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## COMPLIANCE AFTER THREAT: SELF-AFFIRMATION OR SELF-PRESENTATION?

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### ABSTRACT

*People become more likely to comply with the wishes of others after their self-concepts have been threatened. Steele (1975) suggested that the function of compliance in this context is to restore the integrity of the self-concept. An alternative interpretation is that threats merely motivate people to make positive impressions on others. To examine these two possibilities, we manipulated the type of threat to the self (private vs. public) and of the type of compliance opportunity (private vs. public) independently (Study 1). Under three out of four conditions, threats increased compliance. Compliance was no different from the no-threat control when the threat was private and the opportunity was public. This interactional pattern suggested that both self-affirmation and self-presentation motives contributed to compliance. A simulation study ruled out demand characteristics and other intuitions concerning social influence as explanations of these findings (Study 2).*

### INTRODUCTION

Perhaps more often than they realize, people do what others want them to do. Social influence works for a variety of reasons. Kelman (1961) offered the now classic distinction between internalization, identification, and compliance. Internalization reflects deep social influence in that its targets are psychologically transformed; the desires of the influence agents become their own. Identification is more transitory in nature because its effects depend on the presence (actual or imagined) of the influence agents. Compliance is a comparatively shallow type of social influence, but is also the most problematic one because the targets of influence tend to end up doing what they'd really prefer not to do. Cialdini's (1993) review of compliance techniques shows how skilled influence agents can disable the target's better judgment (see also Cialdini & Trost, 1998). The well-known techniques of 'foot-in-the-door,' 'door-in-the-face,' and 'low-

balling,' for example, share subtleties that may appeal to influence agents, but that would appall their victims if they were aware of them. In many instances, compliance has negative connotations. It often works outside of the target person's awareness, against his or her self-interest, and with undesirable social outcomes.

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One time-honored influence technique is to make targets feel good about themselves (Razran, 1938) or indebted to the agent (Regan, 1971). These two methods capitalize on classical conditioning and on the norm of reciprocity, respectively, and both demonstrate the exploitative potential of social influence. To the extent that the agent can extract a favor from the target that is larger than the agent's own investment, the agent wins and the target loses. In one study, for example, the influence agent, who posed as another participant in an art appreciation experiment, handed the naïve participant a soft drink (Regan, 1971). Later, the agent offered raffle tickets for sale. Participants who had received the drink bought twice as many tickets as did controls who had not received this favor. Although the agent had to make an investment to elicit compliance, he succeeded in collecting more money from ticket sales than he spent on drinks.

Material or monetary investments are often unnecessary to elicit compliance. Under certain conditions, it is possible to get something for nothing. Both flattery and insults increase compliance beyond baseline levels (Steele, 1975). Flattery may work simply because it creates a positive mood that facilitates agreeable behavior (see Carlson, Charlin, & Miller, 1988, for a review). The effects of insults, on the other hand, are paradoxical and thus more interesting. Specifically, why would people comply after their self-concepts have been damaged? Steele suggested that this might happen because people seek to repair damage to the self-concept. This repair may be accomplished by any action that confirms an aspect of the self that is at least as important as the one that was threatened. In other words, compliance can be an act of self-affirmation (Steele, 1988). Self-affirmation need not imply self-enhancement because the person does not seek to inflate the self beyond realistic standards. Steele's (1975) demonstration of self-affirmative compliance involved a desirable, pro-social behavior (i.e., helping). Conceivably, self-affirmative compliance is limited to such positive acts because compliance with a request to do something hurtful would hardly be self-affirmative to most people.

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The generality of the self-affirmation effect has not been studied systematically. Perhaps the effect is 'diffuse' in the sense that people try to disarm any threat to the self by engaging in behavior that is congruent with the self-concept.<sup>1</sup> Alternatively, people may be sensitive to the nature of the threat and to the nature of the compliance opportunity. To examine these two possibilities, it is useful to distinguish between private and public threats on the one hand, and between private and public opportunities for compliance, on the other. Suppose, for example, that people are primarily concerned about making favorable impressions on others (Goffman, 1959). If self-presentation is the guiding motive after the experience of a threat to the self, it is conceivable that people avoid costly behavior unless both the threat and the subsequent helpful behavior are public knowledge. Self-affirmation, in contrast, suggests that a private threat to the

self (i.e., a threat that only its victim is aware of) should also enhance compliance. The present work examines the effects of self-affirmation and self-presentation on compliance. Because this work builds on Steele's (1975) methods, we first review his original study.

### **The Effect of Threat to the Self on Compliance: A Classic Study**

In Experiment 1, a person claiming to be a pollster called unsuspecting housewives and engaged them in a conversation. In the course of this conversation, the pollster either insulted the target person, praised her, or remained neutral. To threaten the target's self-concept, the caller claimed that it was "pretty much common knowledge that you, as a member of your community, are not concerned with cooperative efforts for the betterment of your fellow man" (Steele, 1975, p. 362). This claim about the target's uncooperative nature was related to the opportunity for compliance presented later. In an irrelevant-threat condition, the caller claimed that the target was known to be unconcerned with driving safety. Finally, in a third condition, the caller flattered rather than threatened the target by saying that she was known to be a cooperative person.

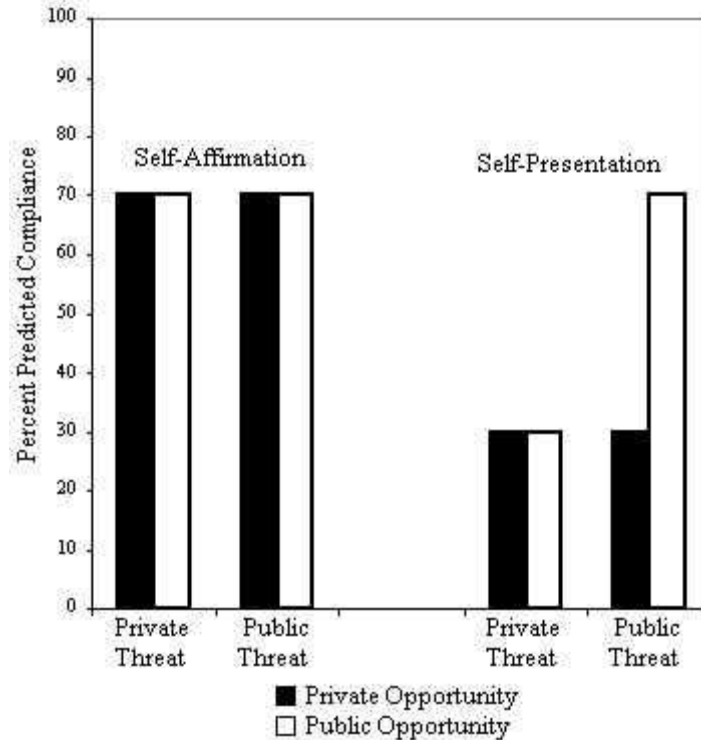
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Two days later, another caller asked each target person to help with a community service project by preparing a list of household products and brands of foods found in the house. Presumably, this list would be used to decide how to help needy families. Compliant behavior was assessed by giving participants the chance to submit these lists. Regardless of whether the threat was relevant or irrelevant to the request for help, most participants (93%) agreed to help. Flattery (65%) was a less powerful technique, but it was still more effective than not addressing the participants' self at all (46%). Across conditions, behavioral compliance was highly correlated with verbal compliance over the phone ( $r = .87$ ), and the effect was only slightly attenuated on the average ( $\approx 10\%$ ). Experiment 2 revealed that the effectiveness of the threat increased with the range of implications it had for the targets' self-concept (see also Bizman, Yinon, Ronco, & Shachar, 1980; Steele & Liu, 1981).

### **The Private Versus Public Distinction**

If compliant behavior is one way to restore the integrity of a damaged self-concept, the role of other people—and thus the role of social influence—may be more modest than previously realized. It is possible that a person receives threatening information about the self of which others are unaware. The self can be threatened privately, for example, by failure on a solitary task. By the same token, amends can be made that others do not learn about (e.g., by making an anonymous donation to a good cause). As it stands, however, self-affirmation theory predicts that compliance should always increase after threat, including threats that are private and that can only be addressed by compliance in a private setting (see Figure 1, left panel).



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On the other hand, there are occasions in which both the threat and the compliance opportunity are public. Threats, in the form of negative feedback, are often delivered by others. In other words, these ‘others’ are privy to undesirable aspects of the self. Often, the same individuals have the opportunity to witness the target person’s compliant behavior. It is under these conditions, that motives of self-presentation are relevant for behavior (Leary & Kowalski, 1995). Indeed, if self-presentation is the only relevant motive, increases in compliance should be limited to situations in which both the threat and the opportunity are public (see Figure 1, right panel).

To review, the self-affirmation hypothesis is that threats have a uniformly facilitative effect on compliance. In contrast, the self-presentation hypothesis is that compliance rises above the no-threat baseline only if both the threat and the opportunity are public. To test these hypotheses, both the nature of the threat and the nature of the compliance opportunity must vary. A threat is private if only the participant is aware of it; it is public if it reflects the perceptions of relevant others. Participants with a private compliance opportunity have no reason to expect that others will find out about their agreement to help; participants with a public opportunity may expect that others will learn about their behavior.

## STUDY 1: ELICITING COMPLIANCE

The orthogonal manipulation of type of threat (private vs. public) and type of compliance opportunity (private vs. public) created four experimental conditions. The design also included two control conditions in which participants did not experience a threat to the self-concept, but

did have either a private or a public opportunity for compliance. Given the nature of the four conditions within the experimental part of the design (threat manipulation), patterns of compliance are possible that are inconsistent with both of the a priori hypotheses. Some of these patterns are highly implausible from the outset, however. There is no reason to expect, for example, that compliance might increase only when the threat is private and the opportunity is public (or vice versa).

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During stage 1 of the experiment, personality-descriptive data were collected from both self-ratings and peer-ratings. During stage 2, some participants received arbitrary negative feedback ostensibly derived from self-ratings (private threat) or from peer-ratings (public threat). During stage 3, participants had an opportunity to volunteer time for a charitable organization that would either publicly recognize their contribution or not. The contents of the negative personality feedback were not specifically related to the compliance opportunity as that specificity is not necessary for self-affirmation (Steele, 1975).

## METHODS

### Participants and Materials

Brown University undergraduates (N = 107) enrolled in psychology courses participated in this study. Each participant completed an inventory consisting of 23 statements originally selected to assess the positivity of a person's self-image (Sinha & Krueger, 1998a). These statements (e.g., ". . .is sometimes rude to others," or ". . .is generally trusting") are a subset of the Big Five Inventory (BFI), which is a broad-band instrument for personality assessment (John & Donahue, 1994). On a separate occasion, the same inventory was also completed for each participant by three of his or her classmates.

A 120-word sketch with arbitrary personality feedback was constructed. Ostensibly, this sketch was specific to each participant by being based on either that participant's self- or peer-ratings. In fact, there was only one sketch. To convey a threat to the self-concept, the sketch characterized the target person as being well-intentioned and confident, but also as being self-absorbed and socially inept. For the measurement of compliance, a description of a food drive was devised, which was followed by the query of whether "you would be willing to help label fliers for one hour during one week in February."

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### Design and Procedure

The experimental design consisted of six conditions. Four of these conditions involved the threat to the self-concept described above. In two conditions, the threat was private in nature, whereas in the other two it was public. The threat was considered private when the negative personality feedback was ostensibly based on the participant's prior self-ratings on the BFI subscale. The threat was considered public when the feedback was ostensibly based on the peer-ratings. The compliance opportunity was private when the participants were led to believe that their

willingness to contribute to the food drive would not be acknowledged in the college newspaper; in contrast, a public opportunity promised such acknowledgement. In the fifth and the sixth condition, there was no threat, but the nature of the compliance opportunity varied.

The first stage of the experiment was conducted during a plenary class meeting. Participants completed the BFI subscale by rating each statement on a 7-point scale (1 = describes me very well; 7 = does not describe me at all). Inventories were returned in unsealed and named envelopes.

One week later, the second stage was conducted during laboratory meetings with 15 to 20 participants each. The teaching assistant (TA) arranged the students in small groups of five to six members and asked them to discuss course-related topics (e.g., reasons for studying psychology). The TA then left the room for about 10 minutes. When the TA returned, he or she distributed three BFI forms to each student, and instructed them to pass them on to the three classmates sitting to the right. Each student then rated the students from whom he or she received a form. The TA explained that these peer ratings were "first impressions" and that the preceding group discussion offered a sufficient basis for such ratings. Though students were led to expect later feedback based on these ratings, they were assured of the confidentiality of individual responses. Rating sheets were then collected in envelopes that identified the target person, but not the peers, by name.

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Another week later, the third stage was conducted also during laboratory meetings. Each student received the personality sketch, and read it while seated in a private cubicle. To help students connect the feedback information with the inventory from which it was ostensibly derived, they were asked to recall and list one or two of the inventory statements. Then, students placed the cover letters and the feedback sketches back into envelopes and returned them to the TAs. Later, while the laboratory meeting was still in session, a "stranger" knocked on the door and engaged in a scripted interaction with the TA. Students could not see the stranger but they could overhear the conversation. The stranger (a confederate of the experimenter), announced that she was working for a community service organization. She declared that she had obtained the professor's permission to recruit volunteers to do clerical work in their own homes for a forthcoming food drive. She handed a mission statement and sign-up forms to the TA, and then left. Near the end of the laboratory session, the TA read the mission statement and distributed the sign-up forms. The forms conveyed the nature of the compliance opportunity by stating that volunteering students would be acknowledged in the newspaper by name (public) or not (private). Students then wrote down whether they were willing to volunteer, and they returned the forms to the TA in a manila envelope. Thus, the TA remained unaware of the students' decisions. The procedures in the control conditions were identical to the ones described here except that there was no personality feedback.

## RESULTS

To examine whether the personality sketch was as negative as intended, a separate group of 19 students read and rated the sketch on a scale from 1 (very negative) to 9 (very positive). Nearly all (89%) of the ratings fell below the midpoint of the scale, and the average rating ( $M = 3.53$ ,  $SD = 1.09$ ) was significantly lower than that midpoint,  $t(18) = 3.68$ ,  $p < .01$ , two-tailed.

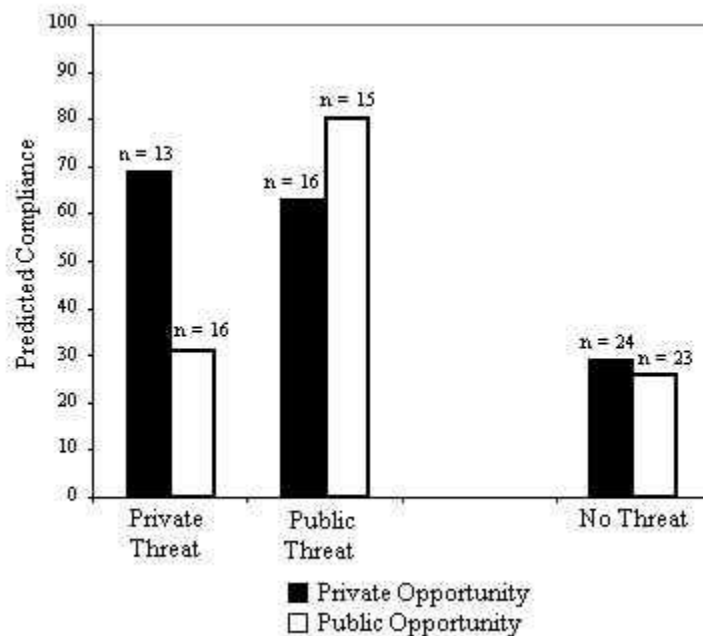
To examine whether the personality sketch was accepted as valid despite its negativity, the participants in the experiment proper were asked to make this judgment after the conclusion of the experiment. Most participants (78%) indicated that they had accepted the personality sketch, and this percentage did not vary across experimental conditions. This high rate of acceptance is consistent with the familiar "Barnum effect" (Forer, 1949). People tend to accept arbitrary, uninformative, and false personality feedback as long as they believe in the legitimacy of the measurement procedure (Krueger & Clement, 1996). Because such acceptance is attenuated when the feedback is undesirable rather than desirable (Furnham & Schofield, 1987), the present rates of acceptance are remarkably high.

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The main measure of interest was the percentage of compliance in each of the six conditions. Figure 2 displays these percentages along with the sample size of each cell.

The first noteworthy finding was that threats to the self had a main effect on compliance. There was twice as much compliance in the experimental conditions (60%) than in the control conditions (28%),  $\chi^2(1, N = 107) = 11.10$ ,  $p < .005$ . The arcsine-transformed effect size indicated that the effect was medium to large,  $h = .66$  (Cohen, 1988). As expected, the rate of compliance among control participants was not qualified by the nature of the opportunity (private vs. public),  $\chi^2(1, N = 47) = .06$ .



The two a priori hypotheses were tested by examining the pattern of compliance rates among the four experimental conditions of the design. The self-affirmation hypothesis predicted uniform effects of threat, and thus no main effects or interaction. Whereas there were indeed no main effects of threat ( $\chi^2(1, N = 60) = 3.21$ ) or opportunity ( $\chi^2(1, N = 60) = .71$ ), these two variables yielded a significant interaction between these two variables,  $\chi^2(1, N = 60) = 4.86$ ,  $p < .05$  (see Winer, 1971). To examine this interaction further, the effects of different compliance opportunities were compared separately for each type of threat. If compliance exclusively serves self-presentational motives, it should increase only when both the threat and the behavioral opportunity are public. Contrary to this hypothesis, a public threat did not lead to greater compliance when the opportunity was public rather than private,  $\chi^2(1, N = 31) = 1.15$ ,  $\eta^2 = .38$ . Instead, the nature of the opportunity mattered when the threat was private. There was less compliance when the opportunity was public rather than private,  $\chi^2(1, N = 29) = 4.14$ ,  $p < .05$ ,  $\eta^2 = .78$ .<sup>2</sup>

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These analyses suggest that the self-presentation hypothesis provides a poor fit with the obtained data. A regression analysis reinforced this conclusion. Recall that the self-presentation hypothesis predicted high compliance only when both the threat and the opportunity were public; otherwise, compliance should have been low. Reflecting this predicted pattern, a contrast weight of 3 was assigned to every participant in the public/public condition, and a weight of -1 to all others. Compliance (1 = yes, 0 = no) was then regressed on this predictor variable. Consistent with the  $\chi^2$ -analyses, the standardized slope coefficient was not significant ( $b = .09$ ),  $t < 1$ .

The failure of the self-presentation hypothesis to account for the interaction between type of threat and type of opportunity raised the question of what psychological model might be able to do this. The observed pattern suggests that the interaction between type of threat and type of opportunity resulted from the failure of the private threat to increase public compliance. Regression weights reflecting this pattern (-3 for the condition of private threat and public opportunity, and 1 for all others) predicted compliance ( $b = .29$ ),  $t = 2.40$ ,  $p = .02$ , and continued to do so when the pattern reflecting the self-presentation hypothesis was statistically controlled ( $b = .30$ ),  $t = 2.26$ ,  $p = .03$ .

## DISCUSSION

Self-concepts may be partially compartmentalized into private and public domains. To a degree, the self can be its own judge, evaluating behaviors, traits, accomplishments, and the like. Self-concepts are threatened when they fall short of ideal standards (Higgins, 1989). The negative personality feedback delivered a blow to the private self because it suggested discrepancies between the real and the ideal self.

On the other hand, much of the self is visible to other people. A person is judged by others with respect to social norms and expectations, and according to past experience with that person. As theories of symbolic interaction emphasize, people are sensitive to the way they are seen by others (Cooley, 1902). From this point of view, perceptions of self-worth are diminished when



appraisals by others are surprisingly negative. The negative feedback from peers in this experiment delivered a blow to that public aspect of the self.

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How do these two types of threat enhance compliance? As hypothesized earlier, people select opportunities for self repair that correspond to the source of the damage. Participants who were privately threatened may have promised compliance privately in an effort to close a gap between the real and the ideal self that only they could see (i.e., self-affirmation). In contrast, participants who were publicly threatened may have promised public compliance in an effort to project a well-intentioned and responsible public image (i.e., self-presentation). In other words, both private and public threats may enhance compliance, but they do so for different reasons.

But how do self-affirmation and self-presentation account for high private compliance after a public threat and low compliance after a private threat? The most likely explanation for this difference lies in an asymmetry between the two types of threat. A public threat, when received from well-acquainted others, comprises a private threat. To the extent that people care about how others see them, they may internalize negative feedback or at least accord it some credibility. In this experiment, a student who learned that three of her classmates made unfavorable trait attributions about her, would likely have wondered what she had done to elicit these views. The widespread acceptance of personality feedback, as noted above, suggests that participants were inclined to believe the judgments of their classmates. The public threat thus subsumed a private threat. Once the threat was private, a private opportunity to self-affirm was sufficient.

In contrast, a private threat need not comprise a public threat. Unless people indulge in unfettered projection, they cannot assume that their newly found insight into a negative aspect of their personality can be detected by others. A student who learned that his own responses to the BFI revealed negative traits could not necessarily assume that this information was public knowledge. Therefore, this student was more likely to affirm the self privately than publicly. Public self-affirmation would create the risk of revealing the experienced threat to others who may have been unaware of it.

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The measure of compliance in this study did not involve actual helping behavior but rather a promise to help in the future. We were wary of an actual behavioral measure because the context of this study made it difficult to control the spontaneous spread of information among the participants. Once participants left the lab, they were free to compare notes on the experience. Nevertheless, we called all participants who had agreed to help that same day. Nearly half of the participants who had been threatened by negative feedback (45%) were reached and none of them declined to help at this time. Only one control participant who had agreed to help in writing could be reached, and this was the only participant who refused to renew the earlier commitment.

Steele's (1975) original data support the view that intended compliance predicts behavioral compliance well. The two levels of compliance were highly correlated across conditions, and

they were similar in magnitude. This close correspondence between intended and actual compliance fits well with the standard finding that specific attitudes (such as behavioral intentions) predict corresponding behaviors (Kraus, 1995). The community service request specified a particular target (needy members of the Rhode Island community) and a particular corresponding action (volunteering to label fliers advertising the food collection event). Therefore, an initial agreement to volunteer should reflect a favorable attitude, which would be predictive of behavioral compliance.

## STUDY 2: ESTIMATING COMPLIANCE

Our interpretation of the results remained tentative because it arose after the results were obtained. Is it possible that the mixed-motive interpretation merely states the obvious? This possibility raises the specter of demand characteristics. However, between-subjects designs are the least transparent to the observant participant. Each participant either received a private threat, a public threat, or no threat at all, and each participant was offered either a private or a public opportunity for compliance. It is difficult to imagine how individual participants could have deduced the design of the study, the experimenters' hypotheses, and the likely behavior of others from the limited experience they had. More importantly, their responses did not correspond to either of the two a priori hypotheses.

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Nevertheless, it was important to examine just how well participants' intuitions might capture the obtained data pattern. Thus, two simulation studies were carried out. Simulation A comprised 56 of the participants who had been threatened in Study 1. Simulation B comprised the 19 students who had rated the desirability of the personality sketch, and who had not participated in Study 1. In other words, participants in Simulation A postdicted the responses of their peers who had experienced the same situation as they themselves had, whereas participants in Simulation B predicted the responses of others in a situation that they themselves had not experienced. All participants read a description of the procedures involving threats to the participants' self in Study 1. The description included the full text of the personality sketch and the text of the request for help with the community project. The participants' task was to estimate the percentage of participants in Study 1 that promised to help.

In both simulations, participants vastly underestimated the prevalence of compliance, and they did not reproduce the actual differences between conditions. In Simulation A, estimated compliance after a private threat was lower for the private ( $\underline{M} = 37.04\%$ ) than the public opportunity ( $\underline{M} = 47.36\%$ ), and the same was true when the threat was public ( $\underline{M}s = 44.93\%$  and  $63.20\%$ ). All three effects were significant (threat,  $\underline{F}(1, 55) = 45.65$ ,  $p < .001$ ; opportunity:  $\underline{F}(1, 55) = 70.53$ ,  $p < .001$ ; and the 2-way interaction:  $\underline{F}(1, 55) = 10.00$ ,  $p = .003$ ). In Simulation B, estimated compliance after a private threat was also lower for the private ( $\underline{M} = 37.89\%$ ) than the public opportunity ( $\underline{M} = 47.63\%$ ), and the same was true when the threat was public ( $\underline{M}s = 33.95\%$  and  $58.42\%$ ). There was only a significant effect for the type of opportunity,  $\underline{F}(1, 18) = 49.65$ ,  $p < .001$ . The combined evidence from these simulations suggests that expectations about compliance increase primarily with the possibility of public recognition for the compliant person.

The most important outcome of these simulations was that participants were unable to predict the actual findings. This outcome attests to the experimental realism of Study 1, and it casts doubt on the possibility that the findings may have been contaminated by demand characteristics. The underestimation of compliance is common in social-psychological research. Milgram (1974), for example, showed that under certain conditions, ordinary people are willing to shock another person to death when asked to do so. What made these findings compelling was the apparent failure of others (including well-trained experts in human behavior) to anticipate that this would be so. When simulations are successful, however, they complicate the interpretation of experimental results. Bem (1972), for example, reproduced attitude change effects in simulations of cognitive dissonance experiments, and concluded that the experience of dissonance is not necessary for attitude change to occur. In the present case, two simulations failed to reproduce the experimental findings, suggesting that the pattern of compliance elicited in Study 1 depended on the participants' actual experience rather than their theories about influence and compliance.

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## GENERAL DISCUSSION

Two studies explored and refined conditions under which threats to the self-image lead to enhanced compliance with the requests of others. The self-affirmation hypothesis found support in Study 1, but there was an important qualification. Compliance rates did not rise indiscriminately after threat. Privately threatened participants were not more compliant than controls when the opportunity was public. Possibly, participants preferred to 'contain' a private threat, rather than reveal it to others by engaging in costly public behavior. An unmitigated self-presentation hypothesis also failed to explain some of the findings. Specifically, self-presentation was an implausible source of compliance when both the threat and the opportunity were private. Similarly, the heightened compliance after a public threat and a private opportunity suggested self-affirmation rather than self-presentation. We suggested that people internalize threats emanating from peers about whose opinions they care. Once a public threat has penetrated the private domain, private compliance opportunities can serve to re-affirm the self.

In Study 2, participants failed to realize the power of social influence. They underestimated its effects on compliance, and furthermore, they failed to understand the pattern of these effects across conditions. These findings suggest that the procedures of Study 1 created an experimental realism that was not reproducible in participants' imaginations. If participants could have accurately predicted how they themselves would behave in each experimental condition, and if they projected their own expected behavior to others, the actual data pattern should have been reproduced (Krueger, 1998a). This overestimation of one's own resistance to social influence—and thus the underestimation of the effectiveness of influence techniques—may be one of the reasons why these techniques work. Failing to understand the power of these techniques, people are unprepared when they encounter them. Despite good reasons to the contrary (e.g., cost-benefit considerations), many people end up doing something that they'd rather not do (Cialdini, 1993).

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It is useful to consider the relevance of the present findings (Study 1) in light of other social-cognitive theories. Following self-affirmation theory, we assumed that negative feedback about certain personality characteristics is a threat to the overall self-concept. This assumption ought to be correct because most people's self-concepts are not only positive, but even positively biased (e.g., Krueger, 1998b). Still, it is possible that for some participants, the feedback was not threatening because it merely confirmed what they believed to be true about themselves. These participants would not have experienced the presumed discrepancy between their real and ideal self. Discrepancies between the real and the ideal self are one way to conceptualize self-esteem.<sup>3</sup> The greater the discrepancies are, the lower is self-esteem. People with high dispositional self-esteem should be particularly sensitive to unfavorable discrepancies that emerge on occasion (e.g., in the research lab). Indeed, Brown and Smart (1991) found that only people with high self-esteem became more helpful after a failure experience. Presumably, being helpful allowed them to restore (verify, affirm) their perceptions of self-worth. People with low self-esteem showed the opposite effect. They became less helpful after failure, presumably because they dwelt on the negative mood that was induced and because helping others had no instrumental value for them. Because the distribution of self-esteem scores is negatively skewed in student populations (Bagley, Bolitho, & Bertrand, 1997), most of our participants were probably high in self-esteem, which helps explain the overall increase in helping after negative feedback.

The design of Study 1 was also reminiscent of work on the effects of self-awareness and mood on compliance. Whereas it is likely that threats to the self increase self-awareness, it is doubtful that it was the experience of self-awareness per se that led to increases in prosocial behavior. When self-awareness is induced without threats, (e.g., by looking into a mirror or by listening to a tape-recording of one's own voice), the rate of compliant helping typically decreases (Gibbons & Wicklund, 1982). The same argument applies to the effects of negative mood (Berkowitz, 1987). Most likely, participants who confronted the negative personality feedback also experienced more negative mood than did controls. Negative moods tend to reduce a person's sensitivity to the needs of others, and thus to reduce prosocial behavior. This trend is reversed only when the behavior is not costly, the cause is worthy, and the person hopes that helping will improve his or her mood (Cialdini, Darby, & Vincent, 1973).

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Steele's (1975) finding that a negative self-relevant experience can increase prosocial behavior is thus quite unique. It was replicated in the present investigation, and its boundary conditions were explored (Study 1). Equally important, the textured effects of private and public threats and opportunities are not available to intuitive reflection (Study 2). They share this feature with many social influences on compliance, which may be the key to their success.

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## FOOTNOTES

1. One might wonder why people do not engage in this self-affirmative behavior anyway, even if there is no threat. In the context of a compliance situation, the answer is that the compliant behavior is not only self-affirming but also costly.

2. An alternative analysis compared compliance across types of threat and within each type of opportunity. As expected, a public threat elicited greater compliance than a private threat when the opportunity was public,  $\chi^2(1, N = 31) = 7.43, p < .01$ , but not when the opportunity was private,  $\chi^2(1, N = 29) = .14$ .

3. We thank an anonymous reviewer for this suggestion.

## AUTHORS' NOTES

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