

## INTERACTIVE EFFECTS OF COMMITMENT TO FUTURE INTERACTION AND THREAT TO ATTITUDINAL FREEDOM<sup>1</sup>

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The present research investigated the attitudinal effect of two variables, commitment to future interaction and threat to attitudinal freedom. Threat to attitudinal freedom was manipulated via a note from the subject's partner which either arbitrarily assigned the subject an attitudinal position (high threat) or solicited the subject's attitudinal preference (low threat). With no expectation of future interaction with the partner (low commitment), we expected greater negative, or "boomerang," attitude change under high threat than under low threat. However, with expectation of future interaction with the partner (high commitment), we expected an attenuation of this effect, presumably because commitment to future interaction with the partner would forestall restoration of attitudinal freedom via negative attitude change. The significant Commitment  $\times$  Threat interaction on the attitude change measure confirmed the prediction. In addition, only under high commitment, subjects covertly derogated the partner, in line with previous results.

Theoretically, reactance is aroused when an individual's freedom to adopt or change an attitudinal position is threatened with elimination (Brehm, 1968). The theory assumes that an individual is free to select his own position, and that this freedom may be threatened by attempts to influence that position (Brehm, 1968). Reactance arousal motivates the individual to restore the threatened freedom either by rejecting the influence attempt (Brehm & Sensenig, 1966) or by rejecting the position advocated by the influence attempt, leading to negative, or "boomerang," attitude change (Sensenig & Brehm, 1968). The greater the perceived threat to attitudinal freedom, the greater the reactance aroused and the greater the attitude change away from the position advocated by the influence attempt.

Sensenig and Brehm (1968) manipulated reactance by varying the number of implied threats to attitudinal freedom. Under high threat (high reactance), subjects received a note ostensibly from their partner which arbitrarily assigned the subject an attitudinal position to uphold. As part of the manipulation, these subjects also expected four additional notes which by implication would restrict attitudinal freedom on four additional issues as well. Low-threat (low reactance) subjects received the same note, but did not expect further notes from their partner. Subjects in the control condition received a note which solicited their preference about the attitude topic. The results supported the prediction, in that high-threat subjects changed more negatively than low-threat subjects on the issue, while control subjects changed positively.

Sensenig and Brehm (1968) suggested that the note not only provided threat to attitudinal freedom, but also informed the subject about the position ostensibly favored by the partner. If so, one might suggest that negative attitude change represented both rejection of the influence attempt and rejection of the position ostensibly preferred by the subject's partner. In this light, boomerang, or negative, attitude change by the subject could be viewed as an increase in the discrepancy between the subject's own position on the topic and the position presumably held by his partner.

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Increasing or maintaining discrepancy by rejecting another's position, however, may not be likely in all cases. For example, as part of a larger design, Kiesler and Corbin (1965) led subjects to believe that their attitude was discrepant with that of an unattractive group to which they belonged. Half of the subjects expected to interact with the group on future occasions (high commitment), and half did not (low commitment). Greater attitude change toward the group's position was obtained under high than under low commitment to continue with the group. Kiesler (1968) suggested that commitment to future interaction makes certain alternative reactions to the opinion discrepancy, such as rejection of the group's position, more difficult and hence less probable. For example, maintaining the opinion discrepancy or rejecting the other's position might imply future disagreement or unpleasant interaction with the other (cf. Kiesler, Kiesler, & Pallak, 1967). Thus, under high commitment, change toward the position held by the other would become a more probable resolution of the discrepancy than rejection of the other's position. Under low commitment, however, rejection of the other's position would be more probable in response to the discrepancy than attitude change toward the other's position.

The effect of commitment to future interaction reported by Kiesler and Corbin (1965) suggests that negative, or boomerang, attitude change, reported by Sensenig and Brehm (1968), might not be obtained if subjects were committed to future interaction with their partner. Presumably, if one reduces opinion discrepancy by accepting rather than rejecting the position held by the other (Kiesler & Corbin, 1965), it seems unlikely that one would introduce discrepancy by rejecting the partner's position, if future interaction with the partner were expected. On the other hand, without expected future interaction, negative attitude change would probably result from the attempted restriction of attitudinal freedom, as Sensenig and Brehm reported. Thus, we suggest that commitment to future interaction makes salient potential unpleasant consequences of restoring attitudinal freedom via negative attitude change, and hence, would reduce negative change in response to the threat to attitudinal freedom.

The present research was designed to investigate the effects of both commitment and reactance on attitude change in a social situation. Commitment was manipulated by leading pairs of subjects to expect that they would interact either with their present partner (high commitment) or with a different partner (low commitment) for three additional sessions. The remaining procedure closely followed that of Sensenig and Brehm (1968). All subjects expected to write five essays on current issues and to receive a note from their partner before each essay concerning the position to be advocated in the essay. Reactance was varied by the degree of threat to attitudinal freedom expressed by the note. In the high-threat condition, the note arbitrarily assigned the subject to a position (consistent with the subject's initial belief), while under low threat, the note actually solicited the subject's preference. Under low commitment, we expected a replication of Sensenig and Brehm, with greater negative attitude change under high than low threat. Under high commitment, however, we expected no difference between the high- and low-threat conditions.<sup>3</sup>

## METHOD

### *Subjects*

A total of 64 male and female introductory psychology students participated in the experiment in same-sex pairs for research credit. All subjects were randomly assigned to conditions. In all cases male experimenters and pretesters conducted the experiment for male subjects, while female experimenters and pretesters conducted the experiment for female subjects. A confederate was substituted if 1 subject failed to appear. One subject misread the dependent measures, 1 subject refused to return for future sessions, and both were excluded from the analysis, leaving a final experimental sample of 62 subjects. A total of 3 subjects indicated suspicion of the procedure; however, the analyses were unchanged by deleting these subjects, and their data are included below. All experimenters were observed by one or the other of the authors while running each subject. To minimize bias, each experimenter ran all con-

<sup>3</sup> Of course, commitment to future interaction might increase reactance motivation, and negative attitude change, if subjects perceived that their partner would have an opportunity to threaten their attitudinal freedom in the future sessions. Such an effect would be fairly obvious, and the present research attempted to minimize it. All subjects were explicitly told that they would write essays only in "the present session" and that they would be "doing some quite different things" in the future sessions (below).

ditions of the experiment in random order, was blind as to threat condition, remained naive concerning the results during data collection, and did not score the data.

### Procedure

*Pretest.* Upon arrival the pretester (Experimenter 1) asked all subjects to fill out a bogus 12-item university survey. Embedded in the pretest was a 91-point scale assessing the subjects' attitude toward "lowering the voting age from 21 to 18" and a similar measure of the subjects' confidence of their attitude on the topic. Subjects who were both initially favorable and unfavorable toward the issue were employed in the experiment. A priori (cf. Sensenig & Brehm, 1968) subjects with pretest scores below 5 or above 85 on the issue were excluded, due to the restricted range of possible change for these subjects ( $n = 23$ ). The pretest means for experimental subjects were not differentially extreme, and the mean pretest score on the issue was 61.90. In all cases the note urged the subjects to write their essay consistent with their initial attitude.

Both subjects were ushered into an experimental cubicle, and the experimenter explained that they would be part of a series of studies dealing with interpersonal dynamics and various topics, such as acquaintanceship processes and group dynamics, and that they would be asked to return for three additional sessions in order to "minimize variance in different phases of the project and to hold down the number of subjects necessary." The experimenter further explained that the future sessions would involve quite different tasks than the present one and that "today, the research deals with attitudes and reasons why people hold various attitudes."

*Commitment manipulation.* The experimenter continued by stating that all subjects would be asked to return for three additional sessions, would receive \$2.50 per session for their participation, and would perform a quite different series of tasks. In the high-commitment conditions, the experimenter continued:

Today you two will work separately, but in the next three sessions, you will work quite closely with each other. These sessions will require cooperation between the two of you and will deal with some of the topics that I mentioned before: group task performance, acquaintanceship, etc. You'll be working together in these next sessions and will probably get to know each other very well.

In the low-commitment conditions, the experimenter stated:

Today you two will work separately, in fact in the next three sessions, you two won't be working together at all. Each of you will be with another partner and will work quite closely with him. These sessions will require cooperation between you and this other partner and will deal with some of the topics that I mentioned before: group task performance, acquaintanceship, etc. You'll be working together with this other partner in these next three sessions and will probably get to know him quite well.

So today is the only time you two will be seeing each other in this study.

Subjects then agreed to return for three more sessions. The only difference between commitment conditions was whether or not the subject expected to work with his current partner in the additional sessions.

As in Sensenig and Brehm (1968), all subjects were told that they would write five short essays on current topics and that this would help to isolate some factors involved in why people hold various attitudes. The experimenter continued by explaining that both subjects would have to write from the same side of the issues, so that it would be possible to compare and isolate the factors of interest, and that neither subject would see his partner's essay. The experimenter explained that in order to randomly determine who would make the decisions about which side of the issues would be supported, subjects would draw lots to select a "deciding partner."

Subjects were told that in the past, the person who made the decisions had sometimes wanted to know how the other subject felt about the issues before he made his choice and that because of this, the deciding partner could consult with the other subject if he wished. Finally, the experimenter explained that subjects would actually write the essays in separate cubicles and would communicate only by notes. Each subject then drew lots, both of which stated that "the other person will be the deciding partner," and the experimenter immediately ushered one subject to another cubicle. The experimenter gave each subject a list of five essay topics, the first of which was "lowering the voting age from 21 to 18."

*Implied threat manipulation.* The experimenter left, checked the subject's initial attitude, and returned with a prewritten note, ostensibly the first from the deciding partner. In the high-threat condition, the note said: "I've decided that we will both agree (disagree) with this first topic. You must write your essay in favor of (against) lowering the voting age."

In the low-threat condition, the note stated: "I'd prefer to agree (disagree) with this first topic. If that's all right with you, go ahead and write your essay in favor of (against) lowering the voting age." In all cases the note instructed the subject to write an essay consistent with the subject's initial attitude. The notes, however, differed in the manner of assignment of the position. The high-threat note was arbitrary, and presumably pressured the subject to take the position, while the low-threat note solicited the subject's preference. Since all subjects expected four more notes from the deciding partner, one prior to each essay, high-threat subjects should have expected that the deciding partner would be equally arbitrary, while low-threat subjects should not have had such an expectation. Note that both versions of the manipulation gave the subject the same information regarding the position preferred by the deciding partner, and differed only in the manner of the assignment.

*Dependent measure.* After each subject had read the note, the experimenter returned with an "essay form" and a set of scales, and explained that the subject should "take a break" before beginning the essay and

fill out the first set of scales. The scales included the same 91-point scale about voting age ("As regards lowering the voting age from 21 to 18, I am:"—with points labeled from "extremely opposed" to "extremely favorable") and confidence ("How confident are you of your opinion on the voting age?"—with points labeled from "extremely confident" to "extremely unconfident") as employed in the pretest. A 91-point scale assessing how important subjects thought the issue ("How important to you is your attitude on lowering the voting age?"—points were labeled from "extremely important" to "extremely unimportant") was also included. All subjects then filled out a set of 61-point "personal impressions" scales, designed to evaluate the effectiveness of the manipulations and reactions to the partner: likely to ask ("How likely do you think it is that your partner will ask for your preference before deciding about the four remaining essays?"); partner liking ("How much do you like your partner?"); partner competence ("How competent do you think your partner is generally?"); intent to influence ("Do you believe that your partner wanted to influence your attitude by the note he sent you?"). Finally, a 91-point partner's opinion scale required subjects to estimate how favorable their partner was toward the voting age issue. All subjects were asked to indicate the number of additional sessions with their partner, the number of essays to be written, and their preference for working with their partner again. Following these measures, both subjects were brought together, completely debriefed, sworn to secrecy, and excused. We might note that approximately 40 minutes elapsed between the pretest and the posttest.

## RESULTS

### *Effectiveness of the Manipulations*

All subjects correctly remembered the number of future sessions with their partner and the

TABLE 1

EFFECTS OF COMMITMENT TO FUTURE INTERACTION AND THREAT TO ATTITUDINAL FREEDOM ON ATTITUDE CHANGE AND EVALUATIONS OF THE PARTNER

Measure	High threat		Low threat	
	High commitment	Low commitment	High commitment	Low commitment
Voting age	+3.86 <sup>a</sup>	-5.86	+ .06	+1.24
Confidence	-1.00	+5.79	-5.71	-6.47
Importance	64.50 <sup>b</sup>	41.64	59.94	58.29
Partner liking	24.64	25.86	33.53	30.29
Partner competence	29.86	39.65	38.00	40.65
<i>n</i>	14	14	17	17

<sup>a</sup> A positive change on this measure indicates change in the direction advocated by the note, and negative change indicates change away from the position advocated. Thus, negative change indicated reactance motivation.

<sup>b</sup> Scores on the importance measure are posttest means rather than a change score. The higher the mean, the more important the issue.

number of further essays to be written. Subjects in the high-threat condition rated their partner as less likely to ask their preference about the four remaining essays than subjects in the low-threat condition ( $F = 13.54$ ,  $df = 1/58$ ,  $p < .01$ ), as expected. Consistent with Brehm (1968, p. 283), high-threat subjects also perceived that their partner wanted to influence their opinion more than subjects in the low-threat condition ( $F = 5.67$ ,  $df = 1/58$ ,  $p < .05$ ). There were no other effects on either measure, suggesting that the experimental manipulation of threat to attitudinal freedom was successful and that commitment to future interaction did not alter perception of threat. In addition, no effects were obtained from the analysis of the partner's opinion measure, suggesting that the partner's ostensible attitude on the voting age issue (presumably inferred by subjects from the note) was not differentially perceived ( $F_s < 1.00$ ), eliminating alternative explanations based on distortion of the partner's opinion.

### *Dependent Measures*

The main dependent measure was the change in subject's attitude toward the voting age issue. Analysis of the change scores from the voting age issue (Table 1) yielded an unreliable main effect for commitment ( $F = 2.72$ ,  $df = 1/58$ ,  $p < .12$ ) and a significant interaction between threat and commitment ( $F = 5.71$ ,  $df = 1/58$ ,  $p < .05$ ). There was no main effect for threat ( $F < 1.00$ ,  $df = 1/58$ ). Under low commitment, subjects in the high-threat condition became more negative toward the voting age issue than in the low-threat condition ( $-5.86$  versus  $+1.24$ , respectively;  $t = 2.20$ ,  $df = 58$ ,  $p < .05$ ),<sup>4</sup> replicating the reactance effect reported by Sensenig and Brehm (1968). Under low commitment, threat to attitudinal freedom produced change away from the position ostensibly advocated by the partner in the influence attempt.

<sup>4</sup> All  $t$  tests were two-tailed unless otherwise noted. The mean square within cell based on all four cells was employed as the error term (Winer, 1962) for all between-cell comparisons. Thus, there were 58 degrees of freedom for all  $t$  tests. Consistent with Sensenig and Brehm (1968), we note that the negative change obtained in the low-commitment-low-threat condition ( $-5.86$ ) was also different from zero ( $t = 1.82$ ,  $p < .05$ , one-tailed).

As the interaction between commitment and threat indicated, there was no difference in attitude change between high- and low-threat conditions under high commitment (+ 3.86 versus + .06, respectively;  $t = 1.18$ ,  $df = 58$ ). The clearest effect of the commitment variable should be obtained by comparing the high- and low-commitment conditions under high threat. This difference was quite strong (+ 3.86 versus - 5.86, respectively;  $t = 3.01$ ,  $df = 58$ ,  $p < .01$ ), and accounted for the weak main effect for commitment noted above. These data were consistent with the original hypothesis that commitment to future interaction would forestall negative attitude change from an implied threat to attitudinal freedom.

The results from the confidence and importance measures (Table 1) also bear on the present hypothesis. The analysis of the confidence change scores produced a weak main effect for threat ( $F = 3.10$ ,  $df = 1/58$ ,  $p < .10$ ), due primarily to the difference between the high- and low-threat conditions under low commitment (+ 5.79 versus - 6.47, respectively;  $t = 1.80$ ,  $df = 1/58$ ,  $p < .10$ ). No other comparisons on this measure approached significance.

The effects from the importance measure were more clear, however. Subjects in the low-commitment-high-threat conditions evaluated the voting age issue as less important than subjects in either the low-commitment-low-threat condition (41.64 versus 58.29, respectively;  $t = 2.22$ ,  $df = 58$ ,  $p < .05$ ) or in the high-commitment-high-threat condition (41.64 versus 64.50, respectively;  $t = 3.05$ ,  $df = 58$ ,  $p < .01$ ). Both the main effect for commitment ( $F = 4.98$ ,  $df = 58$ ,  $p < .01$ ) and the interaction between commitment and threat ( $F = 4.40$ ,  $df = 1/58$ ,  $p < .05$ ) were quite strong.

Thus, the results from the confidence and importance measures, coupled with the attitude change results, provide a clearer picture of the reactance process. Under low commitment, in response to the threat manipulation, subjects changed negatively on the issue, derogated the importance of the issue, and became slightly more confident of their opinion about lowering the voting age. As the pattern of these results suggested, this process did not occur under high commitment.

The results from the partner-liking-partner-competence measures (Table 1) bear on the process under high commitment. Analysis of the partner-liking results indicated a main effect for threat ( $F = 6.46$ ,  $df = 1/58$ ,  $p < .05$ ), such that high-threat subjects liked the partner less than low-threat subjects. It should be noted, however, that under low commitment, the difference between the high- and low-threat conditions did not approach significance (25.80 versus 30.29, respectively;  $t = 1.19$ ,  $df = 58$ ), while under high commitment, the difference was quite strong (24.64 versus 33.53, respectively;  $t = 2.40$ ,  $df = 58$ ,  $p < .02$ ). In addition, subjects under high commitment-high threat evaluated their partner as less competent than under high commitment-low threat (29.86 versus 38.00, respectively;  $t = 1.84$ ,  $df = 58$ ,  $p < .10$ ) or under low commitment-high threat (29.86 versus 39.65, respectively;  $t = 2.21$ ,  $df = 58$ ,  $p < .05$ ). No other between-cell comparisons on these measures approached significance, and they are not presented. The results from the partner-liking and partner-competence measures suggest that differential perception of the note sender did occur, but primarily in the high-rather than low-commitment conditions. Since the interaction between commitment and threat did not approach significance on either measure, clearly the weak differences between threat conditions under low commitment in perception of the partner do not offer a viable explanation of the attitude change results (consistent with Sensenig & Brehm, 1968). The results from the partner-evaluation measures are considered more fully below, however.

Taken together, the results from the voting age measure, coupled with the results from the confidence and importance measures support the hypothesis concerning the interactive effects of commitment and threat to attitudinal freedom. Under low commitment we obtained a replication of the reactance effect reported by Sensenig and Brehm (1968). Under high commitment, however, there was no reactance effect, presumably because commitment to future interaction precluded rejection of the partner's influence attempt as a means of restoring attitudinal freedom.

## DISCUSSION

The present hypothesis suggested that commitment to future interaction would prevent rejection of the influence attempt by the partner. This analysis depended on several assumptions. We assumed that the note employed in the threat manipulation not only arbitrarily assigned (high threat) the subject a position to uphold, but also informed the subject of the position preferred by the partner. As a result, rejection of the position advocated by the partner, via negative attitude change, presumably would have unpleasant implications for future interaction. In this view commitment to future interaction made rejection of the partner's position more difficult and hence less probable. The attitude change results supported this analysis. As the Commitment  $\times$  Threat interaction suggested, under high commitment there was no differential attitude change between high- and low-threat conditions on the target issue.

Let us move to the partner-perception results. Sensenig and Brehm (1968) discussed several alternative explanations of their results, based on differential perception of the partner as a mediator of negative attitude change. In their study, for example, if the partner had been viewed as less competent or less attractive in the high-reactance condition, one might have argued that some form of negative affect had mediated attitude change rather than reactance motivation. No evidence supporting this alternative explanation was obtained by Sensenig and Brehm. In the present study, however, we obtained evidence of differential perception of the partner, but only under high commitment. In the replication conditions (low commitment-high threat and low commitment-low threat), there were no differences on the partner-liking or partner-competence measures. Thus, alternative explanations of the reactance results based on differential evaluation of the partner seem unlikely for the present set of results also.

On the other hand, differential perception of the partner did occur, although not strongly, under high commitment in response to the threat manipulation. Although unexpected, there are two tentative post hoc explanations for the negative covert reactions to the partner,

the first based on Kiesler et al. (1967) and the second based on Brehm (1968).

Kiesler et al. (1967) suggested that covert reactions to the behavior of another might be heightened or intensified by commitment to future interaction. In their view, negative behavior of the other may have predictive importance and may be especially salient if one expects future interaction with the other, thus leading to greater negative reevaluation of the other. The present results are consistent with their view if one assumes that the influence attempt represented a negative behavior.

A second tentative explanation of the partner-evaluation data rests on a slightly broader view of reactance motivation in the present experiment. Perhaps rejection of the influence attempt was inadequate to restore attitudinal freedom, especially in the context of expected future interaction. For example, despite our experimental efforts, perhaps subjects inferred that the partner was likely to threaten attitudinal or behavioral freedom during the future sessions. If so, we might expect some attempt by the subject to undo or revoke his commitment to the future sessions with the partner. Recall that all subjects were asked to indicate their willingness to work with the same partner in future sessions (on a 91-point scale). While there were no overall effects approaching significance, high-commitment-high-threat subjects indicated less willingness to work with the partner in future sessions than high-commitment-low-threat subjects (45.36 versus 54.63, respectively;  $t = 1.90$ ,  $df = 58$ ,  $p < .10$ ). Thus, under high commitment perhaps restoration of attitudinal freedom may be accomplished by derogation of the partner coupled with psychological revocation of commitment to future interaction. The worth of either explanation proposed above can only be assessed in light of further evidence, however.

The present research demonstrated the effect of two variables, commitment to future interaction and threat to attitudinal freedom, on attitude change in a social situation. In line with the hypothesis, subjects under low commitment rejected an implied threat to attitudinal freedom and became more negative toward the position expressed by their partner. Under high commitment, however, this effect of

threat to attitudinal freedom was obliterated. Supplementary measures evaluating perception of the partner suggested that under high commitment, subjects derogated the partner in response to the influence attempt. Minimally, the present research provides an empirical bridge between two bodies of literature—that of commitment and that of reactance—dealing with social interaction.

## REFERENCES

- BREHM, J. W. *A theory of psychological reactance*. New York: Academic Press, 1966.
- BREHM, J. W. Attitude change from threat to attitudinal freedom. In A. G. Greenwald, T. C. Brock, & T. C. Ostrom (Eds.), *Psychological foundations of attitudes*. New York: Academic Press, 1968.
- BREHM, J. W., & SENSENIG, J. Social influence as a function of attempted and implied usurpation of choice. *Journal of Personality and Social Psychology*, 1966, 4, 703-707.
- KIESLER, C. A. Commitment. In R. P. Abelson et al., *Theories of cognitive consistency: A sourcebook*. Chicago: Rand McNally, 1968.
- KIESLER, C. A., & CORBIN, L. H. Commitment, attraction, and conformity. *Journal of Personality and Social Psychology*, 1965, 2, 890-895.
- KIESLER, C. A., KIESLER, S. B., & PALLAK, M. S. The effect of commitment to future interaction on reactions to norm violations. *Journal of Personality*, 1967, 35, 585-600.
- SENSENIC, J., & BREHM, J. W. Attitude change from an implied threat to attitudinal freedom. *Journal of Personality and Social Psychology*, 1968, 8, 324-330.

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