

Self-perception, dissonance, and premanipulation attitudes*

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A controversy has arisen between cognitive dissonance researchers and self-perception theory advocates regarding the relevance of premanipulation attitudes to postmanipulation attitudes in dissonance experiments. The present study attempted to test the relevance of premanipulation attitudes to postmanipulation attitudes by preselecting Ss for a forced-compliance experiment on the basis of the extremity of their premanipulation attitudes concerning a particular topic. It was found that Ss with extreme premanipulation attitudes differed significantly in their postmanipulation attitudes from Ss with neutral premanipulation attitudes. In addition, the extreme premanipulation attitude Ss demonstrated significantly greater attitude change than did the neutral premanipulation attitude Ss. After ruling out a regression effect explanation of the greater change in the extreme premanipulation attitude Ss, the results were interpreted as consistent with cognitive dissonance theory predictions and as nonsupportive of self-perception theory assumptions that premanipulation attitudes are not relevant to postmanipulation attitudes.

The relevance of premanipulation attitudes to postmanipulation attitudes has become a central issue in the controversy between advocates (Bem & McConnell, 1970) and critics (Jones, Linder, Kiesler, Zanna, & Brehm, 1968) of self-perception theory (Bem, 1966, 1967a, b, c, 1968a) as an alternative explanation of cognitive dissonance phenomena (Festinger, 1957, 1964). Bem (1965), operating within a Skinnerian frame of analysis (Skinner, 1957) maintains that the cognitive dissonance results can be explained without the benefits of such hypothetical internal constructs as cognitive dissonance.

According to Bem's analysis, a S participating in a cognitive dissonance experiment engages in a process of self-perception. This process is not fundamentally different from the process of other person perception. Bem claims that judgments about others and judgments about oneself are both made on the basis of observable behavior and the conditions which appear to control that behavior. A behavior occurring under one set of conditions will be judged credible, whereas under another set of conditions this same behavior will be judged noncredible. Thus, for example, the S in a typical forced-compliance type of dissonance experiment who is offered money to write a counterattitudinal essay will be judged by Os and by himself alike to be noncredible in this particular

situation. The S who writes the essay without offer of money is judged credible by Os and by himself. In the first case, both Os and the S himself decide that the essay was written in order to obtain the money and not because the essay really represents the writer's point of view. In the second case, Os and the S decide that the essay really does represent the S's point of view, since he had no other apparent justification for writing such an essay. This process of self-perception is offered as an alternative explanation to the results of such dissonance experiments wherein the Ss not offered pay as an inducement produce attitude ratings more closely representing the position taken in the essay than do the Ss who were offered payment for writing the essay.

Bem (1964, 1965) has attempted to demonstrate the adequacy of this alternative explanation of cognitive dissonance results with the "interpersonal simulation" experiment. This technique makes use of observer Ss who are given descriptions of a cognitive dissonance experiment and are then asked to estimate the postmanipulation attitude rating of the S involved in the description. The observer Ss typically are able to replicate the results of the original dissonance experiment, i.e., observer Ss who received descriptions in which no pay was offered estimated that the participating S's postmanipulation attitude was closer to the essay position than did the observer Ss who were given descriptions in which payment was offered.

Bem's critics (Mills, 1967; Jones

et al, 1968) argue that the success of the interpersonal simulations are due to an artifact of Bem's experimental procedure. These critics argue that the observer Ss failed to receive an important bit of information which was available to the original participating Ss, i.e., the initial or premanipulation attitudes of the original participating Ss. Jones et al (1968) further argue that this lack of information concerning premanipulation attitudes allowed the observer Ss to use a "self-selection" hypothesis, in which the observer S hypothesizes that, since the no-pay S agreed to write the essay for the unpopular position, he must have an atypical attitude and thus volunteered to write an essay which represented his true attitude. These researchers (Jones et al, 1968) performed a series of interpersonal simulations creating conditions which would inform the observer Ss about the participating S's premanipulation attitudes. The observer Ss failed to replicate the dissonance results in those conditions in which they were aware of the no-pay S's premanipulation attitudes. Thus, they argue that the results support a self-selection hypothesis explanation rather than a self-perception theory explanation.

Bem (1968b) replied to his critics by arguing that the "self-selection" hypothesis is not really different from the process involved in self-perception. He suggests that the no-pay S participating in a cognitive dissonance experiment asks himself, "What must my attitude be if I'm willing to write such an essay." According to Bem, this S uses the "self-selection" hypothesis by concluding that he must have an attitude similar to that advocated in the essay and that is why he volunteered to write it.

In his reply to his critics, Bem (1968b) clearly stated his position concerning the issue central to the present paper, i.e., the nonrelevance of premanipulation attitudes to postmanipulation attitudes. He argues that the research of Jones et al (1968) lends support to his position that knowledge of premanipulation attitudes is not relevant to the results of dissonance experiments rather than, as Jones et al (1968) suggest, disconfirms his theory. Liking the interpersonal simulation experiment to a computer simulation in which valid output statements depend on "plugging in" the correct inputs, Bem suggests that the failure of Jones et al (1968) to obtain the "dissonance effect" output statements from their observer Ss demonstrates that they were "plugging in" input that was inappropriate, namely, information concerning premanipulation attitudes.

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Thus, Bem concludes that the Jones et al (1968) experiments provide support for his position that premanipulation attitudes are not relevant to postmanipulation attitudes in a forced-compliance cognitive dissonance experiment.

Woodyard (1968, 1969a, b) attempted to test Bem's theory by performing several interpersonal simulations which adhered strictly to Bem's assumption concerning premanipulation attitudes. However, these simulations were based on experiments relatively more complex than those on which previous interpersonal simulations had been based. Although the observer Ss were given no information regarding premanipulation attitudes, they failed to replicate the results of the original experiments.

Bem acknowledged that Woodyard's results cast some doubt on the generality of his theory. He went on to criticize the value of the interpersonal simulation technique as a test of his theory, since it is left to the E to decide which information is to be included in the description of the dissonance experiment (personal communication, Bem, 1968).

In an experiment designed to demonstrate the nonsalience of premanipulation attitudes to postmanipulation attitudes in a more direct manner, Bem & McConnell (1970) performed a typical forced-compliance dissonance experiment of the essay writing variety. In addition to the traditional forced-compliance postmanipulation attitude measures, another group of Ss were asked to recall their premanipulation attitudes after having been involved in the essay task. It was reasoned that if premanipulation attitudes are salient to postmanipulation attitudes, the Ss should be able to recall these attitudes after having engaged in counterattitudinal essay writing behavior.

Bem and McConnell report that, not only did the Ss fail to accurately recall their premanipulation attitudes, but they actually estimated their premanipulation attitude to be similar to the obtained postmanipulation attitude ratings. These authors conclude that these results are consistent with self-perception theory, although not inconsistent with cognitive dissonance theory, and suggest that a crucial experiment that discriminates between these two theories is unlikely to be performed.

It is the purpose of the present experiment to provide an even more direct test of the relevance of premanipulation attitudes to postmanipulation attitudes in

forced-compliance experiments than that of Bem & McConnell (1970), and, in the process, to put the two theories, self-perception theory and cognitive dissonance theory, in contention with one another.

This study is rather simple in its conception. It merely suggests that if Bem is correct in his assumption that premanipulation attitudes are not relevant to postmanipulation attitudes in a forced-compliance experiment, then if Ss are divided on the basis of their measured premanipulation attitudes into an extreme attitude (EA) group and a neutral attitude (NA) group and then agree to write an essay representing the position opposite that of the EA group, as it is typically done in the no-pay condition of forced-compliance experiments, there should be no significant difference in the postmanipulation attitude ratings of the two groups. If a significant difference between the postmanipulation attitude ratings of the two groups is obtained, the results will support the assumption that premanipulation attitudes are relevant to predicting the outcome of forced-compliance experiments. Furthermore, if the EA group's final attitude ratings are significantly different from its premanipulation attitudes but the NA group's final ratings are not significantly different from its premanipulation attitudes, then the results will be consistent with cognitive dissonance theory. This is based on the cognitive dissonance theory notion that the greater the dissonance experienced, the greater the dissonance-reduction behavior. Thus, it is reasoned that a person who engages in counterattitudinal behavior when his attitude position is extreme will experience more dissonance than a person who engages in the same behavior when his attitude position is neutral. It is assumed then that if cognitive dissonance theory is correct, the EA group will engage in more dissonance-reduction behavior and thus their final attitude should change significantly more than that of the NA group.

METHOD

The E obtained attitude ratings on a 9-point scale (endpoints labeled strongly agree and strongly disagree) concerning a variety of topics from undergraduate students enrolled in abnormal psychology at the University of Windsor during a class period. From these data the issue concerning abolition of student fees was selected, because there was a sizable number of students who were extreme in their position of favoring abolition of student fees and there was an equally sizable number of students who were neutral in their position on this topic.

Prior to the next experimental session, potential Ss were divided into an extreme attitude and a neutral attitude group on the basis of their premanipulation attitudes. Ss with scores falling within the 0-3 range were assigned to the EA group and Ss with scores falling within the 3-6 range were assigned to the NA group. The selected Ss were then contacted by phone, and an appointment to participate in a psychology experiment was arranged in a random order. For the EA group, the most extreme Ss (0) were contacted first, and for the NA group, the most neutral Ss (4) were contacted first. This procedure was continued until there were 20 Ss in each of the four groups for a total of 80 Ss. There were 22 refusals, 7 EAs, 4 NAs, 5 EA controls, and 6 NA controls. The postmanipulation attitude ratings were scheduled for 1 week after the premanipulation ratings were obtained.

When the experimental S arrived at the designated room, he was met by the E. The E had no knowledge of the S's premanipulation attitude. The E explained that the psychology department wanted to obtain arguments on all sides of some issues of current interest and it was hoped that he would cooperate by writing such an essay. The S was then handed a sheet of paper on which he could write the essay. At the top of this sheet were the following instructions: "Write the best, most persuasive essay on the following topic: 'University fees should not be abolished.' Regardless of your personal opinion, you are to take the position that fees should not be abolished, and you are to argue that position to the best of your ability. Use only this paper for your essay, but you may use the other side if necessary. Whether you write this essay or not is entirely up to you. If you do not wish to participate you are free to leave. However, it would be greatly appreciated if you would aid us in the completion of this project. Thank you for your cooperation."

All Ss agreed to write the essay. After the S had written the essay, the E gave him a 9-point attitude scale identical to the one on which he made his initial ratings and he was asked to rate his present attitude toward student tuition fees. The attitude statement to be rated was as before: "I think university education should be free to all who have the ability to do the work." After the S completed the rating scale, the E gave the S another sheet of paper with the following instructions: "On the following scale place an X in the square which best indicates how persuasive you feel your essay was." A 5-point scale with extremes labeled "extremely

persuasive" and "not at all persuasive" followed. Finally, space was provided for the Ss to comment on the experiment and to guess the purpose of the experiment.

The control Ss rated the postmanipulation attitude scale 1 week after the premanipulation attitude rating without any essay writing assignment between the rating sessions.

RESULTS

A summary of the results is presented in Table 1. A significant difference was obtained ($t = 2.59$, $p < .01$) between the mean postmanipulation ratings of the EA Ss ($\bar{X} = 2.95$) and the NA Ss ($\bar{X} = 4.95$). This supports the assumption of Bem's critics that premanipulation attitudes are relevant to the outcome of forced-compliance experiments. The mean attitude change (obtained by subtracting premanipulation ratings from postmanipulation ratings) of the EA Ss ($\bar{X} = 1.70$) was significantly greater ($t = 2.43$, $p < .01$) than the mean attitude change of the NA Ss ($\bar{X} = -.30$). These findings, coupled with the previous findings of significant differences in final attitudes between the two groups, are consistent with the prediction based on cognitive dissonance theory, while at the same time clearly supportive of the assumption that premanipulation attitudes are relevant to postmanipulation attitudes and, thus, counter to Bem's theoretical assumptions. Further analysis indicates that there was a significant difference ($t = 3.15$, $p < .005$) between the mean premanipulation and postmanipulation ratings of the EA Ss ($\bar{X}_1 = 1.25$ vs $\bar{X}_2 = 2.95$), while there was not a significant difference between the mean premanipulation and postmanipulation ratings of the NA Ss ($\bar{X}_1 = 5.25$ vs $\bar{X}_2 = 4.95$). These findings indicate that a "dissonance effect" occurred only with the EA Ss, which is again congruent with the cognitive dissonance predictions in this study.

There was no significant difference found between the groups in terms of their ratings on the persuasiveness of their essays, so differences in the perceived persuasiveness of the essays cannot account for the differences obtained in this study. To rule out the possibility that the change in the EA Ss' ratings was due to a regression effect, the mean attitude change ($\bar{X} = .40$) of the EA control Ss was compared to the mean attitude change ($\bar{X} = 1.70$) of the EA Ss, and a significant difference was obtained ($t = 2.13$, $p < .025$). There was no significant difference between the mean change scores of the NA control group ($\bar{X} = -.68$) and the NA group

Table 1
Mean Attitude Ratings and Mean Change Scores for the
Experimental and Control Conditions

	Premanipulation	Postmanipulation	Change
Extreme Attitude Control Ss	1.80	2.20	.40
Extreme Attitude Experimental Ss	1.25	2.95	1.70
Moderate Attitude Control Ss	5.06	4.38	-.68
Moderate Attitude Experimental Ss	5.25	4.95	-.30

($\bar{X} = -.30$). No significant difference was found between the mean premanipulation ratings of the EA control Ss ($\bar{X} = 1.80$) and the EA Ss ($\bar{X} = 1.25$). Moreover, the mean premanipulation ratings of the NA control Ss ($\bar{X} = 5.06$) and the NA Ss ($\bar{X} = 5.25$) was not significantly different. These results indicate that the change in the EA Ss' ratings probably cannot be attributed solely to a regression effect. The postexperimental questionnaire indicated that none of the Ss had knowledge of the purpose of the experiment.

DISCUSSION

The results of this study are clearly in support of the assumption that premanipulation attitudes do influence postmanipulation attitudes in forced-compliance experiments and thus are counter to Bem's assumption. The results of this study also are consistent with the cognitive dissonance theory predictions concerning the magnitude of dissonance produced in persons with extreme attitudes as opposed to persons with neutral attitudes when they engage in counterattitudinal behavior.

The results of the present study also lend further support to the post hoc analysis in an experiment by Harvey & Mills (1971, pp. 208-209), in which they found that "the effect of opportunity to revoke the discrepant action was greater when the subject's initial attitudes were extreme than when they were moderate..." These results were interpreted by the authors to be consistent with cognitive dissonance theory and nonsupportive of self-perception theory.

Chris & Woodward (1972), in a slightly modified replication of the Bem & McConnell (1970) experiment, also obtained results consistent with the results of the present study. It was found that EA Ss for whom the attitude was important were able to accurately recall their premanipulation attitudes after the completion of a forced-compliance experiment.

The evidence consistent with the dissonance predictions may be at least partially due to an experimental artifact, namely a ceiling effect. While the NA Ss could shift in their final ratings in either direction, since their

initial attitudes were around the center of the scale, the EA Ss could only stay in place or shift in the direction of the position advocated in the essay, since they had very little room on the scale to move in an even more extreme position.

An attempt was made to rule out a regression effect as an alternative explanation of the greater attitude change in those experimental Ss with extreme premanipulation attitudes. It should be clear, however, that even if a regression effect and a ceiling effect could not be ruled out completely, this does not alter the implications of these results for self-perception theory, since such effects could only serve to reduce the difference between the postmanipulation attitudes of the EA Ss and the NA Ss. Thus, while the results are consistent with the cognitive dissonance theory predictions, there may be alternative explanations. However, it is clear from the results of this and other recent experiments that Bem's theory cannot be counted among the alternative explanations without some modification of his theoretical assumptions concerning premanipulation attitudes.

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NOTES & NEWS

Judson S. Brown has returned to the Department of Medical Psychology at the *University of Oregon Medical School* after spending the past few years at the University of Iowa.

David Burrows is now Assistant Professor of Psychology at *State University College at Brockport, New York*.

Robert L. Colegate, who has just finished his PhD at the University of Illinois, is now Assistant Professor of Psychology at *Norfolk State College, Virginia*.

Chizuko Izawa, who has been at SUNY, Buffalo, for the past several years, is now Associate Professor at *Tulane University, New Orleans*.

Donald J. Levis is now Professor and Director of the Clinical Psychology Program at *SUNY, Binghamton*. He formerly was associated with the Department of Psychology at the University of Iowa.

Robert W. Newby has just received his PhD from the University of Texas at Austin and has taken a position as Assistant Professor of Psychology at the *University of the Americas* in Puebla, Mexico. Puebla is located some 86 miles southeast of Mexico City.

George Paxinos has just received his PhD from McGill University and is a postdoctoral fellow in Dr. John Flynn's laboratory at the *Yale University School of Medicine*.

Gregory L. Peters has received his PhD in Experimental Psychology and is at the *Air Flight Dynamics Laboratory* at *Wright-Patterson Air Force Base, Ohio*.

Gordon R. Redding, who has just received his PhD from the University of Wisconsin, Madison, has accepted a position as Assistant Professor of Psychology at *Illinois State University, Normal*.