ATTITUDE CHANGE IN THE COUNTERATTITUDINAL
ADVOCATE: MEDIA AND AUDIENCE FACTORS

A thesis submitted in partial satisfaction of the requirements for the degree of Master of Arts in
Psychology
by
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The thesis of Susan H. Kapitanoff is approved:

California State University, Northridge

May, 1973
ACKNOWLEDGMENTS

This thesis is dedicated to my husband, Bill, and our daughter, Michelle.

I am very grateful for the encouragement and guidance given to me by Dr. James A. McMartin.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>iii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>v</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>vi</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>METHOD</td>
<td>11</td>
</tr>
<tr>
<td>RESULTS</td>
<td>17</td>
</tr>
<tr>
<td>DISCUSSION</td>
<td>26</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>31</td>
</tr>
<tr>
<td>APPENDICES</td>
<td></td>
</tr>
<tr>
<td>A. General Survey of Attitudes</td>
<td>35</td>
</tr>
<tr>
<td>B. Speaker's Evaluation</td>
<td>37</td>
</tr>
<tr>
<td>C. Accompanying Letter to Long-term Post-test</td>
<td>38</td>
</tr>
<tr>
<td>D. Long-term Post-test</td>
<td>39</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Analysis of Variance of Difference Scores</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>for the Topic Statement</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Cell Means of Difference Scores</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>for the Topic Statement</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Analysis of Variance of the Importance of the Issue</td>
<td>22</td>
</tr>
<tr>
<td>4.</td>
<td>Analysis of Variance of Subjects' Ratings</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>of the Quality of Their Speech</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Analysis of Variance of Difference Scores for the</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Topic Question for the Long-term Post-test</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Question for the Long-term Post-test</td>
<td></td>
</tr>
</tbody>
</table>
ABSTRACT

ATTITUDE CHANGE IN THE COUNTERATTITUDINAL ADVOCATE: MEDIA AND AUDIENCE FACTORS

by

Susan H. Kapitanoff

Master of Arts in Psychology

June, 1973

This study was designed to test the attitude change predictions of two different interpretations of dissonance theory and to compare these with a reinforcement prediction. One interpretation is that dissonance is the result of discrepancies between cognitions about one's actions; for instance, "I said X" but "I really believe not X."

A second interpretation is that it is aroused by discrepancies between cognitions pertaining to one's self-esteem. "I am an honest, decent person" but "I have done a dishonest thing by misleading another person." In either case, increased dissonance should lead to attitude change.

Reinforcement theory states that attitude change occurs to the degree that subjects receive positive reinforcements for advocating that belief.

Subjects were asked to make video tapes of counterattitudinal speeches. The topic they advocated was "Legalized Abortions Should Be Banned." They were told that these tapes would be played to either an uncommitted audience or an audience favoring the topic.
After the tapes were made, subjects were further told that the tapes were either intact or destroyed.

A main effect for the intact-tape subjects would be support for the first interpretation of dissonance. An interaction effect with the most attitude change in the uncommitted-audience, tape-intact subjects would support the second interpretation of dissonance. Results consistent with a reinforcement effect should reveal a main effect for the agreeing audience. Results did not support any of the hypotheses.

However, results of a long-term post-test revealed that subjects in the uncommitted-audience, tape-destroyed condition retained significantly more attitude change than subjects in any of the other conditions. This was explained in terms of the Zeigarnick effect where "tensions" remain in an uncompleted task situation until the task has been completed.
INTRODUCTION

Many recent studies of attitude change in the counterattitudinal advocate have been done to support or refute the theory of cognitive dissonance (Festinger, 1957). In the initial investigation, Festinger and Carlsmith (1959) performed an experiment in which subjects were required to say that a dull experiment had been very interesting. According to Festinger's theory of cognitive dissonance, discrepancies between cognitions concerning what a person believes and what he has said he believes arouses dissonance. Thus in this experiment, dissonance would be aroused by the discrepancy between the cognitions. "I believe that this experiment was dull" and "I said that I believed the experiment was interesting." When Ss in this study were offered a large financial inducement to do this task, little attitude change was found. That is, few Ss changed their opinions to agree that the experiment was interesting. However, when a small financial inducement was offered, significantly more attitude change was found. In explaining this observation, Festinger and Carlsmith (1959) reasoned that with a high financial inducement the S had "good reason" for his actions (high monetary gain) and thus little dissonance was aroused. With low financial inducement, however, the S could not justify to himself why he said the experiment was interesting. This increased "cognitive dissonance," which could then be reduced by a change of attitude toward positively evaluating the task. The results of this experiment were taken as support for Festinger's theory of cognitive dissonance. Similar results
were found in an experiment by Cohen (1962), who used an essay-
writing task.

Other theories have been proposed to explain attitude change
in these situations. One group of theories revolves around a rein-
forcement approach. Rosenberg (1965) performed an altered repli-
cation of the experiment by Cohen (1962). He found, contrary to
Cohen (1962), that high financial inducement led to greater attitude
change than low financial inducement. Similar results were found by
Scott (1959), Janis and Gilmore (1965), and Elms and Janis (1965).

Carlsmith, Collins and Helmreich (1966) attempted to test
these two basic approaches by replicating both Festinger and Carl-
smith (1959) and Rosenberg (1965) within the same experiment. They
replicated both results. Carlsmith et al. (1966) concluded that it was
unlikely either result was artifactual. However, they were not able
to determine which of the many differences between these studies
were the critical ones. For example, the Festinger and Carlsmith
study involved a face-to-face situation, may have been more crisis-
like and only required that the S repeat specific statements about the
experiment. The Rosenberg situation involved thinking up and writ-
ing arguments on a complex and perhaps more salient topic.

Subsequent investigators have attempted to clarify these
results by examining a number of other variables. Linder, Cooper
and Jones (1967), for example, examined freedom to comply with the
experimenter’s request. They replicated the Rosenberg experiment
and found an inverse (dissonance) relationship between financial
inducement and attitude change when there was great freedom to
comply. A direct (reinforcement) relationship was found when this freedom to comply was reduced.

Nel, Helmreich and Aronson (1969) asked Ss to give a speech advocating a position (legalizing the use of marijuana) opposing their true beliefs. Ss made video-tape recordings of their speeches. These were presumably to be played to audiences who were either pro, con or had no opinion on the topic. The Ss were offered either a high or low monetary inducement for their participation. It was hypothesized that the greatest dissonance would be created in the uncommitted-audience condition since it was in this condition that the audience was most persuasible and thus the S's speech would have the most influence. The other two audience conditions were not expected to be so influenced. The pro audience would not be affected since they already held the advocated belief and the con audience would be little influenced presumably, because they already held a strong belief in the opposite direction. Also, the S would be influencing the audience toward a position which she opposed and which she thought might be harmful for the audience. Thus she would expect that there would be serious consequences of her actions.

As predicted, Ss in the uncommitted-audience condition, offered a low monetary inducement ($0.50), showed greater attitude change than those offered a high monetary inducement ($5.00). Also, the Ss in the low-monetary-inducement, uncommitted-audience condition, showed greater attitude change than Ss in any other group.

This is consistent with Nel, Helmreich and Aronson's reinterpretation of dissonance. Instead of dissonance aroused between
cognitions, "I believe X" but "I said that I believe not X," it was postulated to be aroused between cognitions "I am a good, honest person" and "I have done a deceitful, dishonest thing by advocating this position." Here dissonance is aroused between discrepant cognitions pertaining to one's self-esteem.

This new interpretation may lead to predictions which are different from those based on the Festinger and Carlsmith interpretation. For example, in the Nel, Helmreich and Aronson study they noted that Festinger and Carlsmith would have predicted more attitude change in the low monetary condition regardless of the audience factor. Actually attitude change was significant only for Ss in the low-monetary-inducement, uncommitted-audience condition.

Helmreich and Collins (1968) replicated the study by Carlsmith, Collins and Helmreich (1966). They examined three hypotheses for achieving both dissonance and reinforcement results in the same study. These hypotheses were: (1) that dissonance is usually found in simpler rather than complex counterattitudinal situations, (2) that there is higher commitment in the face-to-face situation than in the essay-writing situation, and (3) that simply thinking up counterattitudinal arguments does not necessarily produce dissonance, as would be the case in the essay condition. These hypotheses were examined in the following ways: First, although the topic was more complex (government control of family size) than the Festinger and Carlsmith topic (saying a dull task was interesting), the role playing in each of the conditions was almost exactly the same. Secondly, commitment was experimentally manipulated. Thirdly, arguments
were not only thought up, but all the Ss presented them in some way.

Ss were asked to help the E prepare some materials for an attitude change study. They were offered either $.50 or $2.50 for their help and were randomly assigned to one of three conditions. The first condition was a no-takeback video condition in which Ss made a video-tape recording supporting a counterattitudinal position. At the beginning of the tape they stated their name, home town, class and major. This tape was to be played to an audience and then a survey was to be made to see if there was any change of attitude. The S was told that since a delayed post-test was planned, they would have to stand by their position for three months. This was done to maximize commitment. It was assumed that high commitment would lead to high dissonance. Thus an inverse relationship was expected between monetary inducement and attitude change in this condition. This situation was expected to be most similar to the face-to-face situation in the original Festinger and Carlsmith study.

The second condition, video takeback, was designed to eliminate some of the dissonance created in the first condition. Ss were given the same instructions except they were told that they could explain their true feelings, "take back" what they had said, at the end of the video tape. This would be played to the audience after they had completed the attitude survey. No specific relationship was predicted between monetary inducement and attitude change in this condition.
Ss in the third condition made anonymous audio tapes. Even less dissonance was expected in this condition since the tapes were not visual and there was no identification of the person speaking. It was expected that the relationship between monetary inducement and attitude change would be significantly more positive or direct, in this condition than in either of the other two conditions.

Analysis of the results revealed main effects for money and commitment and a significant interaction effect. As predicted, there was an inverse relationship between financial inducement and attitude change in the video no-takeback condition. An inverse relationship was also found in the video takeback condition. Thus a dissonance effect was found in these two conditions. As expected, the relationship in the audio condition was significantly more positive than either of the other two conditions.

It was concluded that several of the hypotheses explaining the results of Carlsmith, Collins and Helmreich (1966) had been eliminated. First, the manipulations did not increase the role-playing difficulty in the different conditions. No difference was found in the quality of the speeches and Ss in all groups both thought up arguments and presented them. Second, the video conditions were not more crisis-like than the audio condition and should not have made the S more suspicious of the E.

The authors concluded that the degree of commitment was an important determinant of the magnitude of attitude change produced at different levels of justification. With low monetary inducement
(low justification), a great deal of dissonance is created. As commitment is lessened, less dissonance is created.

A significant interaction had been predicted between financial inducement and the S's ability to "take back" his counterattitudinal speech. In the no-takeback condition, an inverse relationship had been expected. No specific relationship had been hypothesized in the takeback condition, but the slopes of the interactions were expected to differ significantly. The failure to find this difference might have been due to a failure of the manipulation to allow Ss to actually undo their behavior. But the authors suggest that this explanation does not explain the main effect for commitment.

There was more attitude change and, by inference, more dissonance in the no-takeback video condition. Thus the takeback condition must have produced less dissonance. Since the only difference between these conditions was the S's ability to take back his behavior, it must have had some effect on the amount of dissonance created.

The fact that the slopes were not significantly different suggests that the same process may have been involved in both conditions. The slope of the audio condition, being very different, indicates that the process here was not totally the same.

In view of the Nel, Helmreich and Aronson interpretation of dissonance, one may look at the failure to find a difference between the slopes in another way. Consider the subject-audience relationship. The S was told nothing about the persuasibility of the audience. But, since the E said that he was going to try to change the opinions
of that audience, Ss might easily infer that members of the audience were "persuasible." Although in the takeback condition the S was allowed to express his true feelings, this part of the tape was not played until after the audience was to have been surveyed. And, the S knew this. Therefore, the audience would not have had an opportunity to know the S's true feelings while completing the survey. Thus the S might feel responsible for any changes in attitude that the audience would indicate on their survey even though he had been able to explain his true position. Also he might feel responsible for whatever uses the Es had planned for the results of these surveys. Thus, commitment and the consequences of one's speech on the audience were confounded, and both of these factors may lead to increases in dissonance and attitude change.

The purpose of this study is to test this explanation for the failure of Helmreich and Collins to obtain a difference between the slopes of the two video conditions and to further examine the dissonance interpretation of Nel, Helmreich and Aronson (1969).

Ss will be asked to think up and make video tapes of counter-attitudinal speeches to be played to an audience. This should create a high level of commitment. The Ss will be told that these tapes will be used to try to change the opinions of the audience. Thus, the consequences of the S's behavior should be serious and possibly "harmful." If, however, the S is told that, for some surreptitious technical reason, the tape is destroyed and thus not used, there will be no consequences in terms of the audience. And, the S should not feel responsible for "harming" the audience in any way.
Audience persuasibility will be independently varied also. The S will be told that her speech will be delivered to either an uncommitted audience or to one already in agreement with the topic.

Several different predictions are possible:

Hypothesis 1: From the Festinger and Carlsmith interpretation of dissonance, one would expect more dissonance in the intact video-tape condition regardless of the audience factor. Thus there would be more attitude change in the intact than the destroyed video-tape condition.

Hypothesis 2: According to Nel, Helmreich and Aronson, dissonance should be aroused and lead to attitude change in the uncommitted-audience condition. If the tape is destroyed, however, then there are no consequences of the S's actions and thus little dissonance. Therefore, attitude change should occur in the uncommitted-audience, intact-tape condition.

Hypothesis 3: Results of McMartin (1972) suggest that there should be more attitude change as the result of a reinforcement effect from an agreeing audience. He found that Ss who gave counter-attitudinal speeches to an agreeing (with the speech) audience changed their opinions more than a disagreeing or a neutral audience.

The author predicts an interaction effect following the prediction of Nel, Helmreich and Aronson. In order to explain the Helmreich and Collins data, an interaction should be found within the uncommitted-audience condition. The intact-tape S should show significantly more attitude change than the destroyed-tape Ss. It is not known if one's willingness to persuade an uncommitted audience...
alone (as in the destroyed-tape, uncommitted-audience condition) will produce enough dissonance to alter the S's attitudes. If there is any attitude change in this condition, it is expected to be somewhat smaller than the attitude change in the intact-tape, uncommitted-audience condition.

If there is any real attitude change, then it would be interesting to see if this change would last beyond the experimental setting. Thus, the E will send out a long-term post-test to all Ss approximately two months after the experiment.

In order to maximize the possibilities for dissonance, there will be a great freedom to reject participation in the experiment. Also, since each S makes a video tape which she believes will be used to try to change attitudes, there should be high public commitment on the part of the S. This commitment is the same across the treatment groups.

The choice of the topic is considered critical. Several requirements have to be fulfilled. First, to obtain a high commitment, the topic has to be salient for the female Ss. Second, since some Ss are to be told that the audience holds a position opposite that of their personal beliefs, it has to be plausible that people could have opinions on both sides of the topic. Third, in order to increase dissonance as defined by Nel, Helmreich and Aronson, the S has to believe that the consequences of her actions might be harmful. The topic which was chosen was: "Legalized Abortions Should Be Banned."
METHOD

Design

A 2 x 2 factorial design was used. The two levels for the initial opinion of the audience were uncommitted and agree with the counterattitudinal topic. The levels of the media condition were tape-destroyed and tape-intact.

Subjects

Ss were 64 female introductory psychology students. They participated in this experiment to fulfill a course requirement that all students participate in a minimum number of experiments.¹

Procedure

Pre-test: The E surveyed several introductory psychology classes. She said that she was administering a standard survey used to measure student attitudes on a number of issues. She indicated that this was something done regularly by psychologists in the department as a basic data on student attitudes.

The pre-test consisted of 13 items on two pages. The topic question was number nine on the second page (see Appendix A). At the top of the survey there were places for the students to fill in their name, age, sex, and year in school. The instructions were to circle the number which represented their opinion on each issue. The scale varied from 1 (strongly agree) through 5 (neutral), to 9 (strongly disagree).

¹Twelve Ss refused to participate. Two Ss were eliminated because they spoke opposite the topic.
After the survey was completed, the E said that she had also brought some sign-up sheets for an experiment that she was doing. She said that this was separate from the survey and that she had brought it to class because it was for females only. She indicated that when it was put up on the sign-up board, many males mistakenly signed up and they could not be given any experimental credit. Students were told that this was a study on communication processes and that two units of credit were to be given for it.

**Experimental sessions:** Ss reported to the experiment between one and three weeks after the pre-test. Only Ss with scores of 7, 8 or 9 were used. This was the upper third of the scoring range and indicated that the S disagreed with the topic. Ss were randomly assigned to one of four treatment conditions: (1) uncommitted audience, tape destroyed; (2) uncommitted audience, tape intact; (3) agreeing audience, tape destroyed; (4) agreeing audience, tape intact.

Due to a lack of available Ss, half of the Ss were run during one semester and half during a second semester. In the first semester 27 Ss were run and during the next semester 37 Ss were run.

Instructions in the treatment groups paralleled as closely as possible the instructions in the Helmreich and Collins study.

Upon entering the experiment, all Ss were told: "This is a study on communication processes. We are interested in persuasive communications and attitude change. We would like to know how introductory psychology students will react to some persuasive communications. What we do is present some communications to them
and then afterwards test them to see if we have been able to change their opinions. Right now, we are working with video tapes. In order to remove the effects of a particular personality or speaker type, we are using a number of different people as speakers. We could have hired an actress to do it, but we wanted a real-person, natural approach. The topic we have chosen is "Legalized Abortions Should Be Banned."

"What we want you to do is to help us by making a video tape advocating that topic. Then we will play the tape for that introductory psychology class to see if we can alter their opinions. After we have measured their attitude, we will tell them that this has all been part of an experiment."

"Do you think you can help us out?"

After receiving an answer, the E gave no reinforcement for participating, such as: thank you, we really need your help, etc. The E said, "We have prepared some arguments here which you can use as a basis for your speech."

E hands S a paper with the following four arguments on it:

1. Abortions are immoral.
2. Abortions disregard the right of the unborn child to live.
3. Legalizing abortions will lead to more promiscuous behavior because the consequences of that behavior will be diminished.
4. Couples not wanting children should rely on preventive measures rather than abortions.
E continues, "You may use these or any other arguments that you think of, or any combination. This is sort of a starter point for you to use for your speech. You simply state your name, hometown, major and year in school, and then give your speech."

Here the instructions differed according to which audience condition the S had been randomly assigned. For the uncommitted-audience condition, the E said, "We have already pre-tested this group once and found that they are uncommitted on this topic. We are going to see if we can change their opinions."

For the agreeing-audience condition, the E said, "We have already pre-tested this group once and found that they are already in favor of this position. We are going to see if we can make them even more in favor of it."

Then the E left the room saying that she wanted to check the tape. She said that she had been having a lot of trouble with the video tapes and the technician suggested she change tapes. This would take a few minutes so she would give the S about five minutes to look over the arguments and decide what she wanted to say while the E tried to get the video tape ready.

After five minutes, the E returned and asked if the S was ready. After receiving a positive response, the E explained that the camera was controlled from the control room and that there was no light on it for the S to see when it was on. She said that she would go and turn on the camera and focus it and then tell the S over the microphone when to start. This was done to make the S believe that the camera was really going to be used since there was no way of
telling this from inside the experiment room. Finally, the E also restated the audience condition.

No time limit was given, but all Ss were to be stopped if they exceeded 15 minutes. All speeches were timed.

The E did not actually video tape the speeches. A small portion of the speeches was audio taped.

After the S finished her speech, the E responded differently, depending on the tape condition of the S. For the intact-tape condition, the E played back over the microphone a small portion of the S's speech. Then she returned to the experiment room and said, "I just wanted to play back a little of the speech to make sure that the tape was working, and it was. We got the whole speech on tape."

For the destroyed-tape condition, the E responded in the following way. After the speech was completed, the E played back a prepared tape of noise. This was a tape of scratches and static. Then the E returned to the experiment room and said, "I don't know what happened. I've had so much trouble with that tape machine. The technician said it should work, but it doesn't. I wanted to play back a little of the speech to check the tape but I guess you heard what I got. It didn't work at all and we didn't get any of the speech on tape."

Post-test: Then all Ss were asked to fill out a questionnaire "to get their reactions to this situation and also to get an idea of their feelings on the topic." The E left the room, supposedly to rewind the tape, while the S completed the post-test. The post-test consisted of seven questions including the topic question, its
importance, evaluations of the speech, how comfortable the S was, and her reactions to the audience. The same nine-point scale used in the pre-test was used here.

After the post-test was completed, the E questioned the S to see if she had any suspicions about the experiment, to see if she felt very pressured into participating, and to see what other reactions she had. Then the E told her the real purpose but not the specific predictions of the study. She was also asked not to discuss this with any other potential Ss. The E also said that they expected a lot of controversial material about abortions to be in the news in the near future, and the S was asked if the E could send her a card in about two months asking if her opinions were about the same. The S's address was taken and she was assured that all information would remain confidential.

**Long-term post-test:** About two months after the post-test, the E sent surveys to the Ss. It contained two questions: the topic question and a question asking the importance of this issue. The same nine-point scale was used.
RESULTS

Analysis of the post-test data showed no clear support for any of the hypotheses. A difference score was obtained for the topic question, "Legalized Abortions Should Be Banned," by subtracting the post-test scores from the pre-test scores. Higher scores indicated greater change in the direction of the topic. A 2 x 2 analysis of variance revealed no significant differences between the groups and a nonsignificant interaction effect. The most change occurred in the uncommitted-audience, tape-destroyed condition. Results of this analysis are shown in Table 1. Cell means are shown in Table 2.

The second question on the post-test was designed to measure the salience of the topic for the Ss. It was: "How important is this issue?" This question was used as another measure of dissonance reduction. Since all Ss were randomly assigned to the treatment conditions, prior differences in salience were not expected. However, if dissonance was aroused, Ss could have reduced it by a change in opinion and/or a change in the salience of the topic; make the topic less important and thus reduce the dissonance. An analysis of variance for this question showed a near-significant main effect for the audience condition ($F = 3.48$, $df = 1, 60$; $F = 4.00$, $df = 1, 60$, $p < .05$ required). The uncommitted-audience Ss rated the topic less important than the agreeing-audience Ss did. Results are shown in Table 3.
Analysis of the third question, "How comfortable were you when giving the speech?" showed no significant differences between the groups. Likewise, no significant differences were found for the question, "How persuasive was your speech?" although there was a nonsignificant main effect for audience. The agreeing-audience Ss rated their speeches slightly more persuasive than the uncommitted-audience Ss.

As can be seen in Table 4, there was a significant main effect for the audience factor ($F = 6.70$, $df = 1, 60$, $p < .05$) for the question, "How would you rate the overall quality of your speech?" The agreeing-audience Ss rated their speeches better than the uncommitted-audience Ss.

Analysis of the question, "How much influence do you think your speech had on the audience?" again revealed a near-significant main effect for the audience ($F = 3.42$, $df = 1, 60$; $F = 4.00$, $df = 1, 60$, $p < .05$ required). The agreeing-audience Ss indicated that they thought their speeches would have more influence than the uncommitted-audience Ss.

No significant differences were found for the question, "How much do you think you would like a typical member of the audience?"

All speeches were timed. The length varied from 30 seconds to 285 seconds (four minutes, 45 seconds). The mean length of time was one minute, 52 seconds, and no significant differences were found between the groups.

There were two questions on the long-term post-test. The first question was the topic question. A difference score was
obtained by subtracting the long-term post-test score from the pre-test score. Analysis of variance for unequal cell populations revealed a significant main effect for audience (F = 4.38, df = 1, 44, p < .05) and a significant interaction effect (F = 4.42, df = 1, 44, p < .05). Results are shown in Table 5. Cell means are shown in Table 6. Ss in the uncommitted-audience condition maintained more attitude change than Ss in the agreeing-audience condition. The Ss with the most attitude change were those in the uncommitted-audience, tape-destroyed condition. Analysis of the second question, "How important is this issue?" showed no significant differences between the groups.
TABLE 1
Analysis of Variance of Difference Scores for the Topic Statement

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>MS</th>
<th>F</th>
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<tr>
<td>Media</td>
<td>1</td>
<td>4.00</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Audience</td>
<td>1</td>
<td>.56</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Interaction</td>
<td>60</td>
<td>9.00</td>
<td>1.50</td>
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<tr>
<td>Error</td>
<td></td>
<td>5.99</td>
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</table>

n = 16 per cell
TABLE 2

Cell Means of Difference Scores
for the Topic Statement

<table>
<thead>
<tr>
<th></th>
<th>Uncommitted Audience</th>
<th>Agreeing Audience</th>
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<tbody>
<tr>
<td>Destroyed tape</td>
<td>2.31</td>
<td>1.37</td>
</tr>
<tr>
<td>Intact tape</td>
<td>1.06</td>
<td>1.62</td>
</tr>
</tbody>
</table>

Note: The higher the score, the greater the change in the direction of the topic.
TABLE 3

Analysis of Variance of the Importance of the Issue

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media</td>
<td>1</td>
<td>3.52</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Audience</td>
<td>1</td>
<td>31.64</td>
<td>3.48</td>
</tr>
<tr>
<td>Interaction</td>
<td>60</td>
<td>15.01</td>
<td>1.65</td>
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<tr>
<td>Error</td>
<td></td>
<td></td>
<td>9.09</td>
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</table>

n = 16 per cell
TABLE 4

Analysis of Variance of Subjects' Ratings of the Quality of Their Speech

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media</td>
<td>1</td>
<td>.77</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Audience</td>
<td>1</td>
<td>17.02</td>
<td>6.70*</td>
</tr>
<tr>
<td>Interaction</td>
<td>60</td>
<td>.38</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Error</td>
<td></td>
<td>2.54</td>
<td></td>
</tr>
</tbody>
</table>

n = 16

*Significant p < .05
TABLE 5

Analysis of Variance of Difference Scores for the Topic Question for the Long-term Post-test

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media</td>
<td>1</td>
<td>5.88</td>
<td>2.21</td>
</tr>
<tr>
<td>Audience</td>
<td>1</td>
<td>11.64</td>
<td>4.38*</td>
</tr>
<tr>
<td>Interaction</td>
<td>44</td>
<td>11.76</td>
<td>4.42*</td>
</tr>
<tr>
<td>Within cell</td>
<td></td>
<td>2.66</td>
<td></td>
</tr>
</tbody>
</table>

* Significant p < .05
TABLE 6

Cell Means of Difference Scores
for the Topic Question for the
Long-term Post-test

<table>
<thead>
<tr>
<th></th>
<th>Uncommitted Audience</th>
<th>Agreeing Audience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Destroyed tape</td>
<td>2.00 n = 10</td>
<td>0.00 n = 14</td>
</tr>
<tr>
<td>Intact tape</td>
<td>0.29 n = 14</td>
<td>0.30 n = 10</td>
</tr>
</tbody>
</table>

Note: The higher the score, the greater the change in the direction of the topic.
DISCUSSION

Analysis of the data does not clearly support any of the hypotheses. To be consistent with the Festinger and Carlsmith interpretation of dissonance, there should have been more attitude change for the intact-tape Ss than for the destroyed-tape Ss regardless of the audience condition (hypothesis 1). This was not found.

The predictions of the author followed the interpretation of Nel, Helmreich and Aronson. This was the second hypothesis. The most attitude change should have occurred for the uncommitted-audience, tape-intact Ss since these Ss should have experienced the most dissonance. And, a smaller attitude change might have occurred for the uncommitted-audience, tape-destroyed condition. This would happen if "choosing to mislead" a persuasible audience was enough to create dissonance even though the tape was destroyed. Neither of these results was found.

Results favoring the interpretation given by McMartin would have revealed more attitude change for the agreeing-audience Ss than for the uncommitted-audience Ss. This was hypothesis 3. These results were also not found. However, analysis of the rest of the data showed some reinforcement effects from the agreeing-audience condition. Ss in this condition indicated that they thought their speeches were better and would influence the audience more than the Ss in the uncommitted-audience condition. These Ss may have expected that an audience already in agreement with the topic would be more favorable toward their speeches.
The failure to replicate either dissonance or reinforcement effect findings may be due to several factors.

All Ss knew that after their speeches were heard by the audience, the Es would survey the audience and then tell them that this was really an experiment. While this was done to make the situation similar to the take-back video condition in the Helmreich and Collins study, the Ss may have felt little dissonance because their behavior would be undone to some degree.

Although Ss were run individually, they usually saw other Ss waiting and knew that other students were participating. Thus they may have felt that the other Ss shared with them the responsibility for any consequences of their speeches.

The dissonance situation as described by Nel, Helmreich and Aronson, holds for Ss with a high self-esteem; that is, they believe they are "good, decent, worthwhile" people who would not commit indecent acts. Thus cognitions which are discrepant with the S's self-esteem evaluation should lead to dissonance. The higher the self-esteem of the Ss, the more dissonance he should experience. However, in both the Nel, Helmreich and Aronson, and the Helmreich and Collins studies, the Es may have actually increased the S's self-esteem above their normal levels. This may have occurred in two ways. First, Ss were individually called by phone and asked to participate in an experiment. Then, during the experiment, a second E entered and asked for the S's help. The E explained that his assistant had not arrived in time and he needed help in making some video tapes. Both of these manipulations may have made the
feel important and given him a sense of satisfaction at having helped someone else. Thus his self-esteem may have been greatly increased. In this study the S simply signed up to participate as she would for any experiment and no special significance was attached to her participation.

Following the interpretation of Nel, Helmreich and Aronson, the use of an uncommitted peer group audience should have generated some dissonance for the Ss. However, the agreeing-audience Ss indicated that they thought they would have more influence on their audience than the uncommitted-audience Ss. And, Ss in the uncommitted audience did not rate their speeches as very persuasive. In fact, they rated them as neutral. Ss in the agreeing-audience condition rated their speeches as more influential and persuasive. Thus Ss in the uncommitted-audience condition may not have believed that they would be very convincing and may have treated the speech-writing situation as a mental exercise.

Dissonance might be reduced by believing that one's speech would not be persuasive enough to influence the audience. This might be the case especially if Ss do not have a high level of self-esteem.

It is also possible that Ss did not see the topic position as being a harmful one. In effect, they were advocating not killing a fetus. This might even be seen as a humanitarian position. Perhaps arguments in the opposite direction would have been more powerful, having Ss opposed to abortions argue in favor of them.
The topic used in this study may not have the same behavioral implications as the one used in the Nel, Helmreich and Aronson study (legalizing the use of marijuana). The decision to have an abortion may be seen as a more personal and somewhat more distant one than the decision to try marijuana. Members of an audience who change their attitudes in favor of legalizing the use of marijuana may be seen as more willing to go out and try it, and a change in attitude of the entire group may have created an added impetus to try marijuana. Thus the two topics may be very different in terms of how the Ss perceive the effects of their speeches on the audience.

Also, Ss may have believed that they would not have had an abortion themselves, but that there were some cases in which it should be possible to have one; for instance, in the case of a medical problem in which the mother's life was threatened. The use of the question, "Do you think you would ever have an abortion?" might have led to different results.

As for the agreeing-audience condition, Ss may not have believed that a peer group (introductory psychology students) would agree with the topic since it was not consistent with what most college students believe. In fact, several Ss indicated great surprise at this position. This might make the audience less "credible" and thus remove their reinforcing effects.

It was expected that if there was any real attitude change, then this change might last beyond the experimental setting. Thus significant long-term change was expected if there had been significant attitude change on the post-test. However, with no significant
differences between the groups on the post-test, it is difficult to explain the significant main effect and interaction effect found on the long-term post-test. The one condition which seemed to be responsible for the significance was the uncommitted-audience, tape-destroyed condition. In fact, Ss in this condition showed the most attitude change on the post-test, although this was not significant. There seems to be no simple explanation for this result. If the uncommitted-audience condition did create more dissonance than the agreeing-audience condition, then Ss who were told that their tapes were intact may have felt that they had done the task and completed the experiment. However, Ss who had expended some energy doing the task, when told that the tape was destroyed, might have felt that the situation was incomplete. And, analogous to the Zeigarnick effect, the unfinished task that they performed and the arguments they used may have remained more prominent in their minds and created more "tension" or dissonance for Ss in this condition than for Ss in the other conditions. These Ss may have then been motivated to decrease the dissonance by changing their attitude. This situation may have also created a biased scan effect. This process could be examined by asking Ss how much of their speeches they remembered on the post-test. More content should have been remembered by the uncommitted-audience, tape-destroyed Ss if this were the case.
REFERENCES
REFERENCES


APPENDIX A

GENERAL SURVEY OF ATTITUDES

Name___________________________
Age______________ Sex______________ Class________________

Instructions: Circle the number which represents your opinion on each issue.

1. Capital punishment should be abolished.
   1 2 3 4 5 6 7 8 9
   strongly agree neutral strongly disagree

2. The International Olympics should be discontinued.
   1 2 3 4 5 6 7 8 9
   strongly agree neutral strongly disagree

3. Those men who left the country to avoid being drafted should be given complete amnesty.
   1 2 3 4 5 6 7 8 9
   strongly agree neutral strongly disagree

4. Smoking marijuana should be legalized for those persons over 21.
   1 2 3 4 5 6 7 8 9
   strongly agree neutral strongly disagree

5. The legal drinking age should be lowered to 18.
   1 2 3 4 5 6 7 8 9
   strongly agree neutral strongly disagree

6. Admissions standards at California State University should be raised.
   1 2 3 4 5 6 7 8 9
   strongly agree neutral strongly agree
7. There should be government control of family size.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>strongly agree</td>
<td>neutral</td>
<td>strongly disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tbody>
</table>

8. Manned space flights should be continued.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>strongly agree</td>
<td>neutral</td>
<td>strongly disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Legalized abortions should be banned.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>strongly agree</td>
<td>neutral</td>
<td>strongly disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. Newsmen should be required to reveal the sources of their stories.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>strongly agree</td>
<td>neutral</td>
<td>strongly disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. Busing should not be used as a tool for integrating schools.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>strongly agree</td>
<td>neutral</td>
<td>strongly disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. Researchers should be allowed to use LSD as an experimental drug.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>strongly agree</td>
<td>neutral</td>
<td>strongly disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. All hand guns should be registered with the police.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>strongly agree</td>
<td>neutral</td>
<td>strongly disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# APPENDIX B

## SPEAKER'S EVALUATION

**Name**

Instructions: Circle the number which represents your opinion.

1. Legalized abortions should be banned.
   - 1 2 3 4 5 6 7 8 9
     - strongly agree
     - neutral
     - strongly disagree

2. How important is this issue?
   - 1 2 3 4 5 6 7 8 9
     - very important
     - neutral
     - very unimportant

3. How comfortable were you when giving the speech?
   - 1 2 3 4 5 6 7 8 9
     - very comfortable
     - neutral
     - very uncomfortable

4. How persuasive do you think your speech was?
   - 1 2 3 4 5 6 7 8 9
     - very persuasive
     - neutral
     - very unpersuasive

5. How would you rate the overall quality of your speech?
   - 1 2 3 4 5 6 7 8 9
     - very good
     - neutral
     - very poor

6. How much influence do you think your speech had on the audience?
   - 1 2 3 4 5 6 7 8 9
     - very much
     - neutral
     - very little

7. How much do you think you would like a typical member of the audience?
   - 1 2 3 4 5 6 7 8 9
     - very much
     - neutral
     - very little
APPENDIX C

ACCOMPANYING LETTER TO LONG-TERM POST-TEST

May 8, 1973

Dear

This semester you participated in an experiment entitled, "Communication Processes." During the experiment you were asked to make a speech on the topic: "Legalized Abortions Should Be Banned." At the end you were asked if we could send you a card in a couple of months asking for your current feelings on this topic.

Please fill out the enclosed questionnaire and send it to me by return mail. I will send you a copy of the results in June at the conclusion of this study.

Thank you for your cooperation,

Susan Kapitanoff
APPENDIX D

LONG-TERM POST-TEST

Questionnaire

Instructions: Circle the number which represents your opinion.

1. Legalized abortions should be banned.

1 2 3 4 5 6 7 8 9
strongly agree neutral strongly disagree

2. How important is this issue?

1 2 3 4 5 6 7 8 9
very important neutral very unimportant