

## Desire for Control and Conformity to a Perceived Norm

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The role of individual differences in the general desire for control in conformity situations was examined in three experiments. In Experiment 1, undergraduates low in desire for control were more likely to agree with a persuasive message when survey results were cited indicating public support for the advocated view. Subjects high in desire for control, however, were less persuaded by this message than when the survey information was not included. In Experiment 2, subjects gave humor ratings for cartoons in an Asch conformity paradigm. Subjects with low desire for control were more likely to agree with confederate ratings than were those with high desire for control. Experiment 3 results replicated this effect and ruled out the mere presence of others as an alternate interpretation of it. The findings from all three experiments are interpreted as a demonstration of the motivational component of the desire-for-control construct.

It has been widely assumed that, other things being equal, people generally prefer to be in control of the events in their lives. Several theorists (deCharms, 1968; Deci, 1975; White, 1959) have described a motivation to see oneself as masterful and competent that is satisfied by effectively controlling important aspects of one's environment. White (1959) has identified this motivation for control as effectance or competence motivation.

A series of recent investigations has also demonstrated that there are significant individual differences in the extent to which people generally prefer to have control over the events in their lives. Burger and Cooper (1979) introduced a scale to measure the concept *desire for control*. They proposed that relatively stable individual differences in a general motivation to be in control can be identified and that these differences can account for a significant percentage of variance in behaviors theoretically related to a motive to control events and thereby feel masterful and competent.

Research on desire for control has produced considerable validity for this construct. For example, as compared with people who score low on measures of desire for control, high scorers have been found more susceptible to learned helplessness and depression (Burger, 1984; Burger & Arkin, 1980), more likely to succumb to the illusion of control in a gambling-type situation (Burger, 1986; Burger & Smith, 1985), more likely to exhibit Type A speech and behavior patterns (Dembroski, MacDougall, & Musante, 1984; Musante, MacDougall, Dembroski, & Van Horn, 1983), more likely to succeed at achievement tasks (Burger, 1985), and more susceptible to the perception of crowding (Burger, Oakman, & Bullard, 1983).

In general, the effects of individual differences in desire for control can be placed into three categories. First, there are the perceptual differences that follow from differences in the per-

son's need to see himself or herself in control. As demonstrated in the research on desire for control and gambling, people with high desire for control are more likely than those with low desire for control to distort their perceptions so as to see themselves as having more control over the situation than objective judgment would merit. Second, there are motivational features of desire-for-control differences. Research tying desire for control with achievement, for example, demonstrates that people high in the desire for control are more motivated than those low in this trait to do something that will maintain a sense of personal control or that will overcome challenges to their perception of personal control. Finally, there is the affective component to this individual difference. Research on learned helplessness, for example, demonstrates that people high in the desire for control are more likely than their counterparts to have a strong affective response, in this case depressive affect, when faced with a perceived inability to control important events.

This series of studies was designed to explore another area in which individual differences in desire for control theoretically should play a role—namely, conformity behavior. Research and theory on conformity and, more generally, social influence has been a central part of social psychology for several decades (see Nemeth, 1986, and Tanford & Penrod, 1984, for recent statements on this research). The basic paradigm for a branch of this research is provided by Asch's (1951) classic research on conformity to group norms. In that research, subjects were asked to perform a visual discrimination task in the presence of several confederates posing as other subjects. The confederates, who always gave their responses first, selected an incorrect answer from among the response options in a line-matching task. The real subjects, who invariably made the correct response when answering without these confederates present, often reacted to the confederate responses by agreeing with the otherwise obviously incorrect judgments about the length of the line.

My hypothesis is that people who typically have a high desire to control the events in their lives are less likely to conform to the group norm in this type of situation than are those who are low in the desire for control. This follows from the description

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of the motivational components of this individual difference. Because people high in the desire for control prefer to see themselves in control of events, they are more likely than their counterparts to interpret the conformity norm information as a threat to their perceived freedom to choose their own judgments independently. This then generates a resistance to the perceived pressure, which causes the person high in desire for control to reduce intentionally the impact of this information when forming his or her judgment. In this way, the person high in desire for control is able to maintain the perception that he or she independently arrived at the final judgment. On the other hand, those low in desire for control are less likely to interpret norm information as a threat and are not as motivated to maintain a feeling of independence of judgment. In addition, those with *low desire for control may prefer to go along with the norm* and thereby avoid the problems encountered when taking a minority stand.

In the only relevant investigation on this point to date, Burger and Vartabedian (1980) found that subjects high in the desire for control, compared with those low in the trait, were less likely to be persuaded by a speech when they were initially in disagreement with the speaker's position. The researchers argued that these subjects were more resistant to persuasion because altering their attitudes after being presented with the speech would have caused them to feel less in control of what they believed than they preferred.

I used the Asch conformity paradigm in this set of studies in two ways. Subjects in the first experiment were given information as part of a persuasive message that indicated that public opinion was largely in agreement with the writer. Thus, instead of hearing confederates give responses to stimuli, data from a public opinion survey served to communicate the norm to which the subjects might conform. In the second and third experiments, a situation more similar to the Asch studies was used. Confederates gave their judgments to stimuli in the presence of a naive subject. However, instead of asking subjects to judge line length, subjects were asked to evaluate the level of humor in a series of cartoons. This was done for two reasons. First, the widespread coverage of Asch's work in high school and introductory college psychology courses created the possibility that many of the undergraduate subjects used in this research would have familiarity with the paradigm. Second, other researchers using the humor judgment task (e.g., Bem, 1975) found that these judgments were fairly susceptible to conformity pressures from confederates.

I predicted that in both of these situations, subjects high in desire for control would be less likely to agree with the majority or confederate opinions than would those low in desire for control. The findings from these studies thus have the potential to add to the understanding of how the motivational aspects of the desire-for-control concept relate to attitudes and behavior. In addition, some practical implications for considering the role of motivation for personal control in a social influence situation are suggested.

### Experiment 1

One way that information about normative points of view is transmitted today is through the use of public opinion surveys.

Those advocating a particular viewpoint often cite widespread public support for their position by providing data from these surveys. As in the Asch studies, the audience members for these appeals may allow the information about the judgments of others to influence their own attitudes on the particular issue. In Experiment 1, undergraduates were presented with an editorial that either contained this type of survey information or did not. I predicted that subjects would be more persuaded when led to believe that the vast majority of college students surveyed agreed with the writer. However, because people high in the desire for control are more likely than those low in the trait to resist the impression that they are being influenced by others, these subjects were expected to be persuaded by the survey data less than were the subjects low in desire for control.

### Method

*Subjects.* Seventy-one male and female undergraduates served as subjects in exchange for class credit. All had taken a large test battery approximately 2 weeks earlier.

*Procedure.* Subjects participated in a testing session in which they were administered several inventories. Included in this battery was an attitude survey, which included two items inquiring about college athletics policy. Students indicated on 11-point scales the extent to which they agreed that college athletes should have to meet the academic requirements of the university and the extent to which they agreed that athletes should be allowed to participate in sports without working toward graduation. In addition, subjects completed the Desirability of Control (DC) Scale (Burger & Cooper, 1979). The DC scale is a 20-item inventory designed to assess the extent to which people generally are motivated to control the events in their lives.

Some of the subjects who participated in the testing session also volunteered to participate in this investigation. Subjects were told they would be given an editorial supposedly written by an executive in the National College Athletic Association (NCAA). They were asked to read the editorial and respond to some questions about it. All subjects read the editorial, which discussed the problems of recruitment violations and cheating in college athletics. The writer then proposed a plan to solve these problems that included not forcing the student athletes to meet the academic standards required of other university students. The writer argued that the athletes should be seen as semiprofessionals hired by the school to do a job and therefore that they should not also be required to go to classes.

The editorial was identical for all subjects except for the last page. A randomly chosen half of the subjects received an editorial with information supposedly taken from a survey of college students. Subjects in this *conformity-information* condition read about the results of the survey that indicated strong support for the proposal. For example, they read that 86% agreed that there were serious problems with college athletics, 74% agreed that it was unfair for athletes to be required to go to class, 82% agreed that dropping the academic requirements for athletes was a good idea, and 73% agreed that they would like to see the plan enacted. The other half of the subjects, in the *no-conformity-information* condition, did not read about a survey.

Subjects then completed a short questionnaire concerning their reactions to the editorial. After a few filler items, subjects answered on 11-point scales four items designed to measure the extent of their agreement with the writer's position. They were asked the extent to which they agreed that a problem exists, the extent to which they thought the writer's plan was a good one, the extent to which they believed abolishing academic requirements for athletes would eliminate some of the problems, and the extent to which they would be willing to support the writer's proposal.

Table 1  
Mean Scores on the Posteditorial Attitude Measure

| Information type | Desire for control   |                      |
|------------------|----------------------|----------------------|
|                  | High                 | Low                  |
| Conformity       | 16.37 <sub>a</sub>   | 23.69 <sub>b</sub>   |
| No conformity    | 20.82 <sub>a,b</sub> | 18.47 <sub>a,b</sub> |

Note. The higher the score, the more subjects agreed with the speaker's position. Means not sharing subscripts differ significantly ( $p < .05$ ) by a Newman-Keuls test.

### Results and Discussion

Subjects were divided via a median split of their DC scores into high-DC and low-DC groups. In addition, the four items used to assess attitudes on the posteditorial questionnaire were summed to generate an overall score indicating the degree of agreement with the writer's position. The two relevant items on the preeditorial attitude survey also were summed to generate a measure of subjects' attitudes about the proposal before reading the editorial.

Subject posteditorial attitude scores were examined within a 2 (high or low DC)  $\times$  2 (conformity or no conformity information) analysis of variance (ANOVA). A significant interaction emerged from this effect,  $F(1, 67) = 7.48, p < .008$ . As shown in Table 1, whereas low-DC subjects were more persuaded by the conformity information, high-DC subjects were less persuaded when this information was included. An ANOVA on the preeditorial attitude score revealed no significant differences across conditions in terms of attitudes before reading the editorial (all  $ps > .43$ ). Finally, an analysis of covariance was conducted on the posteditorial attitude score, with the preeditorial score used as a covariate. The results of this analysis were very similar to the ANOVA results. Only a significant interaction was found,  $F(1, 67) = 6.73, p < .02$ . A subsequent Newman-Keuls test revealed that only the two conformity cells differed significantly ( $p < .05$ ).

The results of Experiment 1 thus support the hypotheses. Low-DC subjects were more likely to be persuaded by the editorial with the survey information than by the one without that information. This is similar to the conformity effect demonstrated in earlier Asch-type research. However, the high-DC subjects were more persuaded by the editorial that did not contain the survey information. This finding suggests that the high-DC subjects may have had a type of reactance effect to the conformity information. As described by J. W. Brehm (1966; S. S. Brehm & Brehm, 1981), people who perceive pressure to influence their judgments may interpret this as a challenge to their freedom of choice and react by moving in the direction opposite of that advocated by a speaker. This reactance effect serves to reassure the individual of his or her freedom to choose his or her own attitudes. Because high-DC subjects have a higher need to see themselves in control and have been found to react more strongly than low-DC people to perceived threats to their personal control, it is perhaps not surprising that they would show this reactance effect to the conformity information. This reac-

tance therefore further illustrates the motivational component of the desire-for-control concept.

### Experiment 2

The results of Experiment 1 demonstrate that high-DC individuals are less likely to conform to perceived norms than are low-DC people. Experiment 2 was designed as a conceptual replication of this finding. The experimental procedures in this experiment more closely resemble those used in the classic Asch research. High-DC and low-DC subjects heard confederates rate relatively unfunny cartoons as quite humorous. I predicted that low-DC subjects would alter their judgments of how funny these cartoons were more than high-DC subjects would when compared with high-DC and low-DC subjects who did not hear the confederate ratings.

### Method

**Pilot testing.** Pilot testing was conducted to identify 10 cartoons that college students generally would not find funny. This was done so that a sufficient range for increasing the perceived funniness of the cartoons with the conformity manipulation would be possible. Thirty undergraduate students from a psychology research methods course were used as subjects. They were asked to rate each of 30 cartoons on a scale of 1 to 100 for its level of funniness. The 30 cartoons had been selected from newspaper comic pages because the experimenter thought them to be fairly poor in humor. The subjects were not informed of the purpose of the ratings until they were completed. The 10 cartoons with the lowest mean ratings were selected for use in the experiment. These had a range on the scale of 17.59 to 31.05, and a mean of 25.33, with 1 as the least funny rating and 100 as the most funny.

**Subjects.** Forty male and female undergraduates served as subjects in exchange for class credit. All had taken the DC scale a few weeks earlier as part of a larger test package. No connection was made between the scale and the experiment at the time of recruitment.

**Procedure.** Subjects signed up to participate in an experimental session that had previously been randomly assigned as a conformity or nonconformity condition. Subjects who signed up for a conformity session did so with what appeared to be three other volunteers. On the subject's arrival at the experimental setting, two of the other subjects (actually confederates), a man and a woman, were already waiting for the experiment to begin. Shortly thereafter, a third confederate posing as a subject, a woman, arrived.

The experimenter then explained that the purpose of the study was to better understand humor, more specifically what kinds of cartoons people found funny. He explained that the subjects would be shown 10 slides, each containing a cartoon. The subjects were told that their job was to read the cartoon quickly and rate it on a scale from 1 to 100, with 100 being the highest, on how funny they thought the cartoon was. The experimenter instructed the subjects to give their answers out loud so that he could record them quickly. Then he explained that

I would like to have your immediate response to the cartoon, so please give your answer as soon after you have read the cartoon as possible. Because not everyone can speak at once, however, I would like to assign you to an order in which to respond.

The experimenter then showed the subjects four slips of paper and instructed each of them to draw one. In reality, each of the slips had a 4 on it. When asked what order they had drawn, the three confederates gave the numbers 1, 2, and 3, and the real subject said that he or she had

Table 2  
Experiment 2: Mean Humor Scores

| Humor scores   | Conformity          |                   | No conformity       |                   |
|----------------|---------------------|-------------------|---------------------|-------------------|
|                | High DC             | Low DC            | High DC             | Low DC            |
| Total          | 62.1 <sub>a,c</sub> | 73.2 <sub>a</sub> | 49.3 <sub>b,c</sub> | 43.7 <sub>b</sub> |
| First 5 trials | 54.8 <sub>a,b</sub> | 69.8 <sub>a</sub> | 45.1 <sub>a,b</sub> | 37.4 <sub>b</sub> |
| Last 5 trials  | 67.3                | 76.5              | 53.5                | 49.9              |

Note. DC = desirability of control. The higher the score, the funnier subjects thought the cartoons were. For the first two measures, means not sharing subscripts differ significantly ( $p < .05$ ) by a Newman-Keuls test.

drawn number 4. The experimenter explained that this would be the order in which they would report their responses.

The experimenter then presented the 10 slides. Confederates gave varied responses to the cartoons; these averaged 69.6 overall. After hearing the three confederates give their responses, the subject gave his or her rating. The experimenter pretended to record all of the responses but in fact recorded only the real subject's answers. Subjects then were probed for suspicion and debriefed. No subject indicated that he or she suspected the confederates were not real subjects.

Subjects in the *no-conformity* sessions participated in the experiment without confederates. The same task instructions were given, and the subject gave oral responses to each of the 10 slides.

### Results and Discussion

Subjects were divided via a median split of their DC scale scores into groups high and low in desire for control. Subject responses to each of the 10 cartoons were summed, then divided by 10 to obtain an average humor rating for use as the major dependent variable. This measure was examined within a 2 (high or low DC)  $\times$  2 (conformity or no conformity) ANOVA.

The mean scores for each of the four conditions are presented in Table 2. A significant main effect for the conformity variable was uncovered,  $F(1, 36) = 25.97, p < .0001$ , with subjects in the conformity condition reporting higher funniness scores than those in the *no-conformity* condition. In addition, a significant interaction was found,  $F(1, 36) = 4.11, p < .05$ . As shown in the table, a Newman-Keuls test revealed that whereas the two low-DC groups' scores differed significantly ( $p < .05$ ), indicating a conformity effect, the two high-DC groups' scores did not.

To understand better how this conformity effect developed during the experiment, humor scores were analyzed separately for the first five and the last five cartoons. As shown in Table 2, a similar pattern was found for each of these sets of scores. For the first five cartoons, a significant main effect for the conformity variable,  $F(1, 36) = 25.69, p < .0001$ , and a significant interaction,  $F(1, 36) = 5.67, p < .03$ , were uncovered. For the second five cartoons, a significant main effect for conformity was found,  $F(1, 36) = 19.72, p < .0001$ , but the interaction fell short of significance,  $F(1, 36) = 2.01, p < .16$ . Thus, although it weakened somewhat over the course of the 10 trials, the effect appeared to be present very early in the experiment and seemed to last throughout the experiment.

The findings, therefore, are entirely consistent with the predictions. Although all subjects demonstrated a tendency to conform to the norm, high-DC subjects were less likely to do this than were low-DC subjects. However, the design in this experiment allows for at least one alternate interpretation of these findings. Subjects in the conformity condition differed from those in the nonconformity condition not only in terms of the information they had about what others thought of the cartoons but also in the mere presence of these others. That is, it is possible that simply having other people about caused these subjects to react to the cartoons differently. For example, the presence of others may have increased the arousal of the conformity subjects, and perhaps the low-DC subjects were more affected by this than were the high-DC subjects. Past research on humor (Shurcliff, 1968) has found that higher levels of arousal cause people to find humorous situations funnier. This criticism applies to almost all of the research with the Asch paradigm, which also confounds the conformity manipulation with the presence of others. Experiment 3 was conducted to rule out this explanation.

### Experiment 3

One way to test for the alternate explanation just described is to add to the design in Experiment 2 a condition in which subjects hear confederates report that the cartoons are considerably less funny than average. If the control-motivation interpretation of Experiment 2 is correct, then subjects in this experiment who hear these confederates rate the cartoons as unfunny should also rate the cartoons as not very funny. Furthermore, low-DC subjects, who are more prone to conformity, should be more likely than high-DC subjects to give these low ratings. Such a finding would rule out the possibility that subjects in the conformity condition in Experiment 2 rated the cartoons as funnier because of the mere presence of the confederates.

### Method

**Subjects.** Fifty-five male and female undergraduates served as subjects in exchange for class credit. All had taken the DC scale several weeks earlier as part of a larger test package.

**Procedure.** The procedure was similar to that used in Experiment 2. However, instead of the two conditions used in that experiment, subjects were randomly assigned to one of three conditions. The *funny* condition was identical to the conformity condition in Experiment 2, and the *no-conformity* condition was identical to the no-conformity condition in that experiment. Subjects in the *not-funny* condition received the same treatment as did subjects in the funny condition, except that the three confederates gave different ratings for the cartoons. The confederates in this condition gave responses that averaged 19.4 on the 100-point scale. Their responses varied within each confederate's responses and between confederates in a manner that was similar to the variances in the funny condition.

### Results and Discussion

The average response that subjects gave for each of the 10 cartoons was examined within a 2 (high-DC or low-DC half)  $\times$  3 (funny/no-conformity/not-funny condition) ANOVA. A significant main effect for condition was found,  $F(2, 49) =$

Table 3  
Experiment 3: Mean Humor Scores

| Condition     | High DC             | Low DC              |
|---------------|---------------------|---------------------|
| Funny         | 64.8 <sub>a</sub>   | 70.8 <sub>a</sub>   |
| No conformity | 49.0 <sub>a,b</sub> | 46.3 <sub>a,b</sub> |
| Not funny     | 27.8 <sub>b</sub>   | 20.5 <sub>b</sub>   |

Note. DC = desirability of control. The higher the score, the funnier subjects thought the cartoons were. Means not sharing subscripts differ significantly ( $p < .05$ ) by a Newman-Keuls test.

143.78,  $p < .001$ . As shown in Table 3, subjects in the funny condition rated the cartoons as more humorous and subjects in the not-funny condition found the cartoons less humorous than did subjects in the no-conformity condition.

In addition, there was a significant interaction between DC half and condition,  $F(2, 49) = 3.54, p < .04$ . As predicted, low-DC subjects found the cartoons funnier in the funny condition than did high-DC subjects. However, in the not-funny condition, the low-DC subjects found the cartoons less funny than did the high-DC subjects.

The findings thus replicate the results of the earlier investigation and help rule out the alternate explanation made possible by the confound between conformity information and the mere presence of others. The low-DC subjects were found more likely to conform to the norm given by the confederates when those confederates rated the cartoons as funny and when they rated the cartoons as not funny. Conformity information, rather than any effects due to the mere presence of the confederates, appears responsible for the findings.

### General Discussion

The results from the three studies provide consistent information about the relation between desire for control and conformity to a perceived norm. As predicted from the description of people high in desire for control, those scoring high on the DC scale were less likely to respond to information about the judgments of others by agreeing with those judgments than were people low in desire for control. This pattern is consistent with the description of people high in desire for control as those who wish to maintain the perception that they are in control of their opinions and as motivated to take actions that will satisfy the need to feel in control. The motivational component of the desire-for-control concept was most noticeably demonstrated in Experiment 1, in which subjects with high desire for control were less persuaded by the message containing the conformity information than they were by the message without this information. This pattern suggests a reactance effect in which the high desire for control subjects were motivated to assert their freedom of choice and demonstrate their independence.

People low in the desire for control may conform to a perceived norm more than their counterparts because they lack this strong motivation to feel independent. However, it also is possible that these people are more motivated than those high in desire for control to perceive their judgments as consistent

with the norm. People low in desire for control may be motivated to avoid the anxiety and other difficulties that accompany the perception of personal control. That is, the perception of personal control can carry with it an increase in feelings of responsibility for outcomes and thus increases in anxiety (Burger, Brown, & Allen, 1983). For people low in desire for control, the advantages that come from feeling in control may be outweighed by the disadvantages of feeling responsible. In the case of conforming to a perceived norm, it might be argued that those low in desire for control find a certain amount of solace in feeling like part of the crowd instead of like a trend buster who may have to pay a social and psychological price for his or her independence.

One question that needs to be addressed in this type of research is to what the subjects were conforming. This is particularly difficult to answer for the last two experiments. Did the subjects actually believe the cartoons were as funny as they reported, or did they merely adjust their interpretation of what the various points on the 100-point scale meant? That is, using the confederates' ratings as a guide, the subjects may have decided, for example, that a relatively unfunny cartoon should be rated with a 60 instead of a 40, which they might have used if they had been rating the cartoons alone. In this case, the subject changed not his or her perceived funniness of the cartoon but rather the value of the various points on the scale. One response to this argument is that the difference between an average of 20 and an average of 70, such as the subjects with low desire for control demonstrated in Experiment 3, is unlikely to be the result of simply changing the values of the rating scale. However, even if the differences partially reflect this adjustment in the use of the scale values, the findings still can be interpreted as consistent with the hypotheses. That is, one must at least conclude that subjects with high desire for control were less likely than their counterparts to allow the standards they use for their judgments to be influenced by the way other people used those standards. The reasons for this difference also follow from the desire-for-control analysis provided earlier.

A related question concerns the possibility that the subjects did not adjust their judgments at all but rather simply wished to avoid the potential social sanctions that may come from giving responses very different from those of the others. Arguing against this possibility is the finding that a similar pattern of results was uncovered in Experiment 1, in which there was no possibility for subjects to experience feedback from other students for their answers. In addition, past research with the Asch paradigm (e.g., Allen & Levine, 1968) has demonstrated that although this concern for others' reactions may play a part in conformity behavior, there also remains a tendency to conform that is not attributed to this.

Finally, in addition to providing greater insight into the desire-for-control construct and extending the applicability of that trait to the domain of social influence, the findings hint at some practical applications when dealing with social influence situations. A motivation to retain a sense of personal control may be operating in such situations, at least for some members of the audience. Use of norm information, such as survey results, might be modified to lessen the perception that agreeing with the opinion means becoming a nonindependent follower of pub-

lic trends. A persuasive appeal that, for example, could present this information but also emphasize the audience member's freedom to choose and remain independent might prove an effective strategy.

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