self-image threat inherent in a dissonant act, as would the salience of dispositional and important affirmational resources. Thus, we cannot assume that these experiments adequately tested our proposition that individual differences in affirmational resources will affect the need to rationalize dissonant behavior.

making esteem resources salient in the free-choice paradigm affected self-justifying attitude change not through its effect on self-affirmation but through its effect on mood, the good mood arising from salient better resources, decreasing change, and the worse mood arising from salient poorer resources, increasing change. Study 3 shows, however, that when mood is manipulated independently of affirmational effects, even quite substantial differences in mood have no affect on self-justifying attitude change in this paradigm. This finding, we believe, suggests that any mood changes accompanying the manipulation of resource salience in this research did not mediate the effect of this factor on self-justifying attitude change.

Finally, the present findings also oppose an alternative explanation for earlier affirmation effects. This work showed that self-justifying attitude change was eliminated by an opportunity to self-affirm provided after dissonance arousal and before the posttest attitude measure. Conceivably, the alternative argument goes, distraction from the dissonant cognitions provided by an engrossing affirmation opportunity (most typically the completion of a value-affirming questionnaire), rather than self-affirmation itself, may have eliminated the self-justifying change in these studies. Considerable evidence was offered against this view, for example, that after such an affirmation, dissonance could not be reinstated by reminding subjects of the dissonant act (cf. Steele & Liu, 1983). But the present studies offer another kind of counterevidence by showing that affirming self-images eliminate dissonance (among subjects for whom the priming of esteem resources is self-affirming) even when they are not instated by a distracting questionnaire administered between the dissonant act and the measure of dissonance reduction.

Unfortunately, in the present experiments, we were forced to examine the hypothesized mediational process through a strategy of manipulation, and we had to forego direct measurement of these processes. That is, we were unable to measure self-evaluative resources either as a check on the resource-focus manipulation or as an intervening variable. Any attempt to get such evidence, especially within the flow of events in this experimental paradigm, was, for several reasons, prohibitive. First, measuring such resources and their salience would be a formidable, if not impossible task. This is because the self-aspect resources that underlie self-esteem are so multifarious—declarative and procedural self-knowledge, self-image relevant beliefs, other self-images, and so on—that it would not be feasible to measure them and their salience through a conventional manipulation check or through some other intervening measure. Second, any attempt to do so within the experiments would make these resources equally salient in both the resource-focus and non-resource-focus conditions. The measure itself would become a resource-focus manipulation. Thus, we had little choice but to address the mediational role of esteem resources through the manipulation of subjects' attention toward these resources rather than through their direct measurement. And in support of the resource argument, these studies showed that whenever this happened, self-esteem had the predicted effect on subjects' attitude change, thus making the hypothesized process the simplest explanation of several attentional manipulations (i.e., the personality feedback as well as the resource-focus procedure).

These experiments also ruled out a self-consistency interpretation of self-esteem's effect on self-justificatory change, as well as, we believe, the relevant trivializing alternative explanations.[5]

What Do We Mean When We Say Dissonance?

It is also clear that these findings do not fit the view of dissonance as a motive for self-consistency (e.g., Aronson, 1969, 1990). The negative aspects of the choice were more inconsistent with the self-image of high- than low-esteem subjects, and thus, if people strive for self-consistency, high-resource subjects should have changed more than low-resource subjects. That the reverse happened provides a further, important kind of evidence on behalf of the growing consensus that a motive for psychological consistency is not part of dissonance motivation and phenomena (e.g., Abelson, 1983; Cooper & Fazio, 1984; Greenwald & Ronis, 1978; Scher & Cooper, 1989; Schlenker, 1982; Schlenker & Schlenker, 1975; Steele, 1988). It has been known for some time that inconsistency between cognitions is not enough to arouse dissonance, even when the cognitions are important, as between an important attitude and knowledge of a voluntary but contradictory public action (Aronson, 1969; Cooper & Fazio, 1984; Greenwald & Ronis, 1978; Schlenker, 1982, 1985; Steele, 1988). When the subject's global self-image is affirmed, or the inconsistency involves no aversive consequences, these cognition-to-cognition inconsistencies fail, in their own right, to produce consistency-restoring changes (e.g., Cooper & Fazio, 1984; Steele & Liu, 1983). What the present findings add to this picture is the further evidence that even the cognition-to-self-image inconsistency that Aronson (1969) proposed as the essential dissonance-arousing inconsistency is not enough to arouse dissonance. When global self-integrity is bolstered by the salience of integrity-restoring esteem resources, psychological inconsistency per se, even when it involves the self-concept, fosters no consistency-restoring attitude change. Such findings push us toward the conclusion that dissonance is not fundamentally the distress of psychological inconsistency, or more particularly the distress of self-inconsistency, but the distress of a threatened sense of self-integrity—a quite general self-evaluative distress that, as Tesser and Cornell (1991) describe, is likely to play an important role in a large number of behavioral systems from attitude–behavior regulation to social comparison processes. That distress, we would argue, is what the term *dissonance* should refer to.

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[5] It might be argued, for example, that subjects' spreading of alternatives in these studies (rating the chosen record higher and rating the nonchosen record lower) reflects the influence of demand characteristics or self-presentational motives. Specifically, having received an unexpected gift may have motivated subjects to rate it highly out of politeness, a mixture of gratitude and self-presentation. This argument, however, does not explain why subjects would downgrade the nonchosen record, as it too was a gift, and most important, it does not explain the predicted condition differences in these experiments that show that under conditions of resource salience subjects do not spread the alternatives.

Self-Esteem and Self-Evaluation

We might be pushed even a step further to argue that not only is a motive for self-consistency absent from dissonance processes, but it is absent from mental life altogether. Now, of course, this would come up against the persistent finding in the social psychological literature that people sometimes appear to pursue self-consistency, even heroically, at great cost to their self-esteem or self-enhancement. A great deal of research has examined how the level of self-esteem affects a person's reactions to self-evaluative events and feedback. And a much-documented pattern in this literature might appear to contradict an important thrust of our reasoning and results. Compared with high-esteem people, low-esteem people have been found to be less self-serving in their explanations of poor performance (e.g., Bradley, 1978; Ickes & Layden, 1978; Miller & Ross, 1975), more accepting of unfavorable feedback and less accepting of favorable feedback about self-relevant traits (Dykman, Abramson, Alloy, & Hartlage, 1989; Shrauger & Kelly, 1988), less likely to engage in "compensatory self-enhancement" after negative feedback (Baumeister, 1982), more likely to have their performance expectations weakened by negative feedback (McFarlin & Blascovich, 1981), more likely to have their actual performance weakened by negative feedback (Brockner, 1979), and so on. Low self-esteem people are notoriously willing to accept unfavorable information about themselves whether it arises from their own behavior or from the feedback of others (Alloy & Abramson, 1979; Brockner, 1983; Taylor & Brown, 1988). Swann and his colleagues have shown this consistently: For example, low-esteem subjects when given a choice between a roommate who likes them and one who does not like them will prefer the one who does not like them; or after an important performance, low-esteem subjects prefer to hear negative rather than positive evaluations of their work (e.g., Swann, Pelham, & Krull, 1989; Swann, Wenzlaff, Krull, & Pelham, 1992). Yet, we have shown that low-esteem subjects, when reminded of their self-concept, actually defended their record choice (rationalized) more than high-esteem subjects; that is, they were apparently less willing to accept the possibility that they had made a poor decision.

Recently, however, several investigators have shown that although low-esteem people are generally more accepting of negative information about themselves than high-esteem people, they do self-enhance when they believe they can get away with it, that is, when doing so would not contradict their self-beliefs, or when they believe they could defend a given positive identity (Brown, Collins, & Schmidt, 1988; Crocker & Blaine, 1992; Dykman et al., 1989; Schlenker, 1980, 1985). The point of this research is that both high- and low-esteem subjects are motivated to maintain favorable self-images, but that low-esteem subjects are constrained in this effort by less favorable beliefs about themselves.

Yet an important question remains: How do these less favorable beliefs about the self constrain self-enhancement? Some (Dykman et al., 1989; Swann, 1983; Swann et al., 1992) have argued that low-esteem people fail to engage in self-enhancement because doing so would be inconsistent with their negative self-image. We argue that such sacrifices for consistency are more apparent than real; in our view, it is not surprising that low-esteem people often forego self-enhancement in these situations. It is important to keep in mind that the motive for perceived self-integrity is not just a motive for self-enhancement—as is sometimes implied—but is a motive to perceive the self as morally and adaptively adequate. We readily concede that subjects can be induced to pass up self-enhancements (especially the rather trivial ones offered in research) to fend off more profound threats to their self-integrity. We believe that these people are simply foregoing self-enhancement for another self-integrity motive that in these situations is more powerful; for example, avoiding a roommate who may expect them to be someone they don't believe they can be, or getting an evaluation that, although negative, may help them perform better in the future. The possibility of inconsistency in these situations simply cues subjects to some more fundamental self-integrity concern rather than arousing a motive particularly for self-consistency.

In the present experiments, however, we measured subjects' self-image protection (protection against the negative implications of the record choice) in terms of self-justifying attitude change: rationalization of the record choice rather than acceptance or rejection of negative information about the self. This meant that subjects could protectively self-enhance without contradicting self-beliefs. Thus, our findings can be reconciled with the general pattern of findings in the literature in the following way: When self-enhancement involves claiming what low-esteem people believe they cannot support, they are more accepting of negative information than high-esteem people, but when self-enhancement is free of this constraint, as in our experiments, they self-enhance. What this finding shows in a particularly clear way, further supporting the conclusions of the above literature, is that just beneath the greater tendency of low-esteem people to accept negative information about themselves, is a more primary motive to self-enhance, especially in the face of self-image threat.

What these findings add to this literature is evidence that when subjects are aware of their self-concepts, this motive is even stronger among low-esteem people than among high-esteem people, a finding that we believe is particularly supportive of the resources logic. Recall that when subjects were reminded of their self-concepts, low-esteem subjects actually self-enhanced (rationalized their decisions) more than high-esteem subjects. Their awareness of their ambivalent resources presumably made them realize that their sense of self-integrity depended more on neutralizing particular self-image threats—in this case, the negative implications of their decision—and less on standing resources they could call on. This finding would be difficult to explain without assuming individual differences in self-affirmational resources and without assuming that such differences influence the process of sustaining an overall sense of self-integrity. Thus, we take this finding as suggestive of the hypothesized model. And we argue further that a more complete picture of how low self-esteem people respond to negative self-relevant information must include the fact that they will resist this information (even more strenuously than high-esteem people) when they believe they can get away with it—a fact

that we suggest points to the importance of affirmational resources in self-esteem functioning.

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