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Studies in Forced Compliance: XIV.

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Studies in Forced Compliance: XIV. Commitment and Magnitude of Inducement to Comply as Determinants of Opinion Change.

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Abstract

Subjects were enticed to record a strongly counterattitudinal statement about an important issue under three levels of commitment (anonymous audio recording, identified video recording with subsequent explanation or identified video recording with no opportunity to recant). 1/2 of the subjects were paid $.50 to make the recording; the other 1/2 were paid $2.50 for the counterattitudinal task. In the two higher commitment conditions (identified video recording), subjects given low financial inducement showed significantly more attitude change than those given the large reward. In the low commitment (anonymous audio recording) condition, large amounts of money produced more attitude change.

Studies In Forced Compliance: XIV. Commitment and Magnitude of Inducement to Comply as Determinants of Opinion Change.[1]

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Festinger and Carlsmith (1959) enticed subjects to make a false statement to an experimental accomplice; subjects were induced to say that a dull task had been fun and interesting. Subjects paid $1.00 for this counterattitudinal statement showed significantly more attitude change than subjects paid $20.00. Festinger and Carlsmith reasoned that the cognitions "I <u>said</u> the task was fun and interesting," and "I <u>think</u> the task is dull," were dissonant since the opposite of one seemed to follow from the other. The payment of $20 added a significant consonant cognition, thereby reducing the dissonance between the two cognitions.

A subsequent study by Rosenberg (1965), however, found exactly the opposite result; attitude change increased with larger inducements to comply. The study by Rosenberg and a series of studies by Janis (Janis & Gilmore, 1965; Elms & Janis, 1965) failed to replicate the Festinger and Carlsmith findings. At best, these studies suggest a significant limitation on the generality of the Festinger and Carlsmith findings; at worst, they argue that the original finding was produced by relatively trivial methodological artifacts (see reviews by Aronson, 1966; Rosenberg, 1966; Collins, 1968). The validity of both the Festinger and Carlsmith and the Rosenberg findings, however, has been demonstrated in two subsequent

studies; both found a positive and a negative relationship between attitude change and financial inducement within the same general design. The first, by Carlsmith, Collins, and Helmreich (1966), replicated the Festinger and Carlsmith study when subjects made their counterattitudinal statement in a face-to-face confrontation with an experimental accomplice. Rosenberg's results were replicated when subjects made their counter-attitudinal statement in an anonymous essay. Linder, Cooper, and Jones (1967) replicated Rosenberg's positive, incentive relationship when they followed his procedures exactly; but they obtained a negative, dissonance relationship between attitude change and magnitude of inducement when extra care was taken to insure that subjects had a high degree of choice in their decision to write or not to write the counterattitudinal essay.

The Carlsmith, Collins, and Helmreich replication of Festinger and Carlsmith demonstrates the empirical validity of the dissonance finding within that specific, face-to-face confrontation setting; but the results from the essay conditions of Carlsmith et al. and Rosenberg (1965) challenge the original theoretical formulation presented by Festinger and Carlsmith. Carlsmith et al. argue that "thinking up arguments" did not <u>necessarily</u> produce dissonance.

> It can be argued that writing such an essay will create no dissonance. Stated in an extreme form, the question is whether the cognition "I am, for good <u>reasons</u>, listing some arguments in favor of the position 'not-x' is dissonant with the cognition 'I believe x.'" It is plausible that, especially among college students, the cognition that one is listing such arguments is not at all dissonant with the cognition that one really believes the opposite. Rather, the ability intellectually to adopt such a

> position is the hallmark of the open-minded and intellectual (Carlsmith, Collins, & Helmreich, 1966, p.4).

Aronson (1966), following much the same reasoning, argues that the face-to-face confrontations produce higher degrees of "commitment" than the e say writing condition.

Rosenberg (1966), however, makes a different argument. He suggests that one of the important differences between the two conditions is:

> ...that the dissonance prediction is usually appropriate to rather simple counterattitudinal acts and less appropriate to complex counterattitudinal advocacy. It does indeed seem that in the present (Carlsmith et al.) experiment the essay-writers came closer than did the role players to performing the kind of complex counter-attitudinal advocacy that involves implicit elaboration and internal rehearsal of counterattitudinal arguments (Rosenberg, 1966, p. 162).

The general research strategy of the present authors, in lgiht of the theoretical and empirical controversy discussed above, has been two-fold. First, we wanted to replicate the crossover interaction of the Carlsmith, Collins, and Helmreich study with a methodologically simpler manipulation--thus eliminating many of these alternative explanations. Second, we wanted to be able to produce a negative relationship between attitude change and financial inducement with a less delicate and expensive procedure than that required by a face-to-face confrontation. One approach would be an attempt to produce a dissonance effect by asking subjects to write public, high commitment essays. But five previous efforts along that line had failed (Collins & Helmreich, 1965; Hornbeck, 1967; See Collins, 1967, for a review of the unpublished studies). In

no study was there a significant dissonance effect; the inducement manipulation always produced either no effect or a significant positive relationship. For this reason, the present study was designed to parallel more closely the face-to-face confrontation condition.

In the present study, some subjects were asked to record a counter-attitudinal presentation on video tape. They were told that their tapes would be used as stimulus material in an attitude change experiment to be conducted in a large psychology class. To insure that subjects were fully aware of what they had done, their presentations were replayed to them. In the condition designed to maximize dissonance or "commitment," subjects were told that they would not be allowed to explain their behavior at the end of the experimental session and--since the experiment involved a delayed posttest--they would have to stand publicly by their counterattitudinal position for the next three months. It was expected that this condition would produce a negative (or "dissonance") relationship between financial inducement and attitude change similar to the face-to-face confrontation conditions of Festinger and Carlsmith (1959), and Carlsmith, Collins, and Helmreich (1966).

A second video-tape condition was designed to eliminate some of the features of the first condition which, on an a priori basis, seemed to contribute to the arousal of dissonance. Subjects were assured that they would be able to explain the reasons for their counterattitudinal position at the end of the experimental session. Since these subjects were allowed to "undo" or "takeback" their counterattitudinal behavior after deceiving their audience for only a short period, and since these "take-back" subjects would not have to maintain their counterattitudinal

position in a face-to-face confrontation outside the laboratory, it was predicted that the dissonance or negative relationship would be significantly attenuated in this condition; the financial inducement variable might produce a weaker dissonance effect, no difference at all, or a positive relationship.

A third condition, in which subjects made an anonymous audio tape, should produce even less dissonance. Unlike the preceding conditions, subjects did not identify themselves on the tape. Furthermore, the fact that the recording was audio only makes it less likely that members of the intended audience would be able to associate the subject personally with his message. It was predicted that the slope of the line from low to high inducement would be significantly more positive than each of the lines produced by the preceding two conditions.

Method

Subjects. Subjects were 66 male students in introductory psychology at the University of Texas at Austin who were randomly assigned to one of the six experimental conditions.[2]

Procedure. All students in three sections of introductory psychology were given an attitude inventory assessing opinions on a number of issues. The issue used in the present study was compulsory government control of family size to limit population growth. The pre-test statement was "Because of the population explosion, the size of families should be controlled by the government." Statements were rated on a 31 point scale ranging from 0 (strongly disagree) to 30 (strongly agree) with 15 (neutral) as the labelled midpoint. More than 95% of the sample of 1100 students

strongly disagreed with the statement, checking 0, 1, or 2 on the scale. Subjects were selected who had indicated strong disagreement with the statement and were called by telephone to take part in an experiment for required course credit.

On arriving at the laboratory, subjects were met by an experimenter and conducted to an experimental room. Once in the room, the experimenter explained the "purpose" of the study. He stated that the psychology department was interested in developing a new test to measure values. The experimenter added that the researchers were not happy with the Allport-Vernon-Lindzey Scale of Values (which all introductory students had completed) and were looking for a more reliable measure. He said that students were being called to take the new "experimental" test under controlled conditions in the laboratory. Subjects were then given a mimeographed copy of the "This-I-Believe" test (Harvey, 1967), as a fill-in task, and told to work carefully on it. After each subject had completed the questionnaire (about 20 minutes), the experimenter signed his experimental credit sheet and thanked him for participating in the research.

At this point, a second experimenter knocked on the door and asked to speak with the subject. The second experimenter explained that he was preparing materials to be used in research with the experimental section of the introductory psychology class which met in an electronically equipped classroom and that he could pay the subject for helping him out for a few minutes.

The subject was then told that the research was on attitude change and that a number of communications would be presented to students to see if their opinions could be altered. The experimenter stated that he

could pay the subject 50 cents (or $2.50) for preparing a communication. The procedure then varied according to condition.

Subjects in the no-takeback video condition were told:

> We would like you to make a video tape stating these arguments in favor of the gover ment regulating family size to control the population explosion. (Hand S the card.) As you can see, there are four statements and you can add any additional arguments you like. You simply state your name, hometown, class and major and present the arguments.
>
> We are interested in the long-term effects of a communication on attitudes. So, we plan to measure their attitudes right after we play the tape and again at the end of the semester. Because of this, it is extremely important that you not tell anyone what you really think about the issue or why you made the tape before the end of the semester. Can you help us out? (Re-emphasize major points.)

Subjects in the takeback video condition were told:

> We would like you to make a video tape stating these arguments in favor of the government regulating family size to control the population explosion. (Hand S the card.) As you can see, there are four statements and you can add any additional arguments you like. You simply state your name, hometown, class and major and present the arguments.
>
> After playing the tape to the class, we will measure their attitudes toward the issue and then explain the purpose of the experiment. We would like you to make a second tape on which you explain why you made the tape and the purpose of the experiment. We

will play this to the students. You can also state your real opinions on the issue if you like.

Can you help us out? (Re-emphasize major points.)

Subjects in the anonymous audio condition were told:

We would like you to make an audio tape stating these arguments in favor of the government regulating family size to control the population explosion. (Hand S the card.) As you can see, there are four statements and you can add any additional arguments you like. You don't need to give your name or anything, just give the arguments.

Can you help us out? (Re-emphasize points.)

The statements on the card were: (1) "Family size must be limited because there simply won't be room for everyone if population growth continues at the present rate." (2) "If population increase is not limited, the standard of living will go down." (3) "Since people won't do it voluntarily, the government must take the initiative to limit family size." (4) "The best solution will probably be to have government centers administer long acting contraceptives or perform sterilization after a fixed number of children, probably 2 or 3 have been born to a family."

After agreeing to make the recording, subjects were taken by the second experimenter to a second experimental room equipped with an audio tape recorder or a Sony video tape recorder, video camera and monitor. The subject then made the recording (and

debriefing tape in the intermediate commitment condition). The experimenter than played the tape back to the subject.

After playing the tape, the experimenter added "Oh, by the way, there is one more thing. I have a rough draft of the questionnaire we are thinking about using in the experiment. I would like to have you fill it out so I can see how long it takes and also to see if you have any suggestions for improvement. Please fill it our carefully. It might also be useful to us to know how you feel about the issue."

The questionnaire was roughly typed and draft was pencilled in across the top. There were five questions, all with 31-point scales. One of the questions was identical to the pretest "Because of the population explosion, the size of families should be controlled by the government." Another question asked how important the rater felt the issue to be. The other three questions dealt with evaluations of the presentation, asking for assessments of how sincere the speaker was, how clear the presentation was and how persuasive the argument was.

After completeng the questionnaire, the subject was queried as to possible suspicion and the purpose of the experiment and need for deception explained. No subjects reported any suspicion or insight into the purpose of the study.

Results

The means for the posttest scores are presented in Figure 1, and the associated analysis of variance in Table 1. Although both main effects of

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Insert Figure 1 and Table 1 about here

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the standard 2x3 analysis of variance are significant, the significant interaction ($p < .005$) indicates the need for analysis of simple effects within the 2x3 matrix. Looking first at the differences between high- and low-financial inducement, the negative relationship found within the no-takeback video condition is significant ($p < .001$) as is the negative relationship in the takeback video condition ($p < .03$). However, the positive relationship in the anonymous audio condition does not approach significance. Thus, the first prediction is confirmed; a dissonance effect is obtained in the no-takeback video condition--replicating the face-to-face confrontation conditions of Festinger and Carlsmith, and Carlsmith *et al*. The second prediction, however, is not confirmed; although the trend is in the predicted direction, the difference in slopes between the no-takeback and takeback video conditions does not approach significance ($F = 0.79$). The third prediction, however, is confirmed; the slope of the anonymous audio condition is significantly more positive than both the no-takeback ($F = 11.11$, $df = 1$ and 60, $p < .005$) and the takeback ($F = 3.96$, $df = 1$ and 60, $p < .02$) video conditions. With high and low financial inducement collapsed, the no-takeback video condition is significantly higher than the takeback video ($F = 5.45$, $df = 1$ and 60, $p < .025$) and the anonymous audio conditions ($F = 5.36$, $df = 1$ and 60, $p < .025$).

Discussion

The discovery of a significant negative relationship between attitude change and financial inducement is encouraging after several failures to produce the negative effect in public, high commitment essays. The video tape procedure offers several advantages over the more cumbersome face-to-face confrontation procedures previously used. The effect is very strong ($p < .001$ with 11 subjects in each cell). There is no interaction between subject and accomplice during the counterattitudinal act--a fact which removes a potential source of error variance and experimenter bias. A much wider range of purported audiences and uses for the counterattitudinal act is possible. Finally, the whole experimental situation is relatively straightforward and does not require the delicate job of acting by the experimenter which is necessary to set up a face-to-face confrontation.

The replication of a crossover interaction in the present study does much to extend our insight into the limiting conditions for both the positive and negative effects of financial inducements. The contrast between the anonymous audio-tape and the two video-tape conditions in the present study is, of course, still very complex and in need of further analysis. Nevertheless, the present study represents a significant step toward the isolation of the unitary dimension responsible for the interaction. At least three alternative explanations of the Carlsmith, Collins and Helmreich study are eliminated. The manipulation does not increase the complexity of the role-playing task itself. Nor were the video conditions more "crisis like"; it is hard to argue that the video subjects would be more suspicious or discombobulated than the audio subjects. Finally, in contrast to the trivial attitudes studied in the

Festinger and Carlsmith, and Carlsmith et al studies, the present experiment reports change on an important, central attitude.

It is still necessary to account for the failure of our second prediction--a significant interaction between inducement and the ability to "take back" or "undo" one's counterattitudinal behavior. Several explanations are possible. First, the attitude change shown by the $.50, no-takeback video condition is unusually large--61% of the total change possible for each subject. The mean of subjects in that condition is 4 points above the a priori neutral point of 15 on the 31 point scale. It seems possible that this dramatic change across the neutral point was sufficient to dissipate all dissonance. If the attitude has changed to a point where it is consonant with the position advocated, no further attitude change may be necessary. Thus, even if we had doubled the amount of dissonance produced in the $.50, no takeback condition, it is possible that no additional attitude change would have been observed. Increased attitude change in this condition would, of course, have produced the predicted interaction.

Alternately, it might be that the present manipulation did not allow the subjects to "takeback" or "undo" their counterattitudinal behavior psychologically; subjects may have felt silly and awkward when they tried to explain their behavior. Or, the subjects may have experienced dissonance because they deceived their potential audience during the experimental period--even though they were able to limit the deception to a brief period of time. Or the subjects may have experienced dissonance because they felt they had caused a significant amount of attitude change on the posttest scores of the intended audience. Finally, of course, it could be that "taking back" or "undoing" a counterattitudinal behavior does not reduce dissonance.

Table 1
Analysis of Variance for Attitude Issue

	M.S.	df	F-ratio
Inducement (A)	364.02	1	7.21**
Commitment (B)	181.68	2	3.60*
A X B	300.29	2	5.95***
Within	50.47	60	
A Within No-takeback video		1	12.54****
A Within Takeback video		1	5.20*
A Within anonymous audio		1	1.38

* $p < .05$

** $p < .01$

*** $p < .005$

**** $p < .001$

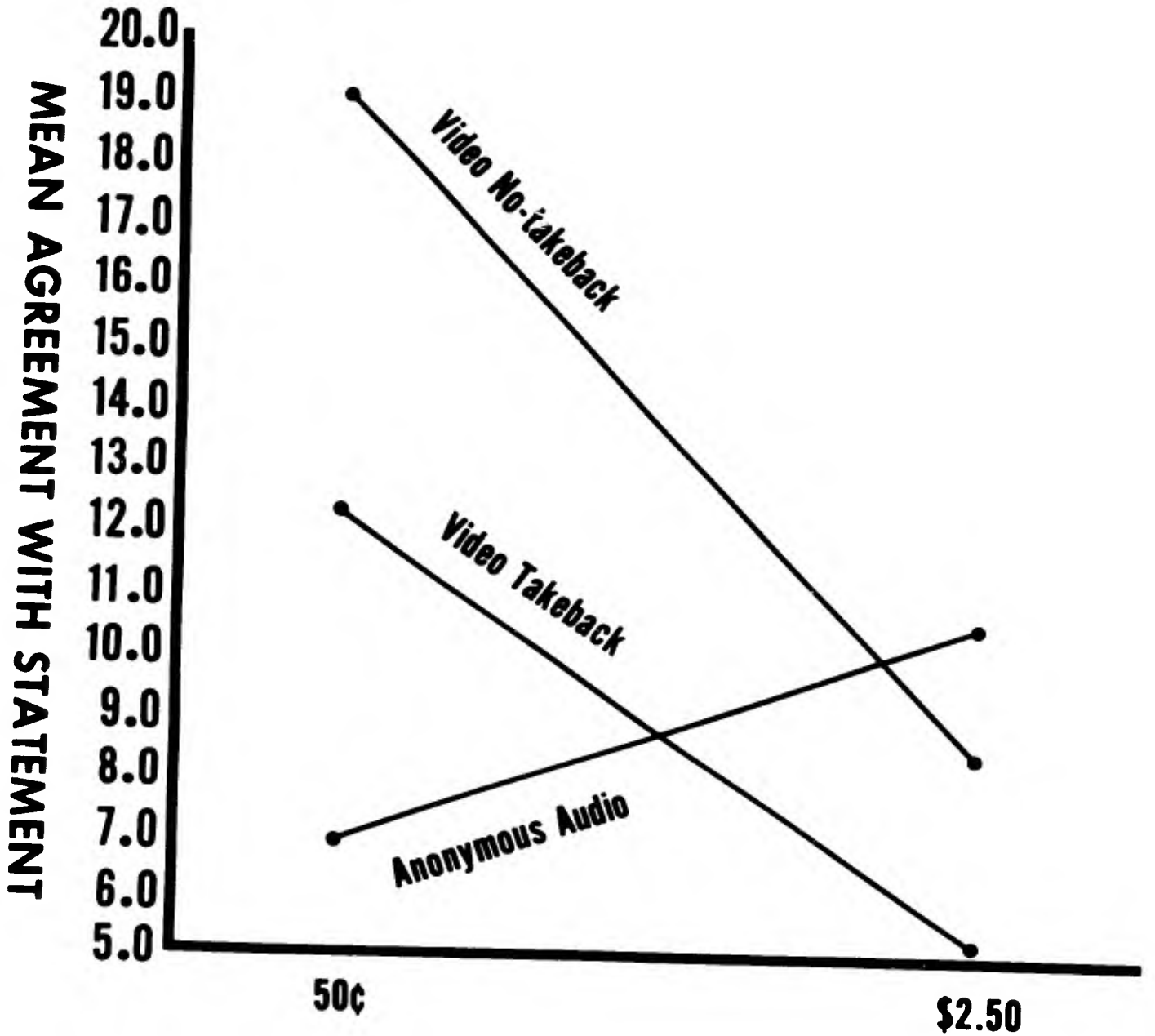
MEAN AGREEMENT WITH STATEMENT
20.0
19.0
18.0
17.0
16.0
15.0
14.0
13.0
12.0
11.0
10.0
9.0
8.0
7.0
6.0
5.0
Video No-takeback
Video Takeback
Anonymous Audio
50¢
$2.50

Figure Caption

Figure 1. Posttest Scores. Higher numbers represent a more favorable attitude.

Footnotes

1. The research was supported by contract N00014-67-A-0126-0001 with the Office of Naval Research, Group Psychology Branch, to the senior author and by a grant from the Advanced Research Projects Agency through grant number AF-AFOSR-1200-67 to the junior author. The authors wish to thank Paul Gaido and James DuBois who served as experimenters.

2. Actually, 72 subjects were run. Six subjects declined to undertake the counter-attitudinal role-playing. Subjects failing to comply were distributed across conditions in the following manner: 50¢ low commitment - 1; 50¢ intermediate commitment - 1; 50¢ high commitment - 3; $2.50 intermediate commitment - 1.

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