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The Self and Social Conduct: Linking Self-Representations to Prosocial Behavior

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Two studies examined how situational variables and personal factors affect peoples' immediate representations of self and how, once activated, these representations guide behavior. In Study 1, Ss with high self-esteem (HSE) and Ss with low self-esteem (LSE) first experienced success or failure at an alleged test of their intellectual ability. Subsequently, they rated themselves on a series of trait adjectives: Half of the items referred to social traits and attributes, the other half referred to achievement-related traits and attributes. Failure led HSE Ss to exaggerate the positivity of their social qualities; the reverse was true for LSE Ss. Study 2 replicated these results and found that HSE Ss were also especially helpful after failure. These findings indicate that situational variables and personal factors interact to influence peoples' immediate views of the self and that people behave in accordance with these activated self-representations.

Recent research on the self has documented two important points. The first is that self-knowledge is vast and that numerous factors influence a person's moment-to-moment thoughts about the self (Markus & Wurf, 1987; Schlenker & Weigold, 1989). The second is that the particular conceptions of the self that are active at any time regulate and direct behavior (Bandura, 1989; Markus & Ruvolo, 1989). In this article, we apply these points to the study of prosocial behavior.

Theoretical Assumptions

A guiding premise of the present research is that a proximal determinant of helping behavior is the immediate perception that one is a helpful person (cf. Berkowitz, 1987). Numerous factors may evoke representations of this type in a person. Somewhat paradoxically, one of these factors may be failure at an achievement task. Specifically, we propose that people will try and counter the blow to self-worth brought about by failure at an intellectual task by actively recruiting positive representations of their interpersonal qualities. In this manner, poor performance at an achievement activity is expected to give rise to representations of the self as kind, compassionate, helpful, and so forth.

Although this hypothesis has not been tested explicitly, the more general notion that people use compensation and substitution to offset threats to the self has been assumed by many theorists. Freud (1915/1957), for example, posited that people displace self-directed anger onto others and sublimate unacceptable impulses into culturally acceptable acts. Adler's (see Ansbacher & Ansbacher, 1967) early writings regarding striving for superiority also emphasized the role of substitution as a means of compensating for a perceived deficiency. Lewin (1935) devoted an entire chapter to the substitutability of goals in his treatise on the dynamics of personality.

The use of substitution as a means of coping with threats to self-worth has also been recognized by contemporary students of the self. Wicklund and Gollwitzer's (1982) research on symbolic self-completion reveals that people who feel inadequate in a self-defining role attempt to offset the deficiency through the use of substitute symbols and activities. Similarly, research testing Steele's (1988) self-affirmation theory indicates that people attempt to cope with specific threats to self-worth by affirming unrelated aspects of the self. Finally, Baumeister (1982b; Baumeister & Jones, 1978) has shown that people use compensatory self-presentational strategies to counter a negative impression that another person has formed of them (see also Schneider, 1969).

The foregoing review gives theoretical substance to the notion that people may attempt to compensate for poor performance at an achievement task by exaggerating their interpersonal strengths and assets. Once activated, representations of the self as kind, caring, thoughtful, and so forth, should facilitate prosocial behavior.

Role of Self-Esteem

In theory, the process just outlined could apply to nearly all individuals. However, there is reason to believe that this pattern will be most characteristic of people with high self-esteem (HSE). Numerous investigations have shown that people with HSE and people with low self-esteem (LSE) diverge in their responses to negative outcomes (for reviews, see Brown, 1990a; Taylor & Brown, 1988). In general, HSE people tend to actively cope with failure, whereas LSE people tend more to accept failure (Brown & Gallagher, in press). Given these propensities, we expected that HSE subjects would be most apt to respond to

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failure at an achievement-related task by recruiting positive perceptions of their interpersonal attributes (cf. Baumeister, 1982b).

Summary

In summary, the present research was guided by two assumptions. The first is that situational variables (i.e., success/failure at an achievement task) and personal factors (i.e., self-esteem) interact to affect individuals' immediate representations of the self as nice, considerate, giving, and so forth. The second assumption is that once these self-representations are activated, they promote helping behavior. In Study 1, we examine the first assumption. Study 2 tests the complete model.

Study 1

Overview

Subjects with HSE and subjects with LSE were given success or failure feedback on an alleged test of their intellectual ability. Subsequently, they rated themselves on a series of trait adjectives. Half of the items referred to interpersonal qualities; the other half referred to achievement-related attributes. It was anticipated that HSE subjects, but not LSE subjects, would compensate for failure at an intellectual task by exaggerating the positivity of their social attributes.

Method

Subjects

The subjects were 52 undergraduates enrolled in introductory psychology courses. Subjects participated in individual testing sessions in exchange for extra course credit. The data from four additional subjects were discarded: Two expressed suspicion regarding the experimental procedure, and two failed to adequately complete the dependent variables.

Materials and Procedure

Subjects were informed at the start of the experimental session that the experiment concerned the measurement of an important cognitive ability called integrative orientation. The experimenter explained that this ability involved the capacity to discern the relations among different kinds of information and to use that information to effectively solve analytical problems (Brown, 1990b). Subjects were told further that prior research had established that integrative orientation was an important predictor of success in college and in the business world. Finally, it was explained that in addition to having their integrative orientation tested, subjects would complete some personality measures. Ostensibly, this was because the researchers were interested in how various personality variables related to integrative orientation.

Self-esteem. At this point, subjects were asked to complete Form A of the Texas Social Behavior Inventory (TSBI; Helmreich & Stapp, 1974). The 16 items on this instrument focus on overall feelings of self-worth and on more specific feelings of perceived competence and comfortableness in social situations. The scale has been shown to be a reliable and valid measure of self-esteem (Helmreich & Stapp, 1974). Subjects who scored in the bottom 40% of the distribution ($n = 20$) were classified as LSE; those who scored in the top 40% of the distribution ($n = 21$) were classified as HSE.[1]

Success/failure. After subjects completed the self-esteem scale, the alleged test of integrative orientation was administered. This test was actually the Remote Associates Test (Mednick, 1962). Prior research has shown this test to be an effective device for manipulating success and failure (McFarlin & Blascovich, 1984). For each of 10 problems, subjects were presented with three words (e.g., *sea, home,* and *stomach*) and were asked to find a fourth word that related to the other three (*sick*). Five minutes were allotted for this task.

Success and failure were manipulated by varying problem difficulty and providing false feedback. On the basis of normative information supplied by McFarlin and Blascovich (1984), as well as pilot testing with an independent sample, subjects in the success condition were given a set of 10 easy problems and subjects in the failure condition were given a set of 10 difficult problems. After the test had been completed, the experimenter scored the subjects' answers. Subjects in the success condition were told that they had performed very well and had scored in the top 15% of all students tested at their university; failure subjects were told that they had not performed very well and had scored in the bottom 30% of all students tested at their university.

Rating task. After receiving their score, subjects were handed a two-page questionnaire. The experimenter then excused himself or herself, saying that he or she needed to go prepare the next part of the experiment. Thus, subjects were alone while they completed these measures.

The items on the first page served as a check on the effectiveness of the manipulation. On the second page were 12 adjectives. Written instructions at the top of the page explained that subjects were to indicate how well each item described them by using 7-point rating scales (1 = *not at all;* 7 = *very much*). Half of the items pertained to qualities and attributes relevant to the interpersonal domain (i.e., sincere, loyal, kind, insensitive, inconsiderate, and insincere); the other half referred to achievement-related attributes (i.e., intelligent, smart, competent, unwise, unimaginative, and incompetent). Within each attribute type, half of the items were positive in valence, and half were negative.

After giving the subjects ample time to complete the measures, the experimenter returned and announced that the experiment was over. All subjects were then probed for suspicion, debriefed, thanked, and excused.

Results

Manipulation Check

A 2 (outcome) × 2 (self-esteem) analysis of variance (ANOVA) revealed that subjects assigned to the success condition correctly solved more problems ($M = 7.55$) than did those assigned to the failure condition ($M = 3.76$), $F(1, 37) = 82.11$, $p < .001$. Success subjects also evaluated their performance more favorably ($M = 7.40$) than did failure subjects ($M = 2.52$), $F(1, 37) = 133.94$, $p < .001$. Finally, when asked to rate their integrative orientation ability, success subjects believed that they had higher ability ($M = 6.80$) than did failure subjects ($M = 3.24$), $F(1, 37) = 83.67$, $p < .001$. For all of these analyses, there were no significant main effects or interactions involving self-esteem.

[1] We excluded subjects who scored in the middle 20% of the self-esteem distribution to avoid misclassifying them with regard to their self-esteem level (cf. Brown, Collins, & Schmidt, 1988). It is worth noting, however, that the use of a median split produced a similar pattern of results and levels of significance comparable to those reported in the text.

Trait Adjective Ratings

Prior to examining subjects' trait adjective ratings, scores for the negatively valenced items were reversed. The six items pertaining to interpersonal qualities were then averaged to create an index of social attributes ($\alpha = .68$); a similar procedure was followed to create an index of achievement attributes ($\alpha = .78$). These scores, which are shown in Table 1, were submitted to a 2 (outcome) × 2 (self-esteem) × 2 (attribute type) mixed ANOVA, with the last factor treated as a within-subjects factor.

The ANOVA revealed a main effect of self-esteem, $F(1, 37) = 22.18$, $p < .001$, an Outcome × Self-Esteem interaction, $F(1, 37) = 5.17$, $p < .05$, and a higher order Outcome × Self-Esteem × Attribute Type interaction, $F(1, 37) = 4.71$, $p < .05$. As each of the lower order effects is qualified by the three-way interaction, we limit our discussion to the higher order effect.

Separate Outcome × Self-Esteem ANOVAs were conducted within each attribute type to clarify the triple interaction. For achievement attributes, the only significant effect was a main effect of self-esteem, $F(1, 37) = 27.86$, $p < .001$; for social attributes, a main effect of self-esteem, $F(1, 37) = 9.47$, $p < .01$, was qualified by a significant two-way interaction, $F(1, 37) = 12.62$, $p < .005$.

The nature of the two-way interaction can be seen in the top row of Table 1. As predicted, HSE subjects, but not LSE subjects, responded to failure at an achievement task by exaggerating the positivity of their social qualities. Simple effects tests confirmed that self-ratings of social attributes were more positive after failure than after success for HSE subjects, $t(37) = 2.12$, $p < .05$, whereas the reverse was true for LSE subjects, $t(37) = 2.90$, $p < .025$. Additional analyses revealed that subjects' perceptions of their social attributes did not differ as a function of self-esteem after success ($t < 1$), but HSE subjects rated their social attributes more favorably after failure than did LSE subjects, $t(37) = 4.69$, $p < .001$.

In summary, the preceding findings show that in comparison with success, failure at an achievement task prompted HSE subjects to glorify their interpersonal qualities but led LSE subjects to depreciate their interpersonal qualities. To determine whether these effects were specific to only a few of the social attributes, we conducted separate ANOVAs for each of the six attributes. The Outcome × Self-Esteem interaction was significant ($p < .025$) for two of the six items (kind and insincere); marginally significant ($.06 > p < .12$) for three of the six items (loyal, inconsiderate, and insensitive), and nonsignificant for one of the items (sincere). Although somewhat equivocal, these analyses suggest that the effect was a general one and not specific to any particular attribute.

Table 1
Mean Ratings of Self-Descriptiveness for Social Attributes and Achievement Attributes as a Function of Prior Outcome and Self-Esteem: Study 1

Attribute type	High self-esteem		Low self-esteem	
	Success	Failure	Success	Failure
Social	5.82	6.29	5.93	5.33
Achievement	6.27	6.22	5.49	5.27

Note. Values can range from 1 to 7; higher scores indicate more positive evaluations of self.

Discussion

The results from Study 1 are in accordance with the claim that performance outcomes interact with subjects' self-esteem levels to influence the nature of self-referent thought. In relation to success, failure at an achievement task evoked more favorable appraisals of their social attributes among subjects with HSE but generated more negative appraisals of their social attributes among subjects with LSE. Hence, whether failure inflated or deflated a person's perceptions of her or his social qualities depended on whether the person's self-esteem level was high or low.

It is important to note that HSE subjects did not deny the feedback they received or its specific implications for their ability. Nor did they attempt to dismiss their poor performance by exalting their achievement-related attributes. Instead, they seemed to be trying to make up for their negative achievement performance by actively recruiting positive perceptions of their social qualities. This finding, which coincides with an investigation by Baumeister (1982b), provides further evidence that HSE people adopt active efforts to offset negative outcomes (Brown, 1990a; Taylor & Brown, 1988).

The use of compensation by HSE subjects underscores how creatively these individuals maintain their favorable self-views. HSE people do not ignore external evidence when seeking to promote self-esteem; instead, they engage a variety of inventive tactics that allow them to enhance their feelings of self-worth while still maintaining contact with reality (Brown, 1990a; Brown & Gallagher, in press; Kunda, 1987; Pyszczynski & Greenberg, 1987; Taylor, Collins, Skokan, & Aspinwall, 1989). The ability to offset failure through the use of compensatory self-enhancement reveals yet another impressive strategy in the HSE individual's armamentarium (Brown, 1990a; Steele, 1988).

Study 2

The results from Study 1 support the claim that people with HSE respond to failure by emphasizing their social qualities. However, we have yet to provide evidence that these thoughts about the self compel prosocial behavior. To test this hypothesis, we gave subjects in Study 2 the opportunity to help someone in apparent need of assistance. We expected (a) that prior outcomes and self-esteem level would again interact to affect subjects' immediate thoughts about the self and (b) that once activated, perceptions that one is kind, thoughtful, considerate, and so forth, would lead subjects to be especially helpful.

A subsidiary issue was also examined in Study 2. Unexpectedly, the success/failure manipulations in Study 1 did not affect subjects' evaluations of their achievement attributes. To explore this matter, we used a broader range of attributes in Study 2.

Method

Subjects

During a mass testing session conducted on the first day of classes, 244 introductory psychology students completed a number of personal-

ity scales. The TSBI was included among these measures. Fifty-two students who scored in either the top or bottom 40% on this scale subsequently participated in the experiment in exchange for extra course credit. Testing occurred on an individual basis 4–12 weeks after the mass testing session. The data from two additional subjects were discarded, for one subject because of a mechanical failure and for the other because of a failure to adequately complete the dependent variables.

Materials and Procedure

The procedures used in Study 2 were very similar to those used in Study 1. After scoring the integrative orientation test, providing subjects with their predetermined test feedback, and administering the manipulation check questionnaire, the experimenter explained that she or he needed to go to another part of the psychology building to get the materials for the next test. In the meantime, she or he was going to have the subject work on another, allegedly unrelated, experiment.

Rating task. At this point the experimenter led the subject to an adjacent experimental room. The room was equipped with a microcomputer. Subjects were told that a series of words would be presented on the computer screen and that they should indicate the degree to which each word described them by pressing a number between 1 and 5 (1 = *definitely no;* 5 = *definitely yes*). As in Study 1, one half of the items referred to interpersonal traits and attributes (e.g., friendly, generous, and caring); the other half referred to achievement-related traits and attributes (e.g., bright, clever, and wise). Furthermore, half of the items were positive in tone; the other half were negative. Twenty-four items were used.

When the experimenter was certain that the subject understood the computer task, she or he left the room. Thus, as in Study 1, subjects were alone throughout the rating task. After allowing the subject sufficient time to complete the task, the experimenter returned and led the subject back to the testing room.

Helping request. At this point the helping request was introduced. Adapting a procedure used by Coke, Batson, and McDavis (1978; see also Cialdini, Darby, & Vincent, 1973), the experimenter offhandedly delivered the following remarks, varying the sex of the graduate student so that it matched the subject's sex.

> Before we get back to the experiment, I want to tell you that while I was out getting these materials I ran into a graduate student who is working on her master's thesis. She's also running a study that uses a computer, though it's not anything like either of the studies you just did. Anyway, apparently she was running a subject earlier today when the computer went down and she had to let the subject go. Now she has the computer working but she doesn't have a subject. I told her I was with a subject now, and she wanted to know if you would be willing to help her by being a subject in her study.
>
> The thing is, though, she already had to give credit to the other subject. So you wouldn't get any credit. But she could use your help in order to finish her thesis. And because it's done entirely on a computer, it's one of these self-paced tasks that she sets up for you to do for 5 minutes, 10 minutes, 15 minutes, up to an hour. So if you do decide you want to help, you can also decide how long to help. Anyway, it's entirely up to you. As I said, you wouldn't get any credit but she could use your help. Are you willing to help?

If the subject agreed to help, the experimenter then had the subject make a commitment for the amount of time she or he would be willing to help (in 5-min intervals from 5 to 60 min). Afterward, the experiment was terminated. Subjects were then thoroughly debriefed and excused.

Results and Discussion

Manipulation Check

As expected, 2 (outcome) × 2 (self-esteem) ANOVAs revealed that subjects assigned to the success condition solved more problems, $F(1, 48) = 22.03$, $p < .001$, evaluated their performance more favorably, $F(1, 48) = 12.30$, $p = .001$, and believed that they had higher integrative orientation ability, $F(1, 48) = 9.26$, $p < .005$, than did failure subjects. Furthermore, as in Study 1, there were no significant effects or interactions involving self-esteem in these analyses.

Trait Adjective Ratings

Ratings for the negatively toned adjectives were reversed, and composite indexes were formed for social and achievement attributes. An Outcome × Self-Esteem × Attribute Type mixed ANOVA revealed a main effect for self-esteem, $F(1, 48) = 10.30$, $p < .005$, an Outcome × Self-Esteem interaction, $F(1, 48) = 4.41$, $p < .05$, and a higher order Outcome × Self-Esteem × Attribute Type interaction, $F(1, 48) = 5.74$, $p < .025$.

As shown in Table 2, The form of the interaction was nearly identical to the one found in Study 1. For achievement attributes, the only significant effect was a main effect of self-esteem, $F(1, 48) = 6.63$, $p < .025$. For social attributes, both the main effect of self-esteem and the Outcome × Self-Esteem interaction were significant, $F(1, 48) = 8.02$, $p < .01$, and $F(1, 48) = 11.96$, $p < .005$, respectively.

The nature of the two-way interaction is shown in the top row of Table 2. Among HSE subjects, self-ratings of social attributes were more favorable after failure than after success, $t(48) = 2.05$, $p < .05$; the reverse was true among LSE subjects, $t(48) = 2.84$, $p < .01$. Looked at somewhat differently, social evaluations did not differ as a function of self-esteem after success ($t < 1$), but after failure, HSE subjects rated their social attributes more favorably than did HSE subjects, $t(48) = 4.45$, $p < .001$. In summary, in relation to success, failure again led HSE subjects to accentuate their social qualities but led LSE subjects to devalue their social qualities.

Helping

In addition to affecting subjects' perceptions of their social attributes, we anticipated that performance outcomes and self-esteem would interact to predict helping behavior. Specifically, we expected that HSE subjects would be more helpful after failure than after success, whereas LSE subjects would be more helpful after success than after failure.

To test this hypothesis, we conducted an Outcome × Self-Esteem ANOVA on the amount of time subjects agreed to help the alleged graduate student who was in need of assistance.[2] The only significant effect was a two-way interaction, $F(1, 48) = 5.62$, $p < .025$. As shown in Table 3, consistent with predictions, subjects with HSE tended to offer more help after failure than

[2] Analyses on the proportion of subjects who offered help in each condition revealed a comparable pattern of findings. Using an arcsine transformation (cf. Langer & Abelson, 1972), we found that the Outcome × Self-Esteem interaction was significant, $Z = 2.00$, $p < .05$.

Table 2
Mean Ratings of Self-Descriptiveness for Social Attributes and Achievement Attributes as a Function of Prior Outcome and Self-Esteem: Study 2

Attribute type	High self-esteem		Low self-esteem	
	Success	Failure	Success	Failure
Social	4.07	4.40	4.14	3.68
Achievement	4.35	4.27	4.07	3.97

Note. Values can range from 1 to 5; higher scores indicate more positive evaluations of self.

after success, $t(48) = 1.92$, $p = .06$, whereas subjects with LSE tended to offer more help after success than after failure, $t(48) = 1.43$, *ns*.

Mediation

The pattern of helping behavior displayed in Table 3 corresponds closely with subjects' evaluations of their social attributes. This suggests that, as expected; subjects' thoughts about their social attributes were closely tied to their social behavior. However, an ANOVA provides only a limited test of a mediational hypothesis (Baron & Kenny, 1986). Several additional analyses were therefore conducted to provide a more fine-grained test of this hypothesis.

First, the correlation between self-ratings of social attributes and helping was examined. As predicted, the correlation was positive and significant, $r = .32$, $p < .01$, one-tailed. Thus, at the individual level, the more favorably one evaluated one's social attributes, the more help one offered to someone in need. Importantly, this effect was specific to self-evaluations of social attributes: A comparable analysis revealed that evaluations of one's achievement-related attributes were unrelated to helping behavior, $r = .06$, *ns*.

A final test of mediation was performed using procedures outlined by Baron and Kenny (1986). According to these theorists, evidence of mediation requires (a) that the independent variables affect the presumed mediator, (b) that the independent variables affect the dependent variable, and (c) that the presumed mediator affects the dependent variable after statistically controlling for the independent variables. Assuming that these three conditions are met, one may say that the effects of the independent variable on the dependent variable are at least partially mediated by the presumed mediating variable.

With reference to the present data, we have already shown (a) that the independent variables (including the Outcome × Self-Esteem interaction) affected the presumed mediator (i.e., self-representations of social attributes) and (b) that the independent variables affected the dependent variable (i.e., helping). To test the third criterion outlined by Baron and Kenny (1986), we conducted a multiple regression analysis in which we tested the influence of the mediating variable on helping after controlling for the independent variables (i.e., after controlling for outcome, self-esteem level, and the interaction of these variables). A significant effect for the mediator was found ($\beta = .2803$, $p = .03$, one-tailed). Moreover, the Outcome × Self-Esteem interaction, which was significant in the absence of the mediator, was no longer significantly related to helping behavior once subjects' perceptions of their social attributes were statistically controlled ($p = .125$).

In summary, these analyses are consistent with the claim that performance outcomes and self-esteem level combined to affect subjects' self-representations and that, once activated, these representations guided social behavior. These results thus provide suggestive evidence that self-referent thought played a mediating role in the effects of performance outcomes and self-esteem on helping.

General Discussion

In this research we examined how situational variables and personal factors influence self-referent thought and social behavior. In comparison with successful task performance, failure at an achievement task led HSE subjects to exaggerate their social qualities and to behave in a prosocial manner. In contrast, failure was linked to a denigration of their social characteristics and inhibition of helping behavior among LSE subjects. Additional evidence suggested that the interactive effects of performance outcomes and self-esteem on helping were mediated by subjects' self-referent cognitions.

Before considering the implications of these findings, we need to acknowledge some possible limitations. First, the absence of a control group limits the conclusions that can be drawn from these studies. Throughout this article we have assumed that the two self-esteem groups primarily diverge in their responses to failure, not success. There is a good deal of evidence to support this assumption (Brown, 1990a; Brown & Gallagher, in press; Taylor & Brown, 1988). Nevertheless, without a control condition, we cannot determine whether the effects we observed here are due to failure, success, or a combination of these outcomes. This limitation needs to be kept in mind when considering the present research.

A second issue deserving attention concerns the fact that subjects' evaluations of their achievement attributes did not vary as a function of prior performance. This finding does not appear to be due to an ineffective manipulation: In both studies, both self-esteem groups rated their integrative orientation ability lower after failure than after success. Despite these specific effects, success/failure did not affect subjects' more general evaluations of their achievement-related qualities.

Why might this be the case? One possibility is that achieve-

Table 3
Helping Behavior as a Function of Prior Outcome and Self-Esteem

Measure	High self-esteem		Low self-esteem	
	Success	Failure	Success	Failure
Minutes of help offered	10.39	22.31	21.79	12.92
Percentage of subjects volunteering to help	54	77	86	58

ment attributes are more stable than are social attributes. Peoples' beliefs about their general intelligence are based on a lifetime of experience. Moreover, these beliefs are often anchored in objective criteria (IQ test scores, feedback from educators regarding performance on standardized tests, etc.). Given the wealth of data that substantiate these views, it might take much more than one success/failure experience to alter peoples' perception of their general intelligence (Brown & Gallagher, in press). Other, less psychologically based explanations (e.g., ceiling effects and measurement error) may also have obscured the effects of the performance manipulations.

Another possibility is that subjects did not believe their test performance was relevant to their more general intellectual attributes. Moreover, if subjects believed instead that their performance had direct implications for their social attributes, the effects we have observed may not represent compensation and substitution, as we have assumed throughout this article.

We conducted a brief experiment to examine these possibilities. The subjects were 10 college students enrolled in an upper division psychology course. In the first part of the experiment, these subjects were given the same information about integrative orientation ability as were subjects in the main experiments. The subjects were also shown three sample problems (and solutions) in order to familiarize themselves with the integrative orientation test. Afterward, subjects were given a rating sheet and asked to indicate the extent to which they thought performance on the test was relevant to each of the 12 attributes used in Study 1 (1 = *not at all relevant;* 7 = *very relevant*).

Analyses of these data showed that subjects believed that performance on the integrative orientation test was far more relevant to achievement attributes ($M = 3.85$) than to social attributes ($M = 1.62$), $F(1, 9) = 24.94$, $p < .001$. The fact that these subjects did not believe test performance was relevant to their social skills supports our assertion that the effects observed in the main studies reflect compensatory self-enhancement processes. At the same time, these findings suggest that subjects in the main studies may have believed that test performance was only moderately related to their achievement attributes. This latter finding may shed further light on our failure to find an effect for the outcome manipulations on these attributes.

Implications

Having discussed some possible limitations of our findings, it is appropriate to consider the contribution of the present research. First, the data reveal that situational and personal factors combine to affect individuals' immediate self-representations. As noted earlier, a defining feature of recent research on the self is the notion that the self-system is not unitary and static but is multifaceted and dynamic (Markus & Wurf, 1987; Schlenker & Weigold, 1989). From this perspective, people conceive of the self in myriad ways. The particular views of self that are active at any time depend on a host of environmental and internal factors.

In support of this claim, prior research has found that self-representations are influenced by temporary variations in mood states (Brown & Taylor, 1986), self-presentational behavior (Rhodewalt, 1986; Schlenker & Trudeau, 1990), attentional focus (Brown, 1988), and the composition of the social environment (Markus & Kunda, 1986; McGuire & McGuire, 1988). By documenting conditions under which situational factors (success/failure) and personal variables (self-esteem) interact to affect a person's momentary thoughts about the self, the present results join and extend previous research supporting the dynamic nature of self-knowledge.

Our results also imply that, once activated, self-representations direct behavior. The notion that self-representations serve as behavioral guides has been suggested by numerous theorists (e.g., Bandura, 1989; Carver & Scheier, 1981; Markus & Ruvolo, 1989; Swann, 1987). Support for this argument has taken many forms. For example, in one intriguing study (Fazio, Effrein, & Falender, 1981), subjects who were first led to think of themselves as extraverts subsequently behaved in a more outgoing manner than did subjects who were first led to think of themselves as introverts. In a conceptually similar vein, our findings show that people who currently conceive of the self as kind, understanding, and caring are most inclined to act in a prosocial manner. Far from being epiphenomenal, then, self-representations appear to play a critical role in guiding and regulating behavior.

Though not denying the role of unconscious motivation, our findings suggest that self-representations may be most strongly tied to behavior when they have recently been activated from long-term memory (cf. Cialdini, Reno, & Kallgren, 1990). This finding is consistent with evidence that individuals interpret and respond to social information in terms of the social constructs that are accessible at the time the stimulus information is encountered (Higgins & Bargh, 1987). On the basis of our findings, we extend this more general tendency to the activation of self-knowledge. Because individuals conceive of the self in multiple ways, specific representations of self that are active at a given time will be the ones that are most apt to guide the processing of personal information and subsequent behavior. In the present case, it seems that whether one responds to a request for help with compassion or indifference depends, in part, on whether views of the self such as kind, considerate, and sympathetic are activated.[3]

Our findings also shed light on the nature of HSE and LSE. The two self-esteem groups diverged in their views of their social skills only after failure; after success, LSE subjects' appraisals of their social attributes were just as favorable as were HSE subjects'. This finding fits well with other evidence suggesting that people with LSE are just as interested in promoting positive views of the self as are HSE people (Brown et al., 1988; Brown & Gallagher, in press). The main difference between these groups lies in their beliefs regarding their ability to support self-enhancing claims (Baumeister, Tice, & Hutton, 1989; Brown et al., 1988; Brown & Gallagher, in press; Schlenker, Weigold, & Hallam, 1990). LSE people are less confident that they can defend positive self-views; consequently, they require more substantiating evidence before they will entertain favorable views of the self. When evidence exists supporting favor-

[3] For some people, views of the self as compassionate, kind, caring, and so forth may be chronically accessible (Higgins & Bargh, 1987). In this case, situational activation might not be necessary for these representations to affect helping.

able self-views, LSE people are just as self-aggrandizing as are HSE people.

Interestingly, although it is more realistic, the conservative approach of people with LSE may not be more adaptive. Taylor and Brown (1988) argued that self-enhancing illusions are linked to superior emotional, psychological, and physical adjustment. The behavior of HSE subjects in the present study seems to fit well with this analysis. Helping another person in need of assistance begets social approval, promotes a positive self-image, and engenders positive affective states (Williamson & Clark, 1989). By offering to help after failure, then, HSE subjects reaffirmed their favorable self-image and probably improved their mood states. In contrast, LSE subjects in the failure condition not only performed poorly on an achievement task but they denigrated their social qualities and subsequently acted in a somewhat inconsiderate and selfish manner. By failing to avail themselves of the opportunity to help another person, then, LSE subjects probably reinforced their negative self-views and perpetuated a negative mood state. Clearly, the behavior of HSE subjects represents a far more effective response to failure. In this sense, the present findings provide additional evidence that self-enhancing illusions have positive psychological consequences.

The precise nature of the motivation underlying the behavior of HSE subjects is left somewhat unclear in the present research. Baumeister (1982b; Baumeister & Jones, 1978) has provided evidence that compensatory self-enhancement is driven by a desire to enhance one's public image rather than a desire to privately augment feelings of personal worth (but see Brown & Gallagher, in press, and Greenberg & Pyszczynski, 1985). Although our subjects were alone when making their self-evaluations, the helping request was delivered by the same person who had witnessed their performance on the integrative orientation test. Conceivably, then, HSE subjects may have agreed to help after failure in an attempt to impress the experimenter with their kindness and compassion.

Unfortunately, the present data do not shed light on whether our subjects' behavior was primarily guided by public or private concerns. However, a clear distinction between these determinants of behavior may not be sharp in the present context. Public behavior serves two functions: impression management and self-construction (Baumeister, 1982a; Gollwitzer, 1986). The former term refers to the use of public behavior to create a particular impression in the eyes of others; the latter term refers to the use of public behavior to create and solidify one's private view of the self. From this perspective, the audience for public behavior can be both others and the self (cf. Greenwald & Breckler, 1985; Schlenker & Weigold, 1989). Both audiences were probably salient in the present research. Hence, it seems likely that HSE subjects helped more than LSE subjects did after failure as a means of convincing both the experimenter and themselves that they were as kind, thoughtful, and nice as they claimed to be.

Concluding Remarks

In closing, we would like to make a final point regarding the implications of our research. We have found that specific representations of the self are linked to prosocial behavior. This finding may illuminate how other variables that have been shown to promote helping exert their influence. For example, positive mood states, which foster helping (Isen, 1984), may do so by priming views of the self as kind and benevolent (cf. Berkowitz, 1987). As a second example, observing charitable behavior in another person may activate related self-representations that, in turn, promote helping behavior (cf. Midlarsky, Bryan, & Brickman, 1973). These conjectures merit empirical examination. If they are confirmed, their potential applied benefits are considerable. In particular, they suggest that it may be possible to increase helping behavior by directly priming self-representations that are compatible with benevolence (Kraut, 1973). Whether other socially responsible behaviors (conservation, voting, etc.) can be similarly increased in this manner is another important empirical question. Ultimately, social change may be effected by affecting the self.

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