ATTITUDE CHANGE FROM AN IMPLIED THREAT TO ATTITUDINAL FREEDOM ¹

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College students were told they were to write an essay supporting 1 or the other side on each of 5 issues, and were led to believe they might be able to influence the decision about which side of an attiudinal issue they were to support. In all cases they were then told to support the side (either pro or con) they initially preferred, and postmeasures were then obtained before the actual writing. Those who were given the impression that their preference was taken into account in the decision regarding which side they would support on the 1st issue showed attitude change favoring the preferred position (i.e., moving toward greater extremity, while retaining their initial polarity). Others, who were given the impression the decision was made without regard to their preference, tended to show attitude change away from the preferred position they were told to support. Within this latter group, those who expected to be told on which side to write on all 5 issues showed significantly greater change away than did those who expected to be told which side to support on only the 1st of the 5 issues.

The existing literature on social influence and attitude change has been primarily concerned with accounting for varying degrees of positive change. There has been some discussion of factors which might lead to resistance to persuasion and to boomerang effects (e.g., Cohen, 1962; Hovland, Janis, & Kelley, 1953; McGuire, 1964), but one can find surprisingly little systematic experimental investigation in this area, recent exceptions being studied by Berscheid (1966) and Abelson and Miller (1967). Indeed, in traditional attitude-change studies the subject's resistance to a persuasive communication is often interpreted as evidence of a weak manipulation, and a boomerang effect would generally be considered an experimental disaster. These interpretations are, of course, usually correct in that the investigators are primarily attempting to operationalize theories which predict differential amounts of positive influence, and they must therefore be able to show reliable amounts of positive attitude change. The purpose of the present study is to test a theory (Brehm, 1966) which predicts active resistance to persuasion and boomerang attitude change.

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The theory assumes that a person generally feels free to select his own position in regard to attitudinal or opinion issues. To the extent that this is true, the person will experience a motivational state called "psychological reactance" whenever his attitudinal freedom is threatened by attempts to influence or change his attitude. Reactance motivation will oppose those forces which lead to compliance with the influence attempt, and if this motivation is sufficiently large a boomerang effect will occur. Evidence in support of this analysis has recently been obtained by Wicklund and Brehm (1968).

There are, of course, a number of reasons why influence attempts generally do not produce boomerang effects. The influence communication may contain persuasive information, the communicator may appear to be an expert, and the issue or the person's position on it may be of low importance, leading to the individual's placing low value on his freedom to hold any attitudinal positions. For these reasons reactance forces presumably often serve more to weaken positive influence than to produce outright movement away from the advocated position.

The theory states that a threat to several freedoms should arouse more reactance than a threat to a single freedom. Thus, when a threat to a given freedom *implies* threats to

further freedoms, the individual should experience more reactance than if the same threat led to no such implications. A study by Brehm and Sensenig (1966) attempted to test this prediction in a situation where subjects made a series of two-alternative choices and another (fictitious) person sent them a note telling them which alternative to select on the first set of alternatives. It was predicted that in a condition where subjects expected to receive later notes (implying the possibility of further suggestions) they would be less likely to choose the suggested alternative than in a condition where they would receive only one such note. It was found that subjects who were told which alternative to choose were significantly less likely to select the suggested alternative, but contrary to the prediction the expectation of later messages made no significant difference. Since the manipulation of implied threat in this study was thought to be weak, it was felt that the implication hypothesis had not been adequately tested. The present study was designed to strengthen the manipulation of implied threats to the subject's freedom and to extend the hypothesis to the area of attitude change. In the original study the restriction to the subject's freedom involved a series of simple choices between different sets of pictures, one of which the subject would then "work with." The present study attempted to establish the reactance effect in terms of change on an already evisting attitude, and utilized a pre- and postmeasure design.

METHOD

The plan was to have two subjects fill out an attitude questionnaire concerning several issues, to lead them to believe that they would have to write essays supporting one side or the other on some of the issues, and that the other member of the pair would decide which side they would both support. Subjects were further to believe the other person could solicit their preference before deciding which side they would support on each issue. For one-third of the subjects this preference was actually solicited on the first issue (control condition) while the remaining subjects were arbitrarily told which side to support. One-half of these remaining subjects expected to be told which side to support on only the first issue (low implied threat to freedom) while others expected to be told in regard to all five issues (high implied threat to freedom). Subjects' attitudes on the first issue were again measured before they wrote their essay.

Subjects

Ninety-nine female students from introductory psychology classes at Duke University participated in the study as part of the course requirement. Subjects were randomly assigned with the exception that they would be equally distributed among three experimental conditions, two subjects being run at each experimental session. Nine subjects were climinated from the analysis; seven because they checked an end point on the premeasure item, thus allowing attitude change in only one direction; one because she apparently misused the premeasure scale; and one because of extreme suspicion. It should be noted that if the deleted subjects had been included in the analysis the obtained differences would have been slightly greater in the predicted direction.

Procedure

Two subjects were run at each experimental session.2 After a brief introduction they were asked to fill out a 15-item questionnaire containing such opinion statements as "The United States is justified in flighting in Viet Nam." Below each statement was a 31-point scale labeled "strongly agree" at one end and "strongly disagree" at the other end. Below each opinion statement were two similar 31-point scales on which subjects were to indicate their "confidence" and the "importance" of the issue. After the questionnaires were completed the experi-menter explained that he was interested in why people felt the way they did on these issues, and the remainder of the study would require that they write a short essay on each of 5 different issues which had been selected from the 15 issues on the questionnaire they had just completed.

In both the high-implied-threat and control conditions it was explained that the experimenter was also interested in "comparing the essays that are written by the two people who are in the study together," and so they would be required to write from the same point of view on each of the five essays. In the low-implied-threat condition the same instructions were given with the exception that only on the first essay would they be required to write from the same point of view. On the four later essays these subjects would each be able to select the side which they preferred.

The procedure to this point laid the groundwork for restricting the subject to write on a given side of the issue. However, the arousal of psychological reactance theoretically requires a real or implied reduction in freedom, not just a restriction. For this

² In the early stages of the experiment, five subjects were run using a confederate as the second person. This was done when either of the two regularly scheduled subjects failed to keep her appointment. This procedure was discontinued when it was determined that there was a relatively low number of subjects who failed to appear.

reason it was necessary to give the subjects the impression they had some freedom to influence the decision as to which side they would support. At the same time, in order to insure that the decision maker would appear to be acting in a credible fashion, and not inconsistently with the experimental instructions, the freedom given to the subject could only be partial. The remaining instructions, then, were designed to give the subjects the impression they had some limited amount of freedom to determine which side they would support on their cssay(s). They were told that some of the previous subjects who had been appointed to make the choice(s) had wanted to know how the other subject felt on the issue(s). Because of this, it was explained, subjects doing the choosing would be able to ask the other subject about her preference. In any case, the person making the choice would have the final say as to which side both of them would support on the essay(s).

Subjects were told they would be in separate rooms while writing their essays, and their questions about procedure were answered. Each was asked to draw a slip of paper to determine which one would make the decision(s), and they were immediately placed in separate experimental rooms. The two slips were actually identical and each subject was informed by the note that "The other person will make the choice on the first essay," in the low-implied-threat condition or "The other person will make the choice on each of the five essays," in the high-implied-threat and control conditions.

Premeasure questionnaires were collected and each subject was given a list of five items taken from the questionnaire. These were the items on which they expected to write their essays. The first, and critical, attitude statement was: "Federal aid to church-run schools should be discontinued." This issue was one on which pretest subjects had not generally been extreme, and would therefore allow attitude change in either direction. The four additional items were selected to strengthen the implied-threat manipulation. They were of general high importance and the freedom to support one side or the other should have been of correspondingly high importance.

While the subjects thought about their essays the experimenter went into another room, scored the critical item on the premeasure (Number 8 of the 15), and assigned each of the subjects a bogus note which the subject was to believe came from the other person. The note always assigned the subject to write her essay in support of the side of the issue she had favored on the premeasure. The highimplied-threat condition and the control condition contained exactly the same instructions and procedure with the exception of the type of note that the subject received. This made it possible to run a high-implied-threat subject and a control subject at the same experimental session with the experimenter remaining blind through all instructions up to the actual assignment of notes. At this time the

experimenter flipped a coin determining which condition each subject would be in and each was assigned the appropriate note. Since the instructions in the low-implied-threat condition differed from those of the other two conditions, it was not possible for the experimenter to remain blind in this condition.

The threat. The note constituted the manipulation of threat to the subject's freedom and was identical in the high- and low-implied-threat conditions. It consisted of the issue printed on it and the hand-written statement, "I've decided we will both agree [disagree] with this." The control condition received a note which said, "I'd prefer to agree [disagree] with this if it's all right with you." It can be seen that on both of these notes the other person stated a definite preference, but with the note given in the control condition, the person appeared to allow the subject the freedom of disagreeing with her if the subject wished.

The experimenter returned to each room in turn and gave the subject the appropriate note and the essay form for the first issue. At the top of this form were three scales on which the subject was to indicate her "actual feelings" on this issue. These scales were repeat measures of agreement, confidence, and importance as contained on the premeasure questionnaire, and they constituted the main dependent measures. After checking these three items the subject was to write her essay on the lower part of this form. Subjects in the high-implied-threat condition and control condition were reminded that, "You will also receive a note before each of the four later essays." Subjects in the low-implied-threat condition were reminded that, "This is the only note you will receive." All subjects in the control condition agreed to write from the point of view expressed in the note. The experimenter left the subjects and returned after approximately 5 minutes with a short questionnaire to fill out "before we go on to the second essay." The questionnaire was rationalized as being a check on impressions they might have formed of the other person during the experiment. It contained eight questions about such impressions, the perceived likelihood that the other person had affected their attiutde, and their perceptions of the manipulations. This completed the formal procedure, and the subjects were brought together, asked about suspicions they might have had, and finally informed as to the deceptions employed and the true purpose of the experiment.

RESULTS

To check on the success of the impliedthreat manipulation the following question was included in the postexperimental questionnaire: "How likely do you think it is that she will ask for your opinion on later choices?" Responses were on a 31-point scale labeled "not at all likely" at one end, and "very likely" at the other, scored with a higher number indicating greater perceived likelihood. Responses are available only for subjects in the control and high-implied-threat conditions since those in the low-implied-threat condition expected to receive no further notes and could not reasonably be asked to respond. The mean response in the high-implied-threat condition, 12.2, was clearly less than that in the control, 18.8 (t = 4.35, df = 58, p < .001), indicating that there should indeed have been a differential perception of threat between the high- and low-implied-threat conditions.

Attitude change. Since subjects in the control condition received a note that suggested that the essay be written from the point of view which they originally favored, and since the other person asked the subject's opinion on that issue, the note would likely be seen as positive social support for the subject's existing attitude. It was expected, therefore, that the subjects in this condition would be positively influenced, that is, they would move in the direction advocated by the note and more toward the extreme on the dependent measure item than they had been on the same item on the premeasure questionnaire. In Table 1 it can be seen that only in the control condition are the subjects' attitudes positively influenced.

Since subjects in the low-implied-threat and high-implied-threat conditions also received notes which agreed with the point of view they originally favored, there would have been some social support in these conditions as well. However, it was predicted that reactance aroused by the threat to freedom would tend to produce attitude change away from the supported position, and that the magnitude of reactance and consequent tendency to change away would be greater in the high-implied-threat condition than in the low. Thus, if reactance effects were great enough, negative attitude change would occur despite social support for initial position. Table 1 shows that these predictions were confirmed.³

³ It will be noted that the variance of change scores is much greater in the high-implied-threat condition than in the low and control conditions. This difference is reasonable since subjects in the high condition are theoretically placed under conflicting pressures to change positively and negatively. A pooled error term was used for the t tests. It

TABLE 1
PREMEASURE AND CHANGE SCORES ON THE ATTITUDE
ISSUE

| Condition | Premeasure | | Change | |
|--|-------------------------|-------------------------|---------------------|------------------------|
| | М | S^2 | M | S2 |
| Control Low implied threat High implied threat | 14.53 14.10 14.37 | 45.15 43.88 58.03 | 1.37 27 -4.17 | 8.80 16.62 68.83 |

Note,—Significance of differences using a pooled error term (df=58): low versus control, t=1.13, p>.10; high versus control, t=3.83, p<.01; high versus low, t=2.70, p<.01.

The low-implied-threat condition subjects showed a slight negative attitude change which is not significant when compared to the positive change shown by control subjects (t = 1.13, df = 58, p > .10). The highimplied-threat condition subjects showed a clearly significant negative attitude change when compared to the control subjects (t = 3.83, df = 58, p < .01), andshowed significantly greater negative change than the low-implied-threat-condition subjects (t = 2.70, df = 58, p < .01). There are no significant differences between conditions on the items measuring either confidence or importance, although there is a trend for confidence to increase with increasing threat.

Perceived characteristics of note sender. It might be argued that there are at least two factors which would affect a person's power to influence the attitudes of another. These are: (a) his personal attractiveness, and (b) his perceived competence on the issue. The power of the note sender in this experiment may have been differentially affected by the content of the notes, which might have caused him to be seen, in the reactance conditions, as (a) personally unattractive, on the basis of a rude note which did not ask the subject's opinion, or (b) incompetent on such issues, perhaps related to the note sender's general social insensitivity as indicated by the restricting note. It is not exactly clear how these arguments would predict the differential attitude change related to implication, and the differential attitude change which exists between the high-implied-threat

may also be noted that the proportion of negative changers increases directly with threat to freedom: 30% in control, 43% in low, and 63% in high.

| TH | E NOTE | SENDER | | |
|--|--------------------------------------|-------------------------|--------------------------------------|------------------------|
| Condition | Likability | | Competence | |
| | M | S2 | М | S ² |
| Control Low implied threat High implied threat | 22.93 ^a 21.97 21.37 | 15.86 16.10 28.62 | 22.13 ^a 21.77 20.87 | 15.50 11.01 8.36 |

TABLE 2

MEAN RATINGS OF LIKABILITY AND COMPETENCE OF THE NOTE SENDER

and low-implied-threat conditions, which used the same note. It is possible, however, that some such differences might have developed even between these conditions as a function of the implication manipulation. Since an explanation of this attitude change based on reactance theory requires that these effects not be primarily mediated by negative impressions of the restricting agent, it was thought valuable to have some check on these impressions. Several such measures of the subject's perception of the other person were obtained a few minutes after the dependent measure. The crucial ratings in this regard were two 31-point scales on which the subject was asked to rate the other person on likability and competence. The first question was: "How much do you like the other person?" and the scale was labeled "very likable" at one extreme, and "not at all likable" at the other extreme. The second question was "How competent do you feel the other person is on tasks such as you are doing?" and the scale was labeled "not at all competent" at one extreme and "highly competent" at the other extreme. The mean ratings on these measures for the three experimental groups are shown in Table 2. It would seem that the other person is seen as moderately likable and competent in all conditions. None of the differences approaches significance and it is improbable that they account for the observed attitude change effects.

Displacement of Hostility

An alternative explanation of the attitudechange data might be based on the concept of displaced hostility. It might be argued that the restricting note aroused hostile feelings in the subject, and that these feelings would be more extreme when the subject expected further notes. Since the experimental procedure did not allow the subject to retaliate by doing something hostile to the note sender, some subjects might find that they could displace this hostility in one of the only ways available to them, changing their attitude. This would seem to be true of those subjects who *originally disagreed* with the statement that federal aid to church-run schools should be discontinued. By moving away from their original position they would, in effect, be displacing their hostility by agreeing that money should be taken away from these schools.

The attitude premeasure and change scores were broken down and analyzed separately according to initial position. The results of this analysis show that, in the crucial highimplied-threat condition, there is in fact somewhat more negative change shown by those who initially disagreed (n = 16, initial)M = 8.44, mean change = -5.38)⁴ than in those who initially agreed (n = 14, initial)M = 22.57, mean change = -2.79). This trend, however, does not even approach statictical significance (t = .85, df = 28, p > .10). Furthermore, it can be noted that no matter which side of the issue a subject originally favored, he does show negative change, that is, he changes away from the position taken in the note. The displacement of hostility argument would not predict this change on the part of those who initially agreed with the statement. If these subjects feel hostile why should they change toward giving money to church schools? These factors would seem to severely weaken, if not eliminate, an alternative explanation of the attitude-change data based on the notion of displacement of hostility.

Self-esteem

Having the other person not ask the subject's opinion and, instead, order her around might have had the effect of lowering the self-esteem of the subjects. To the extent that the subjects felt lowered self-esteem they might have tended to express more moderate

⁴ Higher numbers indicate greater agreement with the statement that federal aid should be discontinued.

A Higher score indicates greater likability and competence.

attitudes after receiving the note from the other. The attitude-change results would, then, be the same if the experimenters had inadvertently manipulated self-esteem rather than the hypothesized reactance motivation.

It will be remembered that both on the initial premeasure questionnaire and on the dependent measure the subjects were asked to indicate not only their attitude but also the importance of the issue and the confidence they had in their opinion. It would seem that any changes in self-esteem might best be revealed by changes in this latter item, that is confidence. These data reveal that the high-implied-threat condition showed the greatest increase in confidence (mean change = 3.63), the low-implied-threat condition showed a moderate increase in confidence (mean change = 2.46), and the control condition showed the least amount of increase in confidence (mean change = 1.90). Although none of these changes reaches an adequate level of statistical reliability, it is obvious that the trend revealed in these confidence change scores is in the opposite direction of what would be predicted by the self-esteem explanation. There is, then, evidence that it was not lowered self-esteem which mediated the observed attitude-change results.

Results have been reported on three of the eight questions asked after the dependent measure (perceived competence and likability of the note sender, and likelihood of being consulted on later decisions). The remaining five items were attempts to obtain self-reports from subjects on their general reactions to the note (for example: "How likely do you think it is that she affected your opinion?"). The trend of the data on these questions indicates a slight tendency toward greater awareness of possible attitude change in those groups which actually did show more change (i.e., the high-implied-threat and control conditions). However, these differences do not approach statistical reliability and they will not be discussed further.

DISCUSSION

The present findings indicate that when a person's freedom to support a position on an attitude issue is eliminated, psychological reactance is aroused in him, and he consequently tends to change his attitude in such a way as to restore the lost freedom. The results also indicate that the magnitude of reactance and consequent attitude change increases with the number of freedoms implicitly threatened with elimination.

It is interesting to note that attitude change takes place even though there is no seeming external instrumental value to the change. The subjects in the threat conditions had no choice but to write on the side of the issue stated in the note, and they had no reason to expect that the note sender would know how they felt. Thus, moving away from a position which they had originally favored could in no way change their fate, and indeed it might make it somewhat more difficult to write an essay from the required point of view. We would contend, however, that within the experimental situation it was difficult for subjects to reestablish their freedoms in any fashion other than negative attitude change. When the subjects received the restricting note, and particularly when they expected later similar notes, one of the easiest ways for them to establish their freedom phenomenally was to move their attitude away from the position which the note sender was demanding they support. This shift in attitude would serve to indicate that, although they might have to write from the required point of view, they were still free to take different positions in regard to their actual beliefs or attitudes.

Regarding their somewhat similar experiment, Brehm and Sensenig (1966) presented an alternative explanation which they were unable to rule out effectively. It centered around the idea that in this type of experiment the note sender may be perceived as transgressing the rules of the experiment. Thus, if the note is unexpected and seemingly not in keeping with the experimental instructions, the subject may attempt to cover up for the other person's transgressions by simply ignoring the note as much as possible. This tendency to ignore the note rather than to oppose it actively is a tenable explanation when a clear and significant boomerang is not produced. In an attempt to lower the likelihood of this type of reaction to the note in the present experiment the experi-

menter tried to make clear that it was acceptable for the note sender either to ask the other's opinion or not. It was mentioned, however, that some of the subjects had wished to know how the other person felt on the issue(s) and that this was why they were to receive notes. It was assumed that most subjects would anticipate being consulted on at least the first choice (on which most subjects were less extreme and perhaps more flexible). Thus, subjects would have a normative expectation of being consulted on the first decision, but if the note sender did not ask their opinion it could not be perceived as an open transgression of experimental requirements. In the present experiment these safeguards may have been less necessary since there is a clear and significant boomerang effect shown in the high-implied-threat conditions. This negative change could hardly be explained by a mere tendency to ignore the note and rather requires positing an active force operating to move the person away from the suggestion.

The differences between experimental conditions do not seem to be based simply on negative attributions associated with the note sender, or on the displacement of hostility, or on lowered self-esteem, or the subjects' simply ignoring the note because of perceived experimental transgression by the note sender. The present authors would contend that the differences are related to differential threats to the subject's attitudinal freedom and concomitant reactance forces. Therefore, we conclude that the present experiment has supported the various links in our chain of

reasoning: specifically, that (a) when a person's freedom is threatened there will occur a motivational state directed toward restoration of the threatened freedom, (b) the greater the number of behavioral freedoms threatened by implication, the greater will be the magnitude of the motivational state and consequent tendency to restore the threatened freedom, and (c) with regard to attitudes, the reestablishment of freedom may take the form of changing one's position away from the position that is implied or forced on one.

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