

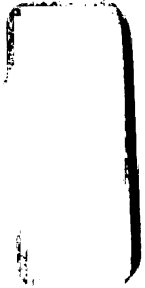
SUSPENSION OF CRITICAL JUDGMENT: AN
APPROACH TO ROLE-PLAYING INDUCED
ATTITUDE CHANGE

Thesis for the Degree of M. A.
MICHIGAN STATE UNIVERSITY
DOUGLAS MARION LITTLE
1971

THESE



LIBRARY
Michigan State
University



ABSTRACT

SUSPENSION OF CRITICAL JUDGMENT: AN APPROACH TO ROLE-PLAYING INDUCED ATTITUDE CHANGE

By

Douglas Marion Little

This research tested a derivation from a new formulation of the role-playing--attitude-change relationship. Termed the suspension of critical judgment approach, this new proposition points to the critical role of defensive reactions in moderating the attitudinal consequences of counterattitudinal advocacy. In attempting to demonstrate the utility of this new position, the present research focused on the general hypothesis that role-playing is particularly effective in inducing attitude change to the extent to which the act of portraying an attitude position not one's own leads to a disengagement or circumvention of the defensive reactions frequently accompanying the reception of counterattitudinal material.

It was specifically hypothesized that both passive exposure to a counterattitudinal communication and active involvement in the expression of a counterattitudinal communication produce a significant amount of attitude

change in the direction of the counterattitudinal position. More importantly, it was hypothesized that active involvement in the expression of a counterattitudinal communication leads to a greater amount of attitude change than passive exposure to the counterattitudinal communication when there is no mention of the persuasive intent of the counterattitudinal communication.

In the 2 X 4 factorial design used to test the above hypotheses, all experimental subjects were asked to read a 1,000-word essay arguing against an all-volunteer army. One member of the pair of subjects present at each session was asked to use the material to improvise a counterattitudinal speech while the other member was asked to outline the material. In an orthogonal manipulation, one-fourth of the subjects were warned about the persuasive intent of the essay before reading it, one-fourth were warned after reading it, one-fourth were warned before the dependent variable measures were distributed, and one-fourth of the subjects were not specifically warned about the persuasive intent of the essay. A control group of subjects who merely filled out a questionnaire about national issues supplemented the design.

The first hypothesis concerning the effectiveness of both active and passive methods of exposure to counterattitudinal material was confirmed, although not as strongly as expected. The interaction predicted by the

second hypothesis was not confirmed. Not only was there no tendency for the mention of persuasive intent manipulation to reduce the superiority of active counterattitudinal advocacy over passive exposure, there was a slight tendency (.08) for passive exposure to lead to more attitude change than exposure involving active participation.

A check on the manipulation of persuasive intent revealed that it did not have the intended effects. It was suggested that, since both an active and a passive participant were present at each experimental session, the role assignment procedures may have interacted with the mention of persuasive intent manipulation to create differential feelings of relief. Presumably, the feelings of relief produced differential attitude change. It was recommended that future role-playing research avoid designs in which two subjects are present at an experimental session where there is only one counterattitudinal performance to be given. The relevance of certain dependent variable measures for the attention, improvisation, and satisfaction hypotheses was also discussed.

SUSPENSION OF CRITICAL JUDGMENT: AN
APPROACH TO ROLE-PLAYING INDUCED
ATTITUDE CHANGE

By

Douglas Marion Little

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF ARTS

Department of Psychology

1971

to the other members of the Little family--
my mother, father, brother, grandmother,
and grandfather

ACKNOWLEDGMENTS

I would like to thank the members of my committee for providing a standard of excellence that will serve me well throughout my career. Special thanks are due to my chairman, Dr. Eugene Jacobson, for his patience and continued reassurances; to Dr. William Crano for his insights about research design and aid in data analysis; and to Dr. Lawrence Messé for his challenging questions about the nature of defensive, belief-maintaining processes and his advice about life in the academic world.

My close friends Bob Homant, Bob Ruh, and Karen Sanderson also contributed invaluable advice and support at critical points during the course of this research. I can not thank them enough.

I am also grateful to the Cooperation/Conflict Resolution Group of Michigan State University for providing access to their subject pool. Department Chairman, Dr. Lawrence O'Kelly, and Mr. Roger Halley were extremely helpful in granting and administering the funds used to encourage students to participate in this research.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
The Problem	1
Explorations of the Role-Playing- Attitude Change Relationship	3
The Dissonance Hypothesis.	4
The Improvisation Hypothesis.	23
The Biased Scanning Hypothesis	29
The Attention Hypothesis	32
The Satisfaction Hypothesis	33
The Effort Hypothesis	36
Defensive Reactions and the Role-Play- ing--Attitude-Change Relationship	43
Evidence Concerning the Role of Defensive Reactions	45
The Suspension of Critical Judgment Approach.	54
Hypotheses and Rationale	62
II. METHOD	70
Overview	70
Subjects	71
Attitude Topic and Essay Material	72
Procedure	73
Manipulation of Role-Playing Variable.	74
Manipulation of Persuasive Intent	76
Control Condition	76
Dependent Measures	77
Attitudes Toward National Issues	77
Evaluation of the Improvised Talk	77

Chapter	Page
Perception of Essay and Its Source . .	78
Recall	78
III. RESULTS	79
Check on Premanipulation Equivalence of Experimental Subjects.	79
Assessment of Experimental Manipulations .	81
Type of Exposure	81
Mention of Persuasive Intent	81
Test of Hypotheses	86
Hypothesis 1	86
Hypothesis 2	88
Supplementary Analyses	90
The Attention Hypothesis	90
The Improvisation Hypothesis	90
The Satisfaction Hypothesis	93
IV. DISCUSSION	96
REFERENCES	109
APPENDICES	
Appendix	
A. Counterattitudinal Communication.	114
B. Postexperimental Questionnaire	120

LIST OF TABLES

Table	Page
1. F Statistics and Associated Probability Values from Analyses of Variance of the Nonmanipulated Attitude Issues . . .	80
2. Means and Analysis of Variance of Subjects' Self-Perceptions of Their Thoughts About Persuasive Intent.	83
3. Means and Analysis of Variance of Subject's Ratings of Fairness of the Essay. . . .	85
4. Means of Attitude Toward an All-Volunteer Army for Experimental and Control Groups	88
5. Analysis of Variance of Attitude Toward an All-Volunteer Army Scores for the Experimental Subjects	89
6. Means and Analysis of Variance for Recall Scores for Experimental Subjects. . . .	91
7. Correlation Between Attitude Toward an All-Volunteer Army and Length and Rated Overall Persuasiveness of Performance for Active Participation Subjects . . .	93
8. Correlation Between Attitude Toward an All-Volunteer Army and Self-Rating of Performance for Active Participation Subjects.	95

CHAPTER I

INTRODUCTION

The Problem

It seems an understatement to suggest that the area of counterattitudinal advocacy is controversial. Attempts to account for the attitude change effects accompanying counterattitudinal advocacy have provided little closure, in spite of nearly 20 years of research. To be sure, a relatively large number of mediating mechanisms have been proposed and investigated. However, about the only conclusion the student of persuasion can have much confidence in is that, under an apparently broad range of conditions, role-playing procedures lead to a significant amount of attitude change in the direction of the publicly portrayed position. Extant explanations of the role-playing effect remain largely problematic.

A reappraisal of the findings and conclusions from various studies in the role-playing area provides a basis for yet another explanatory proposition, but one which may serve to clarify and integrate the theory and research in

51

32

7

22

25

6.

25

11.

(11)

2

2

1

3

9

!

1

this area of counterattitudinal advocacy. Generally, this new position, to be termed the "suspension of critical judgment" approach, states that the attitude change effects associated with the public expression of an attitude-discrepant point of view are primarily a function of the manner in which defensive reactions such as counterargumentation and source and communication derogation are moderated by role portrayal.

The major purpose of the present endeavor is an elaboration and testing of a new formulation designed to account for role-playing induced attitude change. The discussion begins with a selective review of evidence from investigations of the influence of counterattitudinal advocacy on private attitudes and of the theoretical explanations proposed to account for this evidence. An effort is made to support the rather nonspecific claim made above that current explanations of the role-playing effect are inadequate or unsatisfactory. Next, data and speculation are presented which suggest that psychological resistance and defensive reactions are critical factors in role-playing--attitude-change dynamics. This review provides the background for a more detailed and thorough discussion of the new formulation being presented in this thesis. Finally, hypotheses based on one of the implications of this formulation are presented.

315

52

22

20

 $\mathbb{N}_0$

20

5

33

25

3.

v.

2

Explorations of the Role-Playing--
Attitude-Change Relationship

For the present discussion the focus of interest is on those behaviors which may be characterized as a person's involvement in presenting an attitude-discrepant position as though it were the person's own position. Several reviewers have ably recorded the rather large body of research literature which suggests that under a wide range of conditions this active involvement in the processing of counterattitudinal material leads to a marked amount of attitude change in the direction of the public expression (Collins, 1970; Elms, 1967; Insko, 1967; McGuire, 1966, 1969(a); Sears & Abeles, 1969).

Even more interesting and informative than the findings of the general efficacy of counterattitudinal advocacy are the data which indicate that exposure to information by means of active participation in the expression of counterattitudinal material leads to a greater amount of attitude change in the direction of the publicly portrayed position than does a more passive form of exposure to the counterattitudinal material (Culbertson, 1957; Harvey & Beverly, 1961; Janis & King, 1954; Janis & Mann, 1965; King & Janis, 1956; Scott, 1957). The enhanced effectiveness of role-playing procedures has also been reported in terms of the temporal persistence of the attitude-change effects (Elms, 1966; Mann & Janis, 1968; Watts, 1967).

The following review is directed toward an appraisal of the various propositions which have been put forth to account for the attitude-change effects referred to above. The major explanations to be covered include dissonance, improvisation, and biased scanning, although the satisfaction, attention, and effort hypotheses will also be considered. In introducing another concept or mechanism there is a certain need for justification, and it is to this need that the present review is primarily directed. Hopefully, this discussion will clarify the inadequacies and shortcomings of current theoretical rationales for the so-called role-playing effect and, at the same time, begin to suggest the need for and the elemental aspects of a new explanatory proposition.

The dissonance hypothesis. Dissonance theory can easily be seen as the most dominant force in the area of counterattitudinal advocacy. The classic version of the theory as expressed by Festinger (1957) in A Theory of Cognitive Dissonance contains rather uncomplicated predictions about the cognitive consequences of counterattitudinal behavior. Basically, the theory indicates that (1) if a person has engaged in attitude-discrepant behavior and (2) if the person feels or perceives that the behavior does not follow from or is inconsistent with his attitudes or beliefs with respect to the matter,

then the person will experience cognitive dissonance. This state of cognitive dissonance is presumed to be a psychologically aversive one which the person will be motivated to reduce or eliminate--the more so the higher the level of dissonance. One of the several ways in which this dissonance can be resolved is by an alteration of the attitude in question so that the attitude becomes consistent with the counterattitudinal act.

Thus, Festinger would explain the attitude change resulting from counterattitudinal advocacy as due to dissonance reduction. An additional feature of dissonance theory concerns the nature of the pressures used to induce the counterattitudinal behavior. It was postulated that the greater the justification (whether monetary reward, threat of physical harm, or otherwise) for the discrepant act, the less dissonance produced and consequently, the less the need for attitude change. Furthermore, the level of inducement just sufficient to elicit the inconsistent act should yield the maximum amount of dissonance. That is to say, in a role-playing situation an inverse relationship should exist between justification and attitude change. To take reward for an example, it is predicted that the more a person is paid for saying something he does not believe, the less he should change his attitude in the direction of the public performance.

The first dissonance derived investigation of counterattitudinal advocacy was the, now classic, study by Festinger and Carlsmith (1959) which examined the influence of the reward variable on the cognitive reactions to forced compliance. In that experiment subjects were engaged for approximately an hour in very repetitive and monotonous tasks and were then led to believe the experiment was over. At this point, experimental subjects were induced (by the promise of either \$1 to \$20) to help out the experimenter in his alleged study of the effects of expectations on performance. The subjects were asked to misrepresent the nature of the study they had just taken part in to a fellow student by indicating that the dull experiment had actually been interesting, enjoyable, lots of fun, intriguing, and exciting. Control subjects took part in the boring tasks but were not asked to deceive another student. Subsequently, in a study divorced from the one in which forced compliance had been obtained, the subjects expressed their feelings about the various aspects of the previous experiment. The results were consistent with the dissonance theory predictions. Subjects paid \$1 found the experiment significantly more interesting and enjoyable than either control subjects or subjects paid \$20. The latter two groups were not significantly different on the mentioned attitude dimension.

Additional, somewhat dramatic, evidence in support of the dissonance theory predictions was collected by Cohen (1962). It seems that in 1959, the annual spring "riot" at Yale had been met by an unexpected and massive retaliation by the New Haven police department. Since this annual venture had been traditionally a more or less harmless, aimless affair, the student sentiment was overwhelmingly against the police action. Shortly after the riot, subjects were approached by a person who presented himself as a fellow student working for the Institute for Human Relations. The subjects were asked, for varying degrees of reward (\$.50, \$1, \$5, and \$10), to write an essay in favor of the action taken by the New Haven police. Under the guise of getting relevant arguments on both sides of the issue, subjects were asked to write "the strongest, most forceful, most creative and thoughtful essay you can, unequivocally against your own position and in favor of the police side of the riots (p. 75)."

An analysis of the attitude data revealed, as predicted, a significant linear trend; most change was demonstrated by the subjects in the \$.50 condition and least change was shown in the \$10 condition. The \$10, \$5, and control groups were not significantly different in terms of attitude toward the New Haven police action, while the \$.50 condition differed significantly from all the other conditions. The \$1 subjects differed

significantly from subjects in all other conditions but those in the \$5 condition. It can be seen that in both studies the more a subject was paid for taking a counter-attitudinal position, the less he changed his attitude in the direction of the publicly proclaimed position, and the dissonance theory predictions were confirmed.

The studies by Festinger and Carlsmith (1959) and Cohen (1962) have generated a great deal of critical analysis and subsequent research. Basically, the criticisms of the classical dissonance theory explanation of the role-playing effect can be placed into two main categories. First of all, there are a set of objections which suggest that the data which apparently support the dissonance predictions can be more appropriately and accurately interpreted in terms of some alternative proposition. In the second category are a number of suggestions which, in general, can be taken to say that the original dissonance theory statements were over extended and that the range of behavioral situations to which the theory can address itself are much more circumscribed than initially anticipated.

A number of observers, most notably Chapanis and Chapanis (1964), Rosenberg (1965) and Janis (Janis & Gilmore, 1965; Elms & Janis, 1965), have warned that the dissonance manipulations may have created internal states other than or in addition to the ones intended thus

permitting alternative interpretations of the data. All have suggested that the monetary reward manipulations may have created, in some form or another, interfering psychological reactions. Chapanis and Chapanis (1964) specifically suggested that the high reward in the Festinger and Carlsmith (1959) study was so incredible or implausible that it produced wariness and suspicion in the subjects. This resistance was held to be more prevalent in the high reward condition and, as a result, responsible for the inverse relationship between reward and attitude change.

Janis and Gilmore (1965) in reinterpreting the Festinger and Carlsmith (1959) study, spoke of "some degree of suspicious wariness about being exploited by the experimenter or some degree of guilt about being 'bought' to lie to a fellow student [p. 18]" and suggested that this wariness or guilt could account for the observed attitude change effects. Janis and Gilmore (1965) assumed that the sponsor in the Festinger and Carlsmith (1959) study was negatively perceived and that this led the subjects in the \$20 reward condition to experience more "suspiciousness, guilt, or other negative feelings [p. 26]" than the subjects in the \$1 reward condition. Presumably the relationship between reward and attitude change would be direct under favorable sponsorship.

In their own study, Janis and Gilmore (1965) manipulated reward (\$1 and \$20), sponsorship (positive-public welfare and negative-commercial), and condition of role-playing (mere commitment and active participation). While the reward-sponsorship interaction failed to materialize in the Janis and Gilmore study (1965), the sponsorship manipulation led to attitude change effects which were embarrassing to dissonance theory. Those role-playing subjects in the favorable sponsorship condition demonstrated more attitude change in the direction of their role performance than those in the unfavorable sponsorship condition. Elms and Janis (1965) investigated the same conceptual variables as did Janis and Gilmore (1965). They found a significant main effect for sponsorship and a near significant interaction between the sponsorship and reward variables for role-playing subjects. The differences for non-role-playing subjects were nonsignificant and tended to indicate more change under high reward conditions. In sum, the data of these two studies provide suggestive evidence that sponsorship conditions can moderate the effects of incentive and support an alternate interpretation of the mentioned dissonance theory studies.

While Chapanis and Chapanis (1964) and Janis and Gilmore (1965) focused their criticisms of dissonance theory on the Festinger and Carlsmith (1959) study,

Rosenberg (1965) directed his attention primarily to the study by Cohen (1962). As in the other critiques reviewed above, Rosenberg also suggested that the intended dissonance manipulation may have had unintended effects leading to a false confirmation of the theory's predictions. In a reexamination of Cohen's procedures, Rosenberg (1965) detailed a number of factors which could have led to suspicion and hostility. This suspicion and hostility was assumed to have led to "evaluation apprehension" and/or negative affect toward the experimenter--the more so the higher the level of reward. Thus, Rosenberg suggested that as the level of reward increased in Cohen's study there was a greater tendency on the part of the subjects to resist showing any influence which could be linked to exposure to the counterattitudinal material and, as a result, that Cohen found an inverse relationship between reward for role-performance and attitude change.

Note that Rosenberg (1965) is referring to a conscious effort on the part of the subjects to cover up actual influence by the persuasive material--a purposeful distortion of attitude to achieve a desired evaluation or to get back at the experimenter. Rosenberg hypothesized that effects of negative affect toward the experimenter or of evaluation apprehension could be eliminated if the counterattitudinal performance phase of the experiment were markedly separated from the attitude measurement

phase. With the two phases separated, a positive relationship between reward and attitude change was predicted. It is not entirely clear whether Chapanis and Chapanis (1964) were hypothesizing a mechanism like the one proposed by Rosenberg (1965). Janis and Gilmore (1965), however, seemed to have been suggesting that the effect of the suspicion and hostility had a direct effect and actually impeded attitude change. Rosenberg (1965), on the other hand, felt that if the appropriate measurement conditions could be established, then the actually changed attitudes would be revealed.

To test his criticisms, Rosenberg (1965) conducted an altered replication of the Cohen (1962) study. To accomplish the necessary separation, subjects who reported to the experiment were told that they would be kept waiting for 15 or 20 minutes and that if they wanted to they could report to "another little experiment that some graduate student in education is doing [p. 33]." Subjects who reported to the graduate student in education were asked (for \$.50, \$1, or \$5) to write an essay about why the Ohio State football team should not be allowed to participate in the Rose Bowl. Upon returning to the experiment to which they had initially reported, the subjects responded to a number of attitude items including a critical item about the Rose Bowl as part of a sort of local Gallup poll on student attitudes concerning

university issues. A control group was included in which subjects were merely asked to respond to the student poll.

An analysis of the data confirmed the predicted positive relationship between reward and attitude change. While the \$.50 and \$1 conditions were not significantly different in attitude toward the Rose Bowl policy, they were each significantly more favorable toward the advocated Rose Bowl policy than the control group and significantly less favorable than the \$5 condition. Generally, Rosenberg interpreted the results as a validation of his concept of evaluation apprehension and his criticisms of the dissonance theory research.

One conclusion that can be drawn from the above discussion is that the data apparently supportive of dissonance theory predictions can be adequately explained in terms of negative reactions to the dissonance manipulations--reactions such as hostility and resentment and suspicion. Unfortunately, in neither the Festinger and Carlsmith (1959) study nor the Cohen (1962) study were there any direct measures of the subjects' reactions to the manipulations. There were no measures of what the manipulations meant to the subjects and thus there was no direct evidence to support the claims of the critics. In addition, except for a standard, rather general, manipulation check item employed by Janis and Gilmore (1965), the critics have failed to produce direct evidence

of the interfering responses which are supposed to be able to account for the attitude change effects. In spite of the observed lack of direct evidence, the interfering response criticism of the dissonance theory explanation of the role-playing effect seems quite logical and compelling. Moreover, explicit evidence does exist which suggests that the interfering response analysis is a cogent one. Somewhat surprisingly, this evidence comes from two studies which have generally been taken as support for dissonance theory predictions.

In studies by Kelman (1953) and Cohen, Brehm, and Fleming (1958) high justification conditions led to less attitude change than low justification conditions, as predicted by dissonance theory. However in both studies the subjects in high justification conditions expressed more negative reactions to the manipulations than did subjects in low justification conditions. In the Cohen et al. (1958) study, it was reported that subjects given many reasons to justify their attitude-discrepant behavior were less "self-motivated" and showed more "interfering responses" (these measures were not described) than subjects given only a request to engage in the counterattitudinal behavior. In the Kelman (1953) study, those subjects offered the book Huckleberry Finn, and an opportunity to get out of class to watch the movie, "Huckleberry Finn," for writing essays against a type of comic book which they

avored, demonstrated significantly more interfering responses than did subjects given less justification. Interfering responses were measured by a postexperimental questionnaire which asked the seventh-grade students such things as whether they attempted to or actually did think of arguments contrary to the ones they had written.

Although certain aspects of these studies (subject self-selection in the Kelman (1953) study and only borderline significance after eliminating over half of the original subjects in the Cohen et al. (1958) study) force moderation in the conclusions that can be drawn from them, the kind of data provided is strongly supportive of the interfering responses criticism. This evidence takes on increased importance when it is considered that data on the subjects' reactions to the manipulations are exceedingly rare in dissonance theory research (Chapanis & Chapanis, 1964).

Other criticisms of the early dissonance theory formulations have arisen from an attempt to reconcile the findings of Rosenberg (1965), Janis and Gilmore (1965), and Elms and Janis (1965) with dissonance theory derived studies such as those by Festinger and Carlsmith (1959) and Cohen (1962). Basically, the argument has been reiterated, although in several different forms, that the preliminary dissonance analysis of the role-playing effect was too general and over-extended; that a more complex and restricted set of propositions is necessary.

It is important to recall at this point that the purpose of the present discussion is an appraisal of the adequacy and utility of the dissonance theory explanation of counterattitudinal advocacy. The purpose is not to present an overall evaluation of all aspects of dissonance theory, but merely to examine its applicability to the restricted set of behaviors which is the focus of this study. Thus there is no attempt to cover all modifications and subsequent reformulations of the theory. The intent in the remainder of this section is to demonstrate that there is no consensus as to the domain of counterattitudinal behaviors to which dissonance theory is most directly pertinent.

Carlsmith, Collins, and Helmreich (1966) have introduced the possibility that cognitive dissonance has several distinct forms and that the theoretical predictions which are appropriate for one type of dissonance may not be appropriate for another. The study by Carlsmith et al. (1966) was an attempt to reconcile the discrepant findings mentioned above by suggesting that dissonance theory predictions will be supported if the counterattitudinal behavior involves a face-to-face confrontation, while so-called incentive theory predictions will result in situations such as those involving anonymous essay writing. Using essentially the same procedures as used by Festinger and Carlsmith (1959), it

was discovered that the amount of money offered to adopt a counterattitudinal position had different effects under the two role-playing conditions. Under face-to-face conditions, the more the reward given, the less the attitude change; while role-playing by writing an anonymous essay led to more attitude change the more reward offered. Although the data supported the hypothesized relationships, the reformulation is found wanting when applied to the essay writing subjects in the Cohen (1962) study where the dissonance-theory predicted inverse relationship between reward and attitude change was obtained.

In a similar vein, Aronson (1966) cited the Carlsmith et al. (1966) study as support for his claim that the limiting conditions of dissonance theory are defined by the commitment variable. Under high commitment conditions, presumably those in which a person's behavior is public (can be definitely associated with him, and is directed to a person whom he believes is unaware of the inauthenticity of his act), Aronson contends that dissonance predictions will be appropriate. Under low commitment conditions, incentive or reinforcement theory predictions should obtain. While Helmreich and Collins (1968) found evidence to support this analysis, they review several other studies in the "Studies in Forced

Compliance" series which failed to find a dissonance effect under high commitment conditions.

Linder, Cooper, and Jones (1967) discussed yet another aspect of commitment--decision freedom. It was suggested that dissonance predictions about the effect of reward on attitude change could most appropriately be made when the subject took the incentives into account in making his choice about whether or not to engage in the counterattitudinal behavior. On the other hand, reward and attitude change were expected to be positively related when the subject had already committed himself prior to hearing about the incentives. Confirmation of their hypothesis about the role of choice was obtained in two different replications; one based on the Cohen (1962) study and the other based on the Rosenberg (1965) study. In both studies there was a dissonance effect in free decision conditions and an incentive or reinforcement effect under no-choice conditions. That both effects were obtained without a separation of role-playing and attitude measurement phases of the study was assumed to discredit Rosenberg's criticisms of the dissonance research.

Unfortunately, as was the case with the public-private distinction made by Carlsmith et al. (1966), this rather convincing attempt to order the counter-attitudinal advocacy literature is confronted with some

exceptions to the rule. Crano and Messé (1970) obtained a dissonance effect under low freedom of choice conditions similar to those in the Rosenberg study (1965). Furthermore, Janis and Gilmore (1965) found that for role-playing subjects with a high degree of choice such as that in the Cohen (1962) study, more attitude change occurred under favorable sponsorship conditions than under unfavorable sponsorship conditions. To summarize, in the Crano and Messé study where incentive effects would be predicted by the Linder, Cooper, and Jones (1967) analysis, both dissonance and incentive effects were obtained, and in the Janis and Gilmore study where a dissonance effect should have occurred it did not.

For final consideration, another attempted reformulation of the limiting conditions of the dissonance effect will be discussed. Rosenberg (1966) has suggested that dissonance theory is most applicable to those instances of counterattitudinal behavior of a simple and limited nature (not going to a movie that one wants to see, for example). On the other hand, when a person's behavior involves a "complex and extended performance, one that leads to the development and elaboration of a new set of cognitions [p. 144]," dissonance theory is not considered to be particularly germane. The convenient terms "counterattitudinal action" and "counterattitudinal advocacy," respectively, were introduced to distinguish

between the two types of behavior. The category of behaviors involving complex and extended activity was further subdivided into those in which the task set was one of "duplicity" and those in which the task was one of "self-examination." It was assumed that a positive relationship between magnitude of reward and attitude would occur when performance was undertaken with a self-examination set. When the task set was one involving deception, higher levels of reward could lead to lower levels of attitude change. Under the latter circumstances the data would lead to a spurious confirmation of a dissonance prediction.

Unfortunately, Rosenberg (1966) did little to clarify exactly how the change effects were mediated with a duplicity set and merely spoke of insulation from the change implications of the newly elaborated arguments. Linder et al. have objected that Rosenberg's criteria fail to explain properly the results of their two experiments since in their studies no deception set was involved and yet both inverse and direct relationships between reward and attitude change were observed. However, an examination of the procedures employed by Linder et al. (1967) does not provide unequivocal evidence that the subjects could not have assumed a deception or duplicity task set. Perhaps the problem lies in the fact that Rosenberg (1966) has only presented a preliminary

classification system in which other relevant dimensions must be provided by future research and critical analysis. Rosenberg did acknowledge that other task sets and other aspects of the staging of counterattitudinal advocacy could be important in determining the extent to which the elaborated position is internalized.

In general, the foregoing material does not present a very favorable picture of dissonance theory's ability to explain the role-playing effect. Several studies (Carlsmith et al., 1966; Crano & Messé, 1970; Elms & Janis, 1965; Linder et al., 1967; Rosenberg, 1965, for example) have found a positive relationship between incentive for counterattitudinal advocacy and attitude change, and clearly indicate that dissonance theory is incapable of accounting for all of the results of counterattitudinal performance. That is, some instances of counterattitudinal behavior are outside the domain of dissonance theory. Furthermore even if dissonance theory is relevant to some counterattitudinal behaviors, the conditions under which this is so are ambiguous--although a strong case has been made for the centrality of the commitment and choice variables.

Even more serious is the criticism that dissonance theory is not pertinent to counterattitudinal advocacy at all. Janis (Janis & Gilmore, 1965) and others have suggested that mechanisms other than dissonance can

explain role-playing induced attitude change. Similarly, Rosenberg (1965, 1966) has suggested that dissonance theory has no great relevance for complex behaviors in which a person elaborates a set of attitude-discrepant arguments.

Admittedly the data and arguments from the material above could be organized in ways less critical of dissonance theory. A point to be made, however, is that, since instances of counterattitudinal behavior represent a very complex and nonhomogeneous set of behaviors, a single rather simple mechanism such as dissonance cannot be expected to account adequately for the attitudinal consequences of all such situations.

Until recently dissonance theory has had a rather inordinate influence on the investigation of counterattitudinal phenomena. Attention has been diverted from an exploration of other aspects of attitude-discrepant behavior. In part, the somewhat lengthy discussion which has preceded was an attempt to counteract this imbalance by asserting the legitimacy of and need for other approaches to the phenomena in question.

Following is a brief review of some of the other, less researched explanations of the role-playing effect. The same general criticisms that were made concerning dissonance theory are also applicable to each of these other proposed mechanisms and as such will not be repeated

for each additional explanatory proposition. None can explain all the data and none have adequately specified their limits of applicability.

Another major source of perspectives on the role-playing issue in addition to dissonance theory has been the Yale Communication Research Program. In Communication and Persuasion, Hovland, Janis, and Kelley (1953) outlined a number of hypotheses to account for the attitude change effects of "active participation." No doubt the improvisation hypothesis and its derivative, the biased scanning hypothesis, are the explanations most associated with the Yale group. Some form of one of these two propositions (often referred to as the incentive theory position) must surely be considered the strongest contender to the dissonance occupied throne. After a brief consideration of the improvisation and biased scanning hypotheses, explanations in terms of satisfaction, attention, and effort will be covered.

The improvisation hypothesis. The improvisation hypothesis asserts that role-playing will produce attitude change in direct proportion to the extent to which the role player develops good quality arguments, examples, and illustrations. The more a person elaborates on the assigned position, the more his private opinion should become consistent with the overt counterattitudinal act. Thus, role-playing conditions leading to better quality

and quantity of performance should produce more attitude change (Janis & King, 1954).

Both the improvisation hypothesis and the satisfaction hypothesis (to be discussed later) arose from an attempt to explain the data of the pioneering study by Janis and King (1954). In that study, three attitude topics were used and three subjects were scheduled for each experimental session. Each subject in turn assumed the role of active participant and delivered an informal talk based on a prepared outline, while the two passive participants merely read the prepared outline and listened to the informal talk. On two of the three issues, active participants changed their attitudes to a greater extent than did passive controls and the conclusion was drawn that "overt verbalization induced by role-playing tends to augment the effectiveness of a persuasive communication [p. 218]."

Supplementary observations on the third issue which failed to show a superiority of active participation over passive exposure provided some suggestive leads about the mechanisms underlying role-playing induced attitude change. Compared to active role-players in the other conditions, active role-players on this third communication stayed closer to the prepared outline and were less likely to develop new arguments or illustrating material. This led Janis and King (1954) to hypothesize

that "the gain in role-playing may occur primarily because the active participant tends to be impressed by his own cogent, arguments, clarifying illustrations, and convincing appeals which he is stimulated to think up in order to do a good job of 'selling' the idea to others [p. 218]." Evidence was also gathered which seemed to indicate that role-players on this third issue were also less satisfied with their performance. This will be taken up later in the discussion of the satisfaction hypothesis.

Support for this improvisation hypothesis was provided by King and Janis (1956) who manipulated improvisation and found significantly more attitude change in the experimental condition requiring subjects to elaborate on an outline of arguments than in the condition in which subjects were asked to publicly read a speech verbatim. Also consistent with the hypothesis was the finding by Kelman (1953) that the differences between high and low response restriction conditions, in terms of performance ratings of overall quality and number of arguments, paralleled condition differences in attitude change.

In contrast to the evidence just reviewed, the vast majority of studies examining this issue have not confirmed the improvisation hypothesis. In fact, two of the main studies from the so-called "incentive" theory orientation have failed to demonstrate that differences

in quality of performance are responsible for differences in attitude change. Janis and Gilmore (1965) were surprisingly uncommunicative about the finding that while quality of counterattitudinal performance was significantly affected by both "reward" and "sponsorship" variables, attitude change was only significantly different between sponsorship conditions. Elms and Janis (1965) failed to find any significant differences in mean number of good quality arguments produced among the role-playing conditions.

An examination of essay characteristics in the Rosenberg (1965) study further complicates the picture. With respect to number of words per essay, it was found that subjects in the \$1 condition wrote significantly longer essays than the \$.50 group but were not significantly different from the \$5 subjects. In terms of attitude change, the \$.50 and \$1 subjects were not significantly different but both differed significantly from the \$5 group. Ratings of basic "persuasiveness" do provide suggestive evidence that role-playing effects are mediated by quality of role-playing performance. When subjects in the \$.50 and \$1 condition were combined and then divided into high and low "persuasiveness" halves, there was a significant tendency for those who wrote more highly persuasive essays to demonstrate more attitude change. However, when each condition (\$.50, \$1, \$5) was examined

separately, the significant relationship between essay quality and attitude change was not obtained. Other analyses were reported which question the importance of quality of performance in the change process. When low reward subjects with low persuasiveness scores were eliminated from the analysis so that the remaining subjects had a slightly higher mean persuasiveness rating than high reward subjects, high reward subjects still showed a significantly greater amount of attitude change than low reward subjects.

Many other studies have failed to support the improvisation hypothesis: Carlsmith, Collins, & Helmreich (1966); Crano & Messé (1970); Festinger & Carlsmith (1959); Helmreich & Collins (1968); Holmes & Strickland (1970); Linder, Cooper, & Jones (1967); Nel, Helmreich, & Aronson (1969); Zimbardo (1965).

What can be inferred from the fact that there is so little empirical support for the notion that quality of improvisation is positively correlated with the degree of attitude change? One conclusion, assumed by many researchers, is that the improvisation hypothesis is incorrect. But, this research question is so riddled with conceptual and theoretical problems that it may yet be too early to close the issue.

One consideration is that the emphasis may have been misplaced; that the important factor is not objective

ratings of quality of performance but rather the role player's self-evaluation of performance. As Steiner and Darroch (1969) have pointed out, the major theoretical positions on role-playing actually suggest that "subjects' appraisals of their own performance are more appropriate measures of quality [p. 312]." One implication of the Steiner and Darroch discussion is that the improvisation and satisfaction hypotheses have a degree of theoretical interdependence.

Another problem with attempts to relate objective measures of role performance to attitude change is that usually the subject's ability is not taken into account. Now, it seems likely that quality ratings of role performance would be highly correlated with measures of verbal intelligence. But if quality of role performance is for the most part a function of verbal intelligence, and verbal intelligence is complexly and nonmonotonically related to attitude change (McGuire, 1968), then ratings of role performance would not be expected to covary directly with attitude change. More simply, it is being suggested that verbal intelligence may be obscuring the relationship between quality of improvisation and attitude change. Perhaps the relationship between quality of role performance and attitude change would appear if the influence of intelligence was removed statistically using verbal intelligence as a covariate.

A much more basic issue involves the conceptualization of improvisation. An observation by Brehm and Cohen in 1962 is still quite apt today; they observed "that the concept of improvisation is not yet well defined either conceptually or empirically [p. 252]." Extant formulations about the improvisation hypothesis have not clearly specified the critical aspects of the role-performance, although three basic categories of improvisation have been specified: reformulation--a restatement of the communication in one's own words; thinking of new examples or illustrations, and thinking of new arguments. While King and Janis (1956) belittled the importance of reformulation and instead stressed the inventive aspects of improvisation, they presented no data to support their argument and the whole issue had gone virtually unmentioned since then. Clearly, the adequate measurement of the improvisation variable will, to an extent, depend upon the resolution of this definitional quandry. The general conclusion to be drawn about the improvisation hypothesis is that while the evidence is not very supportive, there are enough unanswered questions and unresolved issues to merit its continued investigation.

The biased scanning hypothesis. In later work by Janis (Janis & Gilmore, 1965; Elms & Janis, 1965) a two-factor explanation known as the "biased scanning"

hypothesis was introduced. (For a rudimentary form of this hypothesis see King & Janis, 1956, p. 184.) A rather troublesome aspect of this proposition is that it has been explicitly stated in two different forms without a discussion of the points of correspondence and noncorrespondence between the two different formulations. In Janis and Gilmore (1965) biased scanning referred to (1) thinking of good positive arguments and (2) suppressing thoughts about negative arguments. Elms and Janis (1965) defined biased scanning as

. . . (1) fulfilling the demands of the role-playing task by recalling and inventing arguments that are capable of functioning as positive incentives for accepting a new attitude position, and (2) appraising the recalled and improvised arguments with a psychological set that fosters open-minded cognitive exploration of their potential incentive value, rather than a negativistic set of the type engendered by the arousal of feelings of hostility, resentment, or suspicion [p. 59].

It is not entirely clear what has been added by the second definition. While the correspondence between the two can be made, the second appears to be more general and subtle differences do seem to exist.

A major problem, then, with the biased scanning hypothesis is that it has been so ambiguously stated that procedures for evaluating its validity and utility are unclear. This problem was underscored in the Elms and Janis (1965) study where the quality of essay writing was assumed to reflect or be an index of the psychological set fostering open-minded cognitive exploration--the

second factor of their two-factor definition of biased scanning. Thus, when it was observed that there were no significant differences in quality of performance in contrast to significant differences in attitude change among role-players, Elms and Janis were led to conclude that there was no evidence to support their notion that the attitude change "was mediated by a corresponding increase in biased scanning [p. 60]." However, it could be objected that quality of performance measures are inadequate or inappropriate measures of an open-minded cognitive set (Greenwald, 1969, has recently made this point). Although Elms and Janis acknowledged that quality of performance was only an indirect measure of the role-player's cognitive set, they provided only superficial direction as to how the hypothesis might be more adequately evaluated.

Thus, it can be seen that the biased scanning hypothesis suffers from a lack of clarity and definitional rigor. At present there is no direct evidence against which its claims can be evaluated. Before the hypothesis can be expected to contribute much to an understanding of the mechanisms mediating the role-playing--attitude change relationship, it must first receive more adequate conceptual treatment. As an additional point, it is noted that the improvisation hypothesis is included as a central aspect of the biased scanning hypothesis--a matter which only further compounds the problems of the biased scanning hypothesis.

The attention hypothesis. Another of the explanations discussed by Hovland, Janis, and Kelley (1953) was the attention hypothesis. According to this proposition, role-playing is particularly effective because,

. . . the ego-involving task of verbalizing a communication to others probably induces greater attention to the content, which may increase the chances that one will think about it and be influenced by it [p. 230].

While theoretically plausible, the attention hypothesis has not been empirically supported. Janis and King (1954) reasoned that if role-playing is effective because it leads to greater attention to the content of a communication, then any other technique which evokes increased attention should have a similar effect. In their study, a supplementary control condition was added so that, in addition to an active and a passive participant, another subject was asked to follow along with the prepared outline used by the active participant and take down the main arguments he presented.

Janis and King (1954) reported that, although the supplementary control group of subjects took fairly complete notes (which seemed to indicate a high degree of attention), this note-taking control group displayed about the same amount of attitude change as the passive control group, and significantly less than the role-playing group. As a result, it was concluded that variations in attention level probably were not crucial in

accounting for the results of the study. In a follow-up to their first study, King and Janis (1956) provided further evidence with respect to the attention hypothesis. From a slightly different perspective, they reasoned that if active participation leads to greater attention then active participants should, on the basis of the heightened learning efficiency, demonstrate greater recall than passive participants. Consistent with the conclusion of the first study, it was found that all experimental conditions (improvisation, read, and passive control) obtained approximately equal recall scores. Other researchers (e.g., Zimbardo, 1965) have failed to find differences in recall which parallel differences in attitude change and, thus it appears that the role-playing effect is not mediated by manipulated differences in attention.

The satisfaction hypothesis. Another explanation, the satisfaction hypothesis, contends that a role-player will begin to internalize the publicly presented position to the extent to which he feels he did a good job in portraying the role. These feelings of a job well done may refer either to the way the performance was given (the structure of the role-playing) or to the particular arguments given (the content of the role-playing). Moreover, this self-satisfaction may derive either directly from a

person's perception and evaluation of his own performance or indirectly from the feedback given the person by other role-observers.

As mentioned earlier, this hypothesis developed from the Janis and King (1954) study. In that study, the role-playing effect was obtained for only two of the three conditions. Active participants on the issue which failed to yield the predicted effect were significantly less satisfied with their performance, per se, than were active participants in the other conditions.

In the King and Janis study (1956) the satisfaction hypothesis was further explored. Variations in role requirements produced intended differences in satisfaction with performance but the active participation condition which maximized satisfaction did not induce the most attitude change. A supplementary variation in the "improvisation" condition consisted of varying the role-performance feedback given to role-players. The manipulation successfully induced different levels of satisfaction with performance but did not affect the amount of attitude change manifested. On the basis of the results of the second study it was concluded that the amount of attitude change produced by role-playing is not related to the amount of satisfaction with performance.

Others have failed to find satisfaction with performance differences corresponding to attitude change

differences. For instance, Helmreich and Collins (1968) found evidence consistent with the findings of the King and Janis study. Although there were significant differences in attitude change between various conditions, there were no significant differences in subjects' self-ratings of how clear or sincere or persuasive they had been.

Results in this area are somewhat contradictory though, as other research (e.g., Scott, 1957; Wallace, 1966) seems to suggest that satisfaction can have an affect on the amount of attitude change produced by role-playing. The two studies to be considered here can be cited as support for the satisfaction hypothesis but must rely on the assumption that positive feedback from judges evaluating role-performance affected satisfaction which, in turn, induced attitude change.

Scott (1957) arranged class debates in which each debater was expressing a counterattitudinal position. After the debate half of the subjects were arbitrarily assigned as winners and half as losers, although subjects were led to believe that the results reflected the actual class opinion of who had given the best speech. Results indicated that the winners changed their attitudes significantly more (in the direction of the side debated) than the losers (who showed a slight tendency to intensify their original opinions).

Wallace (1966) also had subjects engage in a debate. Naive subjects debated with an experimental accomplice in the presence of two "judges." Some subjects were rated better than the average college student in terms of the content of their speech but only average in terms of the way the speech was presented. Other subjects were rated better than the average college student in the way the speech was presented, but only average in terms of the content presented. Yet another set of subjects was given average ratings on both content and performance. Debate opponents were given neutral ratings on both dimensions. Data analysis revealed that subjects rated above average on manner in which the speech was given changed significantly more than the other two groups.

The satisfaction hypothesis has yet to receive systematic experimental treatment and future research should be conducted to clarify the nature and the effect of the self-satisfaction variable. At present, the support for the hypothesis is equivocal.

The effort hypothesis. The final explanatory proposition to be considered is the effort hypothesis. Zimbardo (1965) presented a derivation from dissonance theory centered on the role of the effort involved in expressing a counterattitudinal position. Basically, it was his contention that the more effort exerted in

expressing a view inconsistent with one's own private opinion, the more dissonance created and hence the more attitude change in the direction of the role-played position. Differences between active role-players and passively exposed participants are thus assumed to be due to the fact that the improvising subjects exerted more effort rather than to "the 'cognitive-intellectual' aspects of improvisation having to do with its content or quality per se [p. 106]."

In a 2 X 2 factorial design, half of Zimbardo's subjects improvised a speech from an outline of arguments, while the other half read a prepared speech which contained the same arguments along with appropriate examples. Half of the subjects in each role-playing condition performed under low effort conditions (slight delayed auditory feedback of their performance) and half performed under high effort conditions (a longer and highly distracting delayed auditory feedback). Perceived physical effort was significantly greater for high than for low effort participants but did not differ between subjects who improvised and those who read the prepared speech. Results concerning the net percentage of subjects changing their attitudes in the advocated direction paralleled the effort ratings. More high effort subjects changed toward the publicly expressed position than low effort subjects; and there were no differences between improvising

and reading subjects. (Differences in magnitude of attitude change did not reach conventional levels of significance.) Zimbardo concluded that his dissonance theory based prediction concerning effort was supported.

Even though the argument has some plausibility, Zimbardo has not made a strong enough case that it is effort that is creating the dissonance or that the effort involved is substantial enough to lead to dissonance and subsequently to attitude change. It would seem that effort expenditure would lead to the arousal of dissonance only if the effort expended were incommensurate with that which was anticipated to be necessary and appropriate for the particular goal or task. That is to say, it is not effort by itself, but effort relative to value of the goal which would determine the presence and extent of dissonance created.

Furthermore, even if dissonance is created by the effortfulness of the expression of the counterattitudinal position, it is not clear why a change would be expected on any but task relevant attitudes such as those about the pleasantness or interestingness of the experimental task or the value of the research. After all, the effort is not an intrinsic part of the attitude issue, but it is an intrinsic part of the particular experiment and the specific task. (Would we expect the subject to also be more favorably inclined toward such things as:

psychology, the day of the week the experimental session was scheduled on, and experimenters with the color of hair and eyes like the one administering the particular effort manipulation?) What is being suggested is that the effort-justification application of dissonance theory to the area of counterattitudinal advocacy has not been done critically enough. The effort justification argument is far from obvious.

If the dissonance-effort explanation is rejected, what can explain the observed patterns between effort and attitude change? As Zimbardo (1965) observed, there are several alternative interpretations of his data. One strong possibility is that the effort manipulation affected the extent to which subjects were able to think about negative or undesirable aspects of the message or counterattitudinal act.

In a subsequent study, Zimbardo and Ebbesen (1970) attempted to dismiss this "distraction from manipulative intent" interpretation, as well as an interpretation based on novelty. Subjects read prepared speeches under conditions of white noise, delayed auditory feedback (DAF), and normal auditory feedback. It was implied that the white noise was as novel and distracting as DAF, but that it required less effort than DAF. When it was observed that the white noise condition led to less perceived effort and less attitude change than the DAF condition,

it was concluded that the distraction and novelty interpretations has been eliminated and the effort interpretation supported. Unfortunately, Zimbardo and Ebbesen (1970) presented no evidence that white noise was equally "distracting" as DAF and thus much of the force of their argument is lost. In contrast to their conclusions, it is maintained that both studies (Zimbardo, 1965; Zimbardo & Ebbesen, 1970) are consistent with the hypothesis that conditions which inhibit defensive reactions such as counterarguing, without drastically interfering with the reception of communication content, will facilitate attitude change. This latter hypothesis is a basic element of the suspension of critical judgment approach and is more fully discussed in a subsequent section.

There is one further aspect of the Zimbardo (1965) study which should receive some attention because it highlights a major methodological problem for research attempting to pin down the mechanisms mediating role-playing induced attitude change. The specific issue concerns Zimbardo's rejection of the improvisation hypothesis, partially on the basis of a failure to find attitude change differences between "improvisation" and "read" conditions. The crucial point to note is that Zimbardo's conclusion must be tempered by the consideration of the fact that the improvisation-read manipulation was confounded with content differences. That is, the

absence of a difference in attitude change between improvisation and read conditions may have been due to differences in exposure to different communication content. In fact, "read" subjects perceived their speech to be more logical than did "improvisation" subjects and this may have obscured the effects of improvisation.

That content differences can effect the relative superiority of active role-playing techniques relative to more passive-exposure techniques was clearly illustrated by Watts (1967). The Watts (1967) study is a significant one for role-playing research and merits further discussion since it most clearly points out the hazards involved in drawing conclusions about role-playing effectiveness when exposure and attention to the arguments of a communication position are not equated among experimental conditions.

Watts was interested in the relative persistence of opinion change induced by "active" (improvising and writing an essay) as compared with "passive" (reading and underlining topic sentences) participation. In order to avoid regression artifacts, Watts wanted to equate the immediate mean opinion change for the two types of participation. On the basis of several pilot studies, each of the three persuasive messages to be used in the study was altered until subjects who merely read a particular essay demonstrated the same amount of opinion as those

subjects who (without being presented with new information) wrote an essay on the topic. Results of the main study confirmed the success of the pilot studies; immediate attitude change for the active and passive participants was essentially equal.

One observation to be drawn is that the superiority of "active" over "passive" participation can be moderated by varying what content subjects within each condition are exposed to. Clearly, if differences in effectiveness between active and passive participation can be intentionally influenced by varying information exposure, it is reasonable to assume that differences in effectiveness can be unintentionally produced. That is, for example, an experimenter may inadvertently manipulate the degree of "superiority" of role-playing by his particular choice of a standard essay to which all passive participants are to be exposed. A central aspect of this issue is that subjects in the Watts study differed simultaneously on two major dimensions. First of all, active participants thought of arguments and presented them while passive participants did not and, secondly, active participants considered a different set of arguments than did passive participants. The obvious drawback to this is that if two groups of subjects differ simultaneously on two variables--"type of participation" and "amount of information considered"--then unequivocal statements about which variable leads to differences in attitude change are not possible.

Thus, if active and passive forms of participation are to be compared with respect to their effectiveness in inducing attitude change, it is desirable that all other things including exposure to information be as equal as possible. Of course, it is not possible to equate completely the informational content considered between subjects, even for those within the same condition. And then too, the interest in equating information exposure will depend upon the research question of interest. But the confounding of the type of participation and information exposure variables is a crucial matter in research comparing the effectiveness of role-playing with other techniques of persuasion, and appropriate measures should be taken to reduce differences in exposure as much as possible. In the present research, an effort was made to equate exposure to arguments on the experimental issue by having both an active and passive participant present at each session. Both active and passive participants read the same persuasive essay and the passive participant then listened to arguments and illustrations presented by the active participant.

Defensive Reactions and the Role-Playing--Attitude-Change Relationship

The confrontation between the two major explanations, dissonance and improvisation, has not been as fruitful or informative as it might have been hoped. In

general, the issue of the mechanisms underlying the role-playing--attitude-change relationship is replete with unresolved questions and ambiguities. Unfortunately, it seems that the intensity of the dispute has tended to limit the type of questions asked and the interpretations made of the patterns in the data.

That is, not enough attention has been directed to the analysis of the research data with a view that there are mechanisms other than the ones in dispute that could more parsimoniously order the phenomena in question. An examination of research in the role-playing area does suggest that all possibilities have not been exhausted. One particularly compelling explanation stresses the role of psychological resistance in the attitude change process. The following section will review evidence from extant studies which suggests that defensive reactions (such as communication derogation and counterargumentation, for example) moderate the extent to which counterattitudinal advocacy leads to attitude change. Basically the studies can be divided into two categories. One set of studies suggests that those role-playing conditions which produce the lowest level of interfering responses, lead to the greatest amount of attitude change (Cohen, Brehm, & Fleming, 1958; Collins & Helmreich, 1970; Kelman, 1953; Mann, 1967). Another set of studies, while demonstrating the same relationship, suggests even more. Studies by Elms

(1967), Greenwald (1969, 1970), and Janis and Mann (1965) suggest that role-playing is effective because it actually inhibits or prevents defensive reactions. The latter set of studies implies more than mere covariation and suggests something of the causal nature of the relationship between role-playing and attitude change.

Evidence concerning the role of defensive reactions.

The Kelman (1953) study, previously discussed, was one of the earliest studies on counterattitudinal advocacy which presented evidence that the extent to which role-playing leads to attitude change depends upon the manner in which the role-playing procedures influence processes of psychological resistance. It will be recalled that in that study, low restriction subjects (those offered a low probability of receiving a desirable reward) demonstrated more attitude change ($p = .07$) in the direction of the role-played position than did high restriction subjects (those offered a high probability of receiving a desirable reward). Of most importance for the present discussion however, was the finding that attitude change was inversely related to the presence of interfering reactions. Low restriction subjects who had demonstrated more attitude change also reported fewer interfering reactions such as thoughts about counterarguments.

Another previously discussed study found a similar pattern of results. Cohen et al. (1958) induced male

undergraduates at Yale to write essays advocating the unpopular policy of coeducation at Yale. Post hoc analyses which eliminated subjects with extreme initial scores revealed that subjects given many reasons to justify their counterattitudinal behavior were less "self-motivated" and showed more "interfering responses" than did subjects given only a request to engage in the counterattitudinal behavior and tended to change ($p < .07$) their attitudes less.

Other evidence of the mentioned covariation between defensive reactions and attitude change can be found in the study by Collins and Helmreich (1970). That study was one of several by various researchers which has attempted to establish the conditions under which the relationship between reward for counterattitudinal behavior and attitude change is inverse and those under which it is direct. Collins and Helmreich (1970) reasoned that role-playing conditions focusing on the "consequences" of the counterattitudinal act would be most likely to arouse dissonance and support dissonance theory predictions, while conditions focusing on the "process" of counterattitudinal advocacy would create a situation where incentive predictions would be confirmed.

For a quinine tasting task, "process" subjects were asked to think about and describe aspects of the solutions which were actually pleasant and exotic--presumably emphasizing the truthfulness of their performance.

"Consequence" subjects were instructed to create essays about the solutions that would help persuade others that the solutions were not bitter tasting. Monetary reward was also included as a manipulated variable; subjects were offered either \$.50 or \$2.50 for their essays. Contrary to the predictions, the only significant result was a main effect for type of instructions. Process instructions led to more attitude change than consequence instructions. The important additional finding was that consequence subjects tended to dissociate themselves from the essay to a markedly greater degree than did process instructions. Again, the evidence suggests that the more the role-playing procedures activate defensive reactions, the less attitude change occurs.

A major conclusion of a study by Mann (1967) was that "if the requirements or conditions of improvisation arouse responses of resentment and guilt, then interference with positive attitude change may be expected [p. 347]." The basis of this statement was a finding that, for an emotional form of role-playing designed to use shame to facilitate change, high-verbalization female subjects responded with more resentment and less attitude change than low-verbalization female subjects. In fact there was a boomerang effect, high-verbalization female subjects became even more polarized in their

initial position. (These effects were not observed for male subjects under shame-emotional role-playing and, furthermore there was no similar effect of resentment with fear-emotional role-playing or cognitive role-playing for either male or female subjects.)

Each of the four preceding studies has shown that role-playing conditions which minimize defensive reactions maximize attitude change. The four studies which follow go beyond this and suggest that under certain circumstances role-playing induces attitude change because it leads to an inhibition of defensive reactions.

The first study to be described in this second set was by Janis and Mann (1965) and employed emotional role-playing. This form of role-playing uses props and staging devices to encourage subjects to become emotionally involved in a realistic life-like situation. Janis and Mann induced their subjects, moderate to heavy smokers, to assume the role of a patient who was returning for a third visit to her doctor because of a bad cough that was not responding to treatment. During the course of several scenes which were acted out, the patient was informed that she had a form of malignant cancer, and that, while surgery was essential, there was only a moderate chance for a successful outcome. In a set of dialogues with the experimenter who was assuming the role of the doctor, subjects discussed several matters including their thoughts and

feelings concerning the bad news and their knowledge about the relationship between smoking and cancer. Control subjects merely listened to one of the more dramatic and emotional tape-recorded sessions of an actual subject.

Data analysis revealed that experimental subjects changed their attitudes in a role-consistent direction to a significantly greater extent than did control subjects and, on a follow-up interview two weeks later, reported a significantly greater decrease in cigarette consumption. The authors' discussion singled out fear arousal as a mediating factor in the obtained attitude and behavior change. The most noteworthy aspect of the study in terms of the present discussion was a comment by Janis and Mann (1965) about the effectiveness of role-playing vis-a-vis defensive processes. It was observed that

. . . the technique of emotional role-playing may prove to be an exceptionally successful means of arousing potentially adaptive fear reactions, breaking through the defensive facade that normally prevents many people from taking account of their personal vulnerability to objective sources of danger [p. 90].

Clearly, the study provides dramatic, although suggestive, evidence that role-playing has a tendency to disengage defensive processes.

More recent evidence that the disengagement of defensive mechanisms is a central aspect of the role-playing effect is provided by Elms' (1966) study on the influence of fantasy ability on attitude change produced

through role-playing. Empathic fantasy ability, defined as a person's ability to vividly imagine that he holds an attitude on a topic different from the one he actually has, was linked to the increased effectiveness of active as compared with passive forms of role-playing. For male subjects playing the role of a non-smoker, the correlation between empathic fantasy ability and attitude change on a delayed postmeasure was .79. The corresponding correlation for male subjects, who were exposed to the same experimental essay as the role-players and who witnessed the active participant's role performance, was only .18. The difference between the two correlations was highly significant. Other measures of fantasy ability were correlated with attitude change but active and passive participants did not differ significantly in terms of the magnitude of correlation.

It was Elms' belief that empathic fantasy ability would most likely be activated by the instructions and expectations of a role-playing task with its "as if" characteristics. Moreover, it was hypothesized that the trait acts so that, in some manner or another, one's own psychological defenses are circumvented, thus permitting cognitive contact with the new attitude.

The finding of a high correlation of empathic fantasy ability with attitude change for active role-players together with the fact that both active and

passive role-players were exposed to virtually the same information suggests that the crucial factor in role-playing induced attitude change is not what information is presented but rather the manner in which the information is received and processed. In line with the formulation presented herein, the situational characteristics corresponding to the demands of a role-playing task and the personality characteristics corresponding to empathic fantasy ability can be conceptualized as having a sort of functional equivalence with respect to their influence on attitude change. The results found by Elms concerning empathic fantasy ability strongly reinforce the notion that role-playing is uniquely effective because it leads to a lowering of the psychological resistance usually associated with the counterattitudinal position.

Further and more direct evidence that role-playing is effective because it leads to an inhibition of implicit interfering responses was provided by Greenwald (1969). In that study, subjects were led to believe that they would write an essay on the issue of general-specialized education; some were told that they would write in favor of specialized education and others were told that they would write in favor of general education.

In preparation for the expository writing exercise, subjects were asked to evaluate the validity of a set of statements relevant to the general-specialized

education issue. Half of the statements were in favor of specialized education. Subjects expecting to advocate a position consistent with their private opinions, evaluated the arguments that supported their private opinion as significantly more valid than the arguments opposing their own private opinions. On the other hand, subjects expecting to advocate a position inconsistent with their private opinions reported that the arguments consistent with their private opinions were virtually as valid as the arguments inconsistent with their private opinions.

On the basis of an analysis of subjects' evaluations of the statements, Greenwald (1969) concluded that

. . . counterattitudinal role-playing assignments induce a disposition toward unbiased evaluation of controversial information, in sharp contrast with the biased (opinion-consistent) disposition of subjects who expected to advocate their own opinions [p. 383].

While subjects did not overtly portray a counterattitudinal position, it was assumed that the opinion change following counterattitudinal advocacy results from the unbiased judgmental disposition activated by the role-playing requirements.

In summary, counterattitudinal role-playing may be uniquely effective because it succeeds in getting the subject to give impartial evaluation to information opposing his own opinion--something he would do rarely, if at all, under other circumstances [p. 387].

As a limitation on the conclusions of the study, Greenwald (1969) suggested that the role-player's impartial

disposition may be of no consequence for material about which a person has already formed negative cognitive responses. This assumption was confirmed in a subsequent study (Greenwald, 1970). Quite simply, it was demonstrated that the role-playing effect does not occur when a person has an opportunity to evaluate and react to (or consider and counterargue against) the counterattitudinal, role-structuring, material before he is assigned the task of representing this counterattitudinal position. However, when a person examines the counterattitudinal material after he has been assigned the position to be publicly portrayed, the role-playing effect does occur. That is, under the latter conditions, persons actively involved in presenting an attitudinal position discrepant from their own demonstrate more attitude change than persons more passively exposed to the counterattitudinal material.

In summary, Greenwald (1970) confirmed the finding of his previous study that role assignment leads to an impartial evaluation with respect to new information relevant to the role to be played. More importantly, since subjects did actually engage in essay writing, Greenwald was able to present more direct evidence that the unbiased disposition induced by role assignment is a factor in the persuasive efficacy of role-playing procedures.

The suspension of critical judgment approach. In spite of the meager amount of attention devoted to the resistance aspects of the persuasion process, it can be seen that a line of research is accumulating that suggests that defensive reactions play a critical role in determining the extent of attitude change produced by counterattitudinal advocacy. Basically, this research suggests that role-playing will be particularly effective in changing attitudes to the extent to which the act of portraying an attitude position not one's own leads to a disengagement or circumvention of the defensive reactions often accompanying the reception of counterattitudinal material.

The first set of studies just reviewed indicates that role-playing is more effective in changing attitudes when there are less interfering responses. The second set of studies suggests that role-playing is effective because it reduces the incidence of interfering responses. The nature of these interfering responses can be assumed to include such things as judgmental distortions, counterargumentation, and communication and communicator derogation, although their specification and confirmation awaits further research. Similarly, the manner in which these reactions are affected by the counterattitudinal behavioral sequence remains to be established.

It is a matter of utmost importance, however, to note that role-playing procedures have been shown under certain conditions to lead to no appreciable change in attitudes or to no more change than a more passive form of exposure to counterattitudinal material. One of the earliest studies in this research area, the one by Janis and King (1954), only found role-playing superior to passive exposure on two of the three attitude issues studied. Conditions in numerous other experiments are also consistent with the above claim. For example, the \$5 and the \$10 reward subjects in the Cohen (1962) study were not significantly different in attitude from an unexposed control group. Other similar findings include those for: the \$20 reward subjects in the Festinger and Carlsmith (1959) study; the subjects paid \$.50 in the essay writing condition and those paid \$1.50 and \$5 in the face-to-face role-playing condition of the Carlsmith et al. (1966) study; and the debate losers in the studies by Scott (1957, 1959). In the role-playing conditions cited above and in experimental conditions in several other unmentioned studies, role-playing subjects did not demonstrate more attitude change than control subjects.

This suggests that role-playing procedures can have a full continuum of effects--ranging from change facilitating to change inhibiting. One means of conceptualizing this effect would be to view the role-playing procedures as moderating a person's evaluative disposition.

Perhaps it would be useful to postulate that each person has some sort of screening mechanism for categorizing and evaluatively labelling information which is being processed. The state of this psychological filter would be expected to vary as a function of several conditions internal and external to the individual. Under conditions which have only just begun to be delineated (and about which more will be said later), it is hypothesized that the processing filter would operate so that the information being processed is not labeled "alien, to be defended against" and negative emotional responses would not be attached to the material. Under these conditions it would be said that the person has an unbiased evaluative disposition. Under other conditions, such as when the procedures force attention to the exploitative or otherwise undesirable nature of the source or sponsor of the counterattitudinal material, the filter would be conceived as coating all information with the label "alien, to be defended against" and attaching negative emotional reactions to the material. It would be expected that under these conditions the person would be refractory to the new point of view, and the person would be described as having a biased evaluative disposition.

To summarize, the suspension of critical judgment approach asserts that the more the role-playing task or situation inhibits or prevents those interfering responses

commonly associated with the encounter of attitude discrepant material, the more attitude change in the direction of the public statement can be expected to occur. On the other hand, the more the role-playing task or situation forces attention to the biased nature of a communication or the undesirable aspects of the communicator, the more the effectiveness of role-playing should be reduced. In fact, under some circumstances active participation may lead to less change than passive exposure because the role-playing more forcefully highlights negative aspects of the position to be portrayed or of the sponsor.

Since there is probably more interest in the role-playing conditions which facilitate attitude change, it would seem to be desirable to attempt a preliminary specification of the conditions under which disengagement of defensive reactions will mediate between role-playing and attitude change. Perhaps an appropriate place to begin is by noting that the effectiveness of role-playing is hypothesized to be due to the fact that when a person attempts to present counterattitudinal arguments on an issue as though they were his own, he is focusing on the counterattitudinal material and striving to adequately fulfill the task requirements. This preoccupation with the authentic portrayal of a counterattitudinal position is presumed to reduce significantly the opportunity for

such defensive reactions as counterargumentation, source and communication derogation, judgmental distortions, and denial or out-and-out rejection. The involvement in the counterattitudinal performance, per se, then is assumed to be the major aspect of role-playing which results in a disengagement of defensive reactions. However, the entire role-performance situation is a very complex set of variables. This leads to the possibility that factors other than involvement in the role task could also have an effect on defensive reactions. Thus, under some circumstances certain variables in the role-playing complex may be inhibiting defensive reactions while other variables may be intensifying defensive reactions.

More concretely, the implication of the preceding discussion is that when the role-playing situation forces attention to the negative or undesirable aspects of the sponsor of the role performance (or of the counterattitudinal performance itself, or the particular content issue) defensive reactions will tend to be aroused and attitude change will tend to be impeded. In order for the hypothesized relationship between disengagement of defensive reactions and attitude change to obtain, the role sponsor or role performance must not be so unpleasant or repugnant that, on balance, defensive reactions are intensified rather than reduced. Role-playing situations which could be expected to activate interfering reactions

include: those in which the counterattitudinal behavior is considered by the role-player to be morally reprehensible, those in which excessive force is used to induce the counterattitudinal behavior, those in which the sponsor of the counterattitudinal behavior is blatantly insincere or exploitative, and those in which an untrustworthy sponsor creates suspicions about his covert intentions. One critical issue then, is the extent to which the role-playing situation permits the role-player to ignore or disregard negative aspects of his counterattitudinal act or the sponsor of the act, rather than forcing the role-player's attention to these negative characteristics.

Another matter of obvious importance is the relative salience and ego-involvingness of the attitude issue. The suspension of critical judgment proposition is clearly most relevant to more involving issues with respect to which defensive reactions are likely to be aroused. For issues about which there are likely to be few if any defensive reactions, counterattitudinal advocacy would be expected to be no more effective than a passive form of exposure to the counterattitudinal material.

Another important characteristic concerns the extent to which the role-playing procedures permit cognitive contact with counterattitudinal material. One aspect of this characteristic is the length of the

performance. It is assumed that the counterattitudinal performance must be of such duration that role-supporting arguments can be processed with an unbiased evaluative disposition. That is, the performance must be of such length that an inhibition of defensive reactions could make a difference between the effectiveness of active and passive forms of exposure to counterattitudinal material. Another aspect to this characteristic is the extent to which role performance interferes with the reception and/or retention of the processed counterattitudinal arguments. There must first of all be an awareness of the content of the performance before the proposed unbiased evaluative disposition can be a determinant of attitude change.

Another somewhat related consideration involves the extent to which the role-player has sufficient information to enable him to fulfill the role requirements. Before the disengagement of defensive reactions can be an influential factor, it is necessary for the role-player to express some counterattitudinal views. Role-playing would be expected to be of little consequence when the role-player has little knowledge about the issue and/or counterattitudinal arguments. Under these latter conditions the potential effect of disengagement of defensive reactions would not have an opportunity to be actualized.

On the basis of a superficial appraisal, it might be assumed that the proposition being presented herein is a negative or incomplete statement which only explains why change does not occur, and that some other mechanism is necessary to explain why change does occur. As a corrective for such a misinterpretation, it is noted that the suspension of critical judgment approach assumes as a matter of definition that there is some content to the counterattitudinal performance. That is, it is assumed that in presenting an assigned position a person will draw upon a pool of information to fulfill the task requirements. (This pool of information will of course vary from person to person, from time to time, and from issue to issue.) Role-playing induced change occurs from reprocessing parts of this pool of information with the cognitive dispositions activated by role performance as described above.

It should be noted that it is assumed that dissonance, satisfaction, attention, effort, improvisation, and possibly other mechanisms can have some affect on the attitudinal outcome of a role-playing experience. However, it is further assumed that, under the conditions specified above, these various mechanisms will be of only secondary importance relative to the effect role-playing has in disengaging defensive reactions.

Research to verify the suspension of critical judgment approach could begin at many places. The very general objective of the present study is to demonstrate that defensive reactions play a critical role in moderating the attitude change effects of a role-playing experience. This will be attempted by varying an aspect of the role-playing situation which seems likely to effect differences in the extent to which defensive reactions are aroused.

Hypotheses and Rationale

Hundreds, perhaps thousands, of studies have shown that an experimenter can change the attitudes of subjects by presenting the subjects with some form of a persuasive communication. A much smaller body of research suggests that, in general, actively involving a subject in expressing a counterattitudinal position will lead to more attitude change than would occur by passively exposing the subject to the counterattitudinal position. The main purpose of the present research is a demonstration of the utility and applicability of the "suspension of critical judgment" approach in accounting for the particular effectiveness of role-playing in producing attitude change. To accomplish this purpose, the present study focuses on both active and passive forms of participation. Generally, it is assumed that while presenting a subject with a persuasive communication or counterattitudinal material will lead to attitude change

in the direction advocated, actively involving the subject in the presentation of the material will lead to even greater change.

The preceding considerations lead to the following hypothesis:

H1: Both passive exposure to a counterattitudinal communication and active involvement in the expression of a counterattitudinal communication produce a significant amount of attitude change in the direction of the counterattitudinal position.

Now, if the presence or absence of implicit interfering responses are critical determinants of the cognitive consequences of counterattitudinal advocacy, then it should be possible, by manipulating their presence, to affect the amount of attitude change produced. Furthermore, it could be said that, if role-playing is particularly effective because it reduces the presence of interfering responses, then by introducing (by experimental manipulation) interfering responses into the role situation, it should be possible to decrease or eliminate the superiority of active participation over passive exposure.

Janis and Gilmore (1965), in a comment consistent with the above assumptions, suggested that the gain in attitude change produced by role-playing would not be likely to occur if there were negative incentives in the role-play situation such as information about the manipulative intentions of the sponsor. A related finding

was provided by Brock (1967) who asked subjects to list their thoughts before receiving a counterattitudinal message. Among several variables, persuasive intent was manipulated and it was found that high persuasive intent led to a higher level of counterargument production.

Thus, under the circumstances of the present study, it was assumed that implicit interfering responses would be activated by explicitly mentioning the persuasive intent of the author(s) of the communication used to provide a basis for role-performance. Two factors added extra credence to the anticipation of the efficacy of the manipulation: first of all, the research was conducted just after the resumption of classes following a student strike over the first U.S. invasion of Cambodia and secondly, the subjects (male) were asked to argue against an all-volunteer army and at the time of the study, students were very much in favor of an all-volunteer army.

This prediction was made with the recognition that it has been demonstrated that suspiciousness of intent and warning about the issue and direction of persuasive material do not necessarily diminish the extent of attitude change. Excellent reviews by Papageorgis (1968) and McGuire (1969b) have pointed out the complex effects of these variables. The predictions in this

study are not about how mention of intent, in general, influences attitude change. The question is, first of all, whether the specific manipulations of this study induced negative, potentially interfering psychological reactions and, secondly, how this manipulation of interfering reactions affected the relative difference in persuasive effectiveness between an active and passive form of exposure to counterattitudinal material.

To the extent to which interfering responses are produced by the mention of persuasive intent, the superiority of active role-playing over passive exposure should be reduced. This hypothesis is more formally presented as:

H2: Active involvement in the expression of a counterattitudinal communication leads to a greater amount of attitude change than passive exposure to the counterattitudinal communication when there is no mention of the persuasive intent of the counterattitudinal communication.

In the current research, all subjects were presented with a five-page 1,000-word essay which was to provide a common background for the role-performance. The basic design of the present study required role-players to read over a counterattitudinal communication (which served to structure the role performance), then to use the information to prepare an informal talk, and finally to deliver the talk. A question arises as to which point in the procedure to introduce a comment about the manipulative intent of the source of the communication.

In order to obtain a clearer meaning of the manipulation of intent to persuade and to gather information about the crucial time parameters in the change process, it was decided to mention the persuasive intent at one of three different points in the procedure: before the subject initially reads the communication, after the subject reads the communication, or after the subject delivers (hears) the informal talk and just before attitude measurement. For one set of subjects there was, of course, no explicit mention of persuasive intent.

It is assumed that the earlier that persuasive intent is mentioned, the more interfering responses are created in the interval preceding and during role performance; and consequently the more equal in persuasive effect are active and passive forms of participation. Mention of persuasive intent would be expected to have less of an inhibiting effect if given after preparation for and delivery of a counterattitudinal performance. The second hypothesis then predicts an interaction between type of participation and mention of persuasive intent. It is assumed that active participation will be at least as effective as passive exposure in all mention of intent conditions; although it is uncertain whether the main effect of type of participation will be obscured by the interaction mentioned.

A number of explanations of the role-playing effect have been considered: (a) dissonance, (b) improvisation, (c) biased scanning, (d) attention, (e) satisfaction, (f) effort, and (g) suspension of critical judgment. Although the present research is primarily an attempt to validate the suspension of critical judgment approach, evidence relative to several of the other alternatives will be collected.

Recall data were gathered in order to examine the attention hypothesis. Although the "effort" hypothesis was not considered particularly compelling when applied to attitude change concerning nontask related arguments, role-playing and non-role-playing conditions were equated as nearly as possible in terms of effort required to fulfill the task requirements. To evaluate the satisfaction hypothesis, self-ratings of role performance can be compared to see if they correspond to condition differences in attitude change.

The dissonance theory explanation may or may not have been relevant to the subjects' behaviors in the present study. A number of studies have suggested that "choice" seems to be an essential element in the arousal of dissonance (e.g., Linder et al., 1967). That is, it is assumed that counterattitudinal advocacy will arouse cognitive dissonance only if a person is given a choice of whether or not to engage in the attitude-discrepant

behavior. If choice is a necessary condition for the arousal of dissonance, and therefore a necessary condition for testing theory-related predictions, then the present study did not establish adequate conditions for testing dissonance predictions. Subjects committed themselves over the telephone to take part in an experiment looking into the ways in which people organize their thoughts. In addition, before engaging in any issue related behaviors or receiving any information about the experimental topic, subjects were paid and signed receipts. During the experiment, active and passive roles were arbitrarily assigned and the subjects were not queried about their desire to continue with the study.

If, however, dissonance was aroused by the manipulation in the current study, then predictions from the theory are possible. The clearest prediction that can be made is that active participation will lead to greater attitude change than passive exposure. Subjects in active participation conditions should experience more dissonance than passive exposure subjects since they would have the dissonance produced by the attitude-discrepant role performance in addition to the dissonance produced by the counterattitudinal communication.

Predictions about the effect of the mention of persuasive intent are uncertain. It seems most likely that mentioning the persuasive intent would increase the

dissonance and consequently, the amount of attitude change. Thus, dissonance theory would predict that the mention of persuasive intent would lead to an increase in the amount of attitude change produced by role-playing--a prediction contrary to the one made by the suspension of critical judgment approach.

CHAPTER II

METHOD

Overview

An after-only design was used to examine the effect of role-playing and mention of persuasive intent on attitude change. Experimental subjects were exposed to a 1,000-word essay arguing against an all-volunteer army. Half of the subjects then used the material to improvise a counterattitudinal speech, while the other half outlined the essay material. Two subjects were scheduled for each session. The two role-playing conditions were randomly assigned so that one member of the pair was assigned to improvise a "talk" while the other member was asked to outline the material. After the role playing, the effect of the two independent variables on several dependent variables was measured.

The role-playing manipulation was crossed with a manipulation of mention of persuasive intent. One-fourth of the subjects were warned about the intent of the essay before reading it; one-fourth of the subjects were warned after reading the essay; another fourth were warned before

the dependent variable measures were distributed; and finally, for one-fourth of the subjects the persuasive intent of the essay was not mentioned. Supplementing this 2 x 4 design was a control group which was not exposed to any of the experimental procedures but merely filled out the attitude rating scales.

Subjects

One hundred forty-nine undergraduates at Michigan State University were recruited from a larger pool of subjects who had responded to a school-newspaper advertisement offering to pay subjects for participating in motivational research. Subjects were contacted by telephone and given a chance to earn \$2 for taking part in an experiment "looking into the ways in which people organize their thoughts." After the subject had agreed to participate and had made an appointment for the experiment, he was informed that, because of scheduling requirements and the fact that two people were taking part in each session, it was important to be prompt. While a small percentage of the subjects had never taken part in psychological research before, the mean number of experiments per subject was 2.77. Sixteen subjects were randomly assigned to each of eight experimental conditions and 21 were assigned to the control group condition.

Attitude Topic and Essay Material

Three weeks prior to the first session of the experiment students in several undergraduate classes at Michigan State University were surveyed about their attitudes on a number of topics of national interest. The topic of an all-volunteer army was selected for manipulation because there was a high degree of consensus and polarization on the issue. Approximately 80% of the subjects surveyed checked a point on the side of the neutral point which favored an all-volunteer army. On an 11-point scale most respondents checked one of the first three choice points.

The fact that there was a great deal of consensus in this student population on a position strongly in favor of an all-volunteer army made the topic highly desirable for a number of reasons. First of all, since subjects were randomly selected for the experiment without knowledge of their attitude on the issue, there was a high probability that a position against an all-volunteer army would be counterattitudinal for most subjects. Secondly, the extremity of the majority responses reinforced the assumption that this was a highly ego-involving issue. Finally, the attitudinal consensus was desirable because the greater the consensus in initial attitude, the less individual differences in initial attitude contribute to the total variability of attitude change

scores and therefore the greater the likelihood of detecting the influence of the independent variables.

To provide material for the role-playing experience an essay was developed which took a position that an all-volunteer army is an undesirable way to maintain an army. The 1,000-word essay entitled "Concerning an All-Volunteer Army" was written in a clear and highly organized style. The first page noted that the issue of an all-volunteer army was one of widespread concern. The second page made a case that the United States did need an army. The remainder of the essay contained four arguments suggesting that an all-volunteer army is not the answer to American military manpower needs: the cost would be too high; civilian concern about military involvement would wane, the military institution would become more inflexible, and the poor would have to carry the burdens of the society for the rich. The source of the essay was unspecified, E merely indicated that the material was taken from a recent campus position paper. (See Appendix A for a copy of the essay.)

Procedure

Two subjects were scheduled for each session. Immediately upon arriving at the experiment, subjects were paid \$2 and asked to sign a receipt. E then assured the subjects of the confidential nature of their responses. After reminding Ss that the purpose of the research was to

examine the ways in which people organize their thoughts, E passed out copies of the essay on an all-volunteer army and proceeded with the following instructions:

First of all what we'd like to have you do is read over the following material. It's of some current interest and we thought it would be something you could work with. You'll be given six minutes to finish reading the essay.

Manipulation of role-playing variable. After Ss completed the essay, E read the following instructions which functioned to define the two experimental tasks.

Now I'd like each of you to do something different with the material in the essay. I'd like one of you to use the points listed in the essay and present a "talk" in your natural speaking style. When the time comes, I'll ask you a "lead-in" question and you should answer in the way you normally would when having a discussion between friends. As sincerely and convincingly as possible present the same position as the one taken in the essay. Use all the arguments listed and any examples, illustrations or other arguments you want. You'll be given eight minutes to prepare the talk. A sheet of paper will be provided so that you can take whatever notes you think will be helpful. Your talk will be tape-recorded for purposes of analysis.

Now, while one of you is preparing a talk, the other will be asked to make up an outline of the essay in whatever form you decide is appropriate. While the talk is being presented, the other person should carefully listen to and think about the presentation. After the talk, I'll ask you both some questions about it.

At this point E briefly summarized the instructions and asked for questions concerning the two different tasks. Active role-players were informed that they could use whatever notes they should desire to take.

At the end of the eight-minute preparation (or outline) period, E asked Ss if they were ready. Upon

acknowledgment from both Ss, E reminded the passive role-player to listen very carefully and told the active role-player to begin with the talk after E had given him a lead-in question.

After turning on a tape recorder which had been in full view from the beginning of the session, E cued the active role-player by saying, "Well, I don't know. I've been doing a lot of thinking about it and I just can't decide although I think I'm leaning toward an all-volunteer army. How do you feel about it?" Subjects were allowed to talk as long as they wanted; however, most "talks" ranged between three and five minutes in length. When the active role-player had finished his talk, E collected the notes of the active role-player and the outline of the passive role-player. E then passed out two sets of questions which he said would help him understand their performance. (See Appendix B.)

Subjects were not debriefed at the experimental session but were given several options about receiving further information about the experiment. Two separate evening discussions were scheduled for times later in the quarter. Ss also had a chance to sign-up for a "two- or three-page description and discussion of the study." For all Ss to whom the above options were undesirable or impossible, E extended an invitation for office

appointments. Before leaving, subjects were thanked for their cooperation and asked not to discuss the experiment with friends.

Manipulation of persuasive intent. The persuasive intent variable was intended to induce implicit interfering responses (see introduction). To instigate these affectively negative reactions, E told the subjects, "As you'll see [or 'As you've seen'] the essay is a recent campus-position paper which was intended to influence people so that they would be against an all-volunteer army." For one-fourth of the experimental Ss the "forewarning" was delivered before they read the essays, for one-fourth the "forewarning" was delivered after the essay, for another fourth the "forewarning" came before the attitude measurement, and for another fourth of the subjects there was no mention of the persuasive intent of the essay.

Control condition. After being paid \$2 and signing a receipt and without being exposed to any experimental material or manipulations, control subjects answered a set of questions concerning their feelings about national issues of current interest and filled out a set of items composed of two personality scales. E then informed the Ss that they were in a control group and described the activities of experimental Ss. As with experimental Ss, the control Ss were thanked and asked not to discuss the experiment with friends.

Dependent Measures

Attitudes toward national issues. The first page of the first set of questions asked subjects to express their opinions about six issues of national interest by checking a point on an 11-point rating scale. The third item of the set, which is included below as an example of the format of these questions, was the measure of the major dependent variable of the study.

The United States should have an all-volunteer army.

1	2	3	4	5	6	7	8	9	10	11
Strongly					Neutral					Strongly
Agree										Disagree

(See Appendix B for a list of the entire set of questions used.)

Evaluation of the improvised talk. Both the passive and active role-players rated the talk on four dimensions. Ss rated how convincing, interesting, sincere, and logical the presentation had been. Role-playing subjects rated themselves and passive participants rated the performance of the active participants with whom they were paired. Ratings were made on a scale such as the one below. (See Appendix B.)

How convincing was the "talk" which was just given?

1	2	3	4	5	6	7	8	9	10	11
Not at all									Very	
convincing									convincing	

Perception of essay and its source. Besides rating the talk, subjects were also asked to rate the original essay. Ss indicated how "fair" the "essay" had been and how "knowledgeable" and "trustworthy" the source (or sources) had been. Ss also checked how much they had thought about the essay's intent to persuade. Again 11-point scales with end-point labels like those used for evaluating "the talk" were provided.

Recall. The last question of the first set of questions asked Ss to list the main thesis and each of the supporting arguments of the essay.

CHAPTER III

RESULTS

Check of Premanipulation Equivalence of Experimental Subjects

The after-only nature of the design used in this study makes it impossible to specify definitely whether or not there were significant premanipulation differences among the various experimental conditions in terms of attitudes toward an all-volunteer army. Indirect evidence does suggest, however, that the procedures used to assign subjects to conditions were effective in creating experimental groups relatively equivalent with respect to the critical attitude issue.

After the experimental manipulation, subjects were asked to indicate their opinions on five other issues of nationwide concern in addition to the critical issue of an all-volunteer army. Nonsignificant main effects and interactions on these nonmanipulated topics would suggest that the assignment procedures were successful.

The values of the F statistics and associated probability levels obtained from the analysis of variance of opinion data for each issue are presented in Table 1.

Table 1

F Statistics and Associated Probability Values
from Analyses of Variance of the Non-
manipulated Attitude Issues

Attitude Issue	Main Effect Type of Exposure ^a		Main Effect Mention of Intent ^b		Interaction ^b	
	F	p	F	p	F	p
Question 1 (development of ABM)	.642	(.424)	1.046	(.375)	.087	(.967)
Question 2 (demon- strations)	.001	(.976)	2.152	(.097)	.324	(.808)
Question 4 (college deferments)	.559	(.456)	1.802	(.150)	1.155	(.330)
Question 5 (family size)	.868	(.353)	1.363	(.257)	1.191	(.316)
Question 6 (Supreme court)	.185	(.668)	.818	(.486)	.758	(.520)

^adf = 1,120

^bdf = 3,120

None of the main effects or interactions on any of the issues obtained conventional levels of significance and it was therefore assumed that the various experimental conditions were equivalent with respect to premanipulation attitudes toward an all-volunteer army.

Assessment of Experimental Manipulations

Type of exposure. No measure of this variable was taken. It was assumed that each participant would be aware of and could identify the behaviors associated with the condition to which he was assigned.

Mention of persuasive intent. As part of an experiment on "the ways in which people organize their thoughts," subjects were presented with an essay against an all-volunteer army. In some conditions the manipulative intent of the essay material was explicitly stated to the subjects by the experimenter. The purpose of the manipulation was to arouse implicit interfering responses (see introduction).

It will be recalled that the time at which this observation was introduced was systematically varied: for some subjects the comment was delivered before they read the essay; for others the comment was delivered after they read the essay and before they prepared for an informal talk or outlined the material; in yet another condition, the comment was delivered after the

role-performance had been given and just before post-manipulation questionnaires were administered. In one condition the experimenter did not explicitly mention the persuasive intent of the essay. It was hypothesized that this mention of persuasive intent would greatly reduce the superior persuasive effect of active participation as compared with passive participation.

As a check to see if the manipulation was successful, subjects were asked, "How much did you think about the essay's intent to influence your feelings?" and were given an 11-point rating scale (anchored at 1 with the label "not at all" and at 11 with the label "constantly") to indicate their reaction. An analysis of variance of the scores revealed that there were no significant differences in concern about intent among the experimental conditions. The means and analysis of variance of the subjects' self-perceptions concerning their thoughts about the essay's persuasive intent are presented in Table 2.

The data seem to suggest that the manipulation was unsuccessful. There was no tendency for subjects to report more thoughts about the essay's intent to influence when the statement about intent was delivered earlier in the experimental proceedings. In fact, subjects in the condition in which no mention of intent was delivered reported virtually the same degree of interfering thoughts as did subjects in the other conditions.

Table 2

Means and Analysis of Variance of Subjects' Self-perceptions of Their Thoughts about Persuasive Intent

Condition ^a	M1	M2	M3	M4	
Active Participation	5.56	5.94	6.25	5.56	
Passive Exposure	6.81	4.56	7.06	6.31	
Source of Variance	SS	df	MS	F	P
Type of Exposure	4.13	1	4.13	.54	ns
Mention of Intent	33.02	3	11.01	1.43	ns
Interaction	33.27	3	11.10	1.44	ns
Error	924.56	120	7.70		
Total	994.99	127			

Note.--The higher the score the more thought about intent to persuade; n = 16 in each cell.

^aM1 = mention of intent before subject initially reads essay.

M2 = mention of intent after subject reads essay.

M3 = mention of intent after informal talk delivered.

M4 = no mention of persuasive intent.

The subjects may have differentially experienced thoughts about the persuasive intent of the essay as intended but the differences may have been obscured when subjects attempted to reconstruct their thoughts concerning what was clearly a biased essay about an all-volunteer army. It is thus possible that the manipulation was effective but that the question used to check it was so direct that it introduced a demand to report the presence of thoughts about the manipulative intent. An analysis of subject ratings of how fair the essay was offers some support for this possibility.

That is, for subjects in active role-playing conditions, the earlier in the procedure mention of intent was delivered, the greater the tendency for subjects to perceive the essay as biased. Table 3 presents the means and analysis of variance for the ratings of fairness of the essay.

The means for passive exposure conditions do not parallel the trend of means for the active-participation conditions. In fact, the mention of intent condition which induced the highest ratings of bias among role-players, induced the lowest ratings of bias among non-role-playing subjects. This suggests that the manipulation was effective for active participants but had an unintended effect for passive exposure subjects. Subjects were also asked to indicate how knowledgeable and how trustworthy

Table 3
Means and Analysis of Variance of Subject's Ratings
of Fairness of the Essay

Condition ^a	M1	M2	M3	M4	
Active Participation	9.50	8.94	7.94	7.38	
Passive Exposure	6.38	8.25	8.00	8.25	
Source of Variance	SS	df	MS	F	P
Type of Exposure	16.53	1	16.53	2.85	.094
Mention of Intent	11.78	3	3.93	.68	ns
Interaction	71.53	3	23.84	4.11	.008
Error	695.38	120	5.79		
Total	795.22				

Note.--The higher the mean, the more the essay was perceived to be biased; n = 16 in each cell.

^aM1 = mention of intent before subject initially reads essay.

M2 = mention of intent after subject reads essay.

M3 = mention of intent after informal talk delivered.

M4 = no mention of persuasive intent.

they felt the source of the counterattitudinal essay to be. None of the main effects or interactions approached conventional levels of significance.

When the evidence concerning the manipulation of intent is reviewed, it unfortunately becomes quite clear that any interpretation of the data with respect to the mention of intent variable must be purely speculative. The meaning of the manipulation is at best ambiguous. As a result of these findings, the validity of Hypothesis 1 can still be properly examined but the examination of Hypothesis 2, the major hypothesis of the study, becomes a questionable exercise.

Test of Hypotheses

Hypothesis 1. The first hypothesis predicted that both types of participation, active role-playing and passive exposure, would be effective in changing attitudes. This hypothesis specifically predicted:

H1: Both passive exposure to a counterattitudinal communication and active involvement in the expression of a counterattitudinal communication produce a significant amount of attitude change in the direction of the counterattitudinal position.

Essentially, this tests whether or not the procedures were effective in changing attitudes. A supplementary control group unexposed to any of the experimental manipulations was added to the 2 x 4 after-only design to provide a baseline against which change could be assessed.

The means for the experimental conditions and the control condition on the all-volunteer army issue are presented in Table 4.¹

Results of the analysis of the mean differences indicate that only the passive exposure--M1 subjects (mention of intent given before subjects read the essay) and passive exposure--M3 subjects (mention of intent given after the informal talk had been presented) differed significantly ($p < .05$) from control subjects. (The critical value for Dunnett's t statistic, $p < .05$, for 9 means and 120 degrees of freedom was 2.41, one-tailed.)

This indicates that only subjects in the two mentioned passive participation conditions demonstrated a significant amount of attitude change. However, the difference between the mean of the experimental condition

¹A modified version of Dunnett's test for comparing all means with a control was used to test Hypothesis 1. Dunnett's test (Winer, 1962, p. 89) is appropriate for comparing a control condition of K conditions with each of the rest of the conditions. The level of significance chosen applies to the whole set of $K-1$ comparisons and not to each of the individual comparisons. Dunnett's t -statistic is:

$$t = \frac{\bar{T}_j - \bar{T}_o}{\sqrt{2MS \text{ error}/n}}$$

In this case a harmonic mean was computed for n with 16 subjects in each of the eight experimental groups and 21 subjects in the control group. This computed value for n was 16.43.

Table 4

Means of Attitude Toward an All-Volunteer Army for
Experimental and Control Groups

Condition ^a	M1	M2	M3	M4
Active Participation	4.62	4.31	4.12	4.81
Passive Exposure	7.12	4.12	5.94	4.75
Control		3.42 ^b		

Note.--The lower the mean, the more favorable toward an all-volunteer army.

^aM1 = mention of intent before subject initially reads essay.

M2 = mention of intent after subject reads essay.

M3 = mention of intent after informal talk delivered.

M4 = no mention of intent.

^bn = 16 in each cell but this one where n = 21.

and the control condition was in the predicted direction for each of the experimental conditions ($p < .01$, binomial test) suggesting that, in general, the procedures tended to change the subject's attitudes in the intended direction. Thus, the first hypothesis receives some confirmation although the support is rather weak.

Hypothesis 2. The second hypothesis states:

H2: Active involvement in the expression of a counter-attitudinal communication leads to a greater amount of attitude change than passive exposure to the counterattitudinal communication when there is no mention of the persuasive intent of the counter-attitudinal communication.

The means for the attitudes toward an all-volunteer army were presented in Table 4. Table 5 presents the analysis of variance of the attitude scores for the experimental subjects.

Table 5

Analysis of Variance of Attitude Toward an All-Volunteer Army Scores for the Experimental Subjects

Source of Variation	SS	df	MS	F	P
Type of Exposure	33.01	1	33.01	3.26	.073
Mention of Intent	45.52	3	15.17	1.50	.218
Interaction	43.58	3	14.52	1.44	.235
Error	1212.81	120	10.10		
Total	1334.92	127			

The predicted interaction was not significant nor was the main effect for the "mention of intent" variable. Since the manipulation of mention of intent variable did not seem to have the intended effect, the failure to find the predicted interaction is to be expected. Rather unexpectedly, the main effect for "type of exposure" approached conventional levels of significance ($p < .08$). This latter outcome was in the opposite direction from that expected. Contrary to a great deal of research, passive exposure had a tendency to produce more attitude change than an active form of counterattitudinal advocacy.

Supplementary Analyses

The attention hypothesis. An item in the post-manipulation questionnaire asked the subjects to list the main thesis and each of the supporting arguments presented in the essay and permitted an examination of the attention hypothesis. The interjudge reliability of the two judges' ratings of recall was .91. For purposes of comparison a subject's recall score was the combination of the two judges' ratings. The means and analysis of variance of the recall scores are presented in Table 6.

The main effect for mention of intent and the interaction between type of participation and mention of intent were not significant. The main effect for type of participation approached significance ($.10 < p < .05$). That is, there was a trend for actively involved subjects to recall more of the counterattitudinal essay. This is what the attention hypothesis predicts. However, the attention hypothesis also predicts greater attitude change along with greater recall and the data did not support this prediction. While subjects actively involved in presenting a counterattitudinal position had greater recall scores than passively exposed subjects, actively involved subjects demonstrated less attitude change.

The improvisation hypothesis. To explore the predictions of the improvisation hypothesis, two general dimensions of the counterattitudinal performance were

Table 6
Means and Analysis of Variance for Recall Scores for
Experimental Subjects^a

Condition ^a	M1	M2	M3	M4	
Active Participation	11.75	11.12	12.50	9.68	
Passive Exposure	10.38	10.00	10.50	10.31	
Source of Variation	SS	df	MS	F	P
Type of Exposure	30.03	1	30.03	3.70	.05 < p < .10
Mention of Intent	40.12	3	13.38	1.65	
Interaction	30.34	3	10.11	1.25	
Error	973.38	120	8.11		
Total	1073.88	127			

Note.--The higher the mean, the greater the recall; n = 16 in each cell. The potential range for the recall scores was 0-16, the actual range was 2-14.

^aM1 = mention of intent before subject initially reads essay.

M2 = mention of intent after subject reads essay.

M3 = mention of intent after informal talk delivered.

M4 = no mention of persuasive intent.

examined. First of all, the length of time spent in delivering the counterattitudinal talk was obtained by timing the tape-recorded talk with a stop watch. In addition, role-player's talks were rated on a 7-point scale for overall persuasiveness. The interjudge reliability of the judge's ratings of persuasiveness was .81.

Since there were no significant differences among active role-playing conditions in either overall persuasiveness ($F < 1$) or length of performance ($F < 1$), the improvisation hypothesis was tested by examining within cell and overall correlations between performance and attitude. These correlations are presented in Table 7. The within condition correlation of attitude score with overall persuasiveness ranged from $-.164$ to $.145$. The within condition correlation of attitude score with length of performance ranged from $.114$ to $.320$. None of the correlations were significantly different from zero (Critical value of $r .05$, $df = 14$, one-tailed = $.426$). The overall correlation between attitude toward an all-volunteer army and length of performance was $.2055$. A value this large or larger has approximately a $.05$ probability of occurrence. The overall correlation between attitude toward an all-volunteer army and overall persuasiveness was $-.0091$ and did not begin to approach significance.

Table 7

Correlation Between Attitude Toward an All-Volunteer
Army and Length and Rated Overall Persuasiveness
of Performance for Active Participation Subjects

Condition ^a	M1	M2	M3	M4	Overall
Correlation of attitude with:					
Length	.2411	.1728	.3203	.1140	.2055*
Overall Persua- siveness	-.1643	.0321	-.0859	.1449	-.0091

Note.--for within cell correlations $r_{.05}$, $df = 14$, one-tailed = .426; for the overall correlation $r_{.05}$, $df = 60$, one-tailed = .211 (Ferguson, 1966, p. 413).

* $p < .06$.

^aM1 = mention of intent before subject initially reads essay.

M2 = mention of intent after subject reads essay.

M3 = mention of intent after informal talk is delivered.

M4 = no mention of persuasive intent.

The satisfaction hypothesis. The essence of the satisfaction hypothesis is that a role-player will be influenced in the direction of his counterattitudinal performance to the extent to which he feels he has done a good job. To gather data for this hypothesis active role-playing subjects were asked to indicate how convincing, interesting, sincere, and logical they had been in giving the informal talk. That is, the subjects rated themselves on the mentioned dimensions.

There were no significant differences among mention of intent conditions for role-playing subjects on any of the self-ratings. There was no theoretical basis in the present research to use non-role-playing subjects' ratings of the active participants' performance and consequently these ratings were not used in any analyses. The within cell and overall correlations between attitude and self-rating for each dimension are presented in Table 8. Both self-ratings of sincerity and convincingness were found to be consistently related to attitude toward an all-volunteer army. The overall correlation between attitude toward an all-volunteer army and the rating of sincerity was .356 ($p < .005$, $df = 62$, one-tailed). The overall correlation between attitude toward an all-volunteer army and the rating of convincingness was .270 ($p < .025$, $df = 62$, one-tailed).

Table 8

Correlation Between Attitude Toward an All-Volunteer
Army and Self-Rating of Performance for
Active Participation Subjects

Condition ^a	M1	M2	M3	M4	Overall
Correlation of Attitude with Self-Rating					
"Convincing"	.4229	.2896	.0919	.2184	.2701**
"Interesting"	.2789	.4613*	-.0120	-.1043	.1150
"Sincere"	.4154	.4822*	.3458	.2228	.3559***
"Logical"	.5131 ^a	-.1579	.0442	-.1349	.1119

Note.--n = 16 in each experimental condition:
df = 14, one-tailed: r .05 = .426, r .01 = .574
df = 62, one-tailed: r .05 = .295, r .001 = .325
(Ferguson, 1966, p. 413).

^aM1 = mention of intent before subject initially
reads essay.

M2 = mention of intent after subject reads essay.

M3 = mention of intent after informal talk
delivered.

M4 = no mention of persuasive intent.

* p < .05, one-tailed.

** p < .025, one-tailed.

*** p < .005, one-tailed.

CHAPTER IV

DISCUSSION

A large number of studies (Janis & King, 1954; Culbertson, 1957; Elms, 1967; Janis & Mann, 1965) have shown that active participation in the expression of counterattitudinal position leads to a significant amount of attitude change in the direction of the public statement. Many more studies have demonstrated that an experimenter can produce desired attitude change by passively exposing subjects to a persuasive communication. It is somewhat surprising then that the first hypothesis (which predicted that both active and passive forms of contact with counterattitudinal information would lead to a significant amount of attitude change), received only weak support. Only two of the eight experimental groups were significantly different from the control group on the primary dependent variable measure (see Table 2).

One partial explanation of the limited amount of attitude change may be related to a finding by Greenwald (1970). In that study it was obvious that the role-playing effect did not occur when subjects had an

opportunity to consider and reject the counterattitudinal argument before they were assigned the counterattitudinal task. The role-play effect was observed, however, when the counterattitudinal material was received after the role assignment.

In the present study subjects in all experimental conditions read the counterattitudinal essay before role assignment. This procedure was used to ensure equal attention by both role-playing and non-role-playing subjects to the content of the attitude-discrepant communication. The unintended effect may have been to reduce the amount of attitude change.

Yet another explanation of the limited attitude change involves an aspect of the counterattitudinal essay which may have highlighted peer group opinion on the attitude issue under investigation. Specifically, the introduction of the essay attacked student support of an all-volunteer army as short-sighted and self-serving. A matter of historical accident, a campus-wide boycott of classes because of the first U.S. invasion of Cambodia, may have increased the importance and salience of peer opinion. Pilot studies just prior to the boycott revealed that student opinion was overwhelmingly in favor of an all-volunteer army. It has often been observed that reference groups can function as a force not only in developing attitudes but also in maintaining attitudes.

Thus, in the present study at a time when there were strong anti-war feelings, the comment in the essay about peer group opinion may have reduced the effect of the counterattitudinal essay.

Uncertainty about the effectiveness of the manipulation designed to induce implicit interfering responses presents even a more serious problem. Two possible approaches can be considered with respect to the manipulation. First of all, it may be assumed that the manipulation was effective as intended but that the effect was inappropriately measured. It was previously suggested that the manipulation-check item may have been too direct, thus obscuring actual differences.

Another possibility is related to the fact that the critical aspect of the manipulation involved the time dimension; when during the processing of the counterattitudinal material the thoughts about manipulative intent occurred may have been of major importance. It may not have been possible for subjects to report accurately the onset of their reactions about intent. As a final consideration it is suggested that it may have been better to ask subjects how strongly they reacted to this persuasive intent rather than how much of the time they thought about the persuasive intent.

The other approach, and the one which seems most likely, assumes that the manipulation was not effective as

intended. If the manipulation had been effective, the attitudes of active role-playing subjects in conditions where intent was explicitly mentioned would have been significantly lower than the actively role-playing subjects who did not receive mention of persuasive intent. Table 4 indicates that the means of former group (4.62, 4.31, and 4.12) were essentially the same as the mean of the latter group (4.81).

In addition, the attitude data suggest that the manipulation tended to have different effects on active role-players than on passive participants. In two of the three passive exposure conditions, the explicit mention of persuasive intent tended to facilitate attitude change.

Apparently, for active participants, the manipulation provided little information that was not immediately available without explicit mention of intent.

Very much related to the question of the actual effect of the mention of intent manipulation is the finding that there was a near significant difference in mean in attitude toward an all-volunteer army between active role-players and passive participants. Passive participants were more influenced by the counterattitudinal material. Clearly the difference was due to the effect of the mention of intent variable on passively exposed subjects (see Table 4). It can be seen that passively

exposed subjects who were told about the persuasive intent before initially reading the essay material and passively exposed subjects who were told about the persuasive intent of the essay after the informal talk had been given evidenced attitude scores substantially larger than the attitude scores of subjects in the other conditions.

It should be noted that the change facilitating effect of role-playing has not been universally acknowledged. McGuire (1969a) has been responsible for some of the more forceful objections. Several studies were cited which have found greater attitude change with passive than active participation. For his skeptical readers, no doubt, McGuire provided several reasons for the obviousness of the observed decreased efficacy of active participation. The major reasons included the facts that:

- (a) Aspects of active participation may interfere with learning.
- (b) The active participant has little interest in or acquaintance with the topic.
- (c) The active participant is unmotivated or unprepared to utilize the participation opportunity.
- (d) The active participant typically does not have a supply of relevant arguments within his cognitive repertory.

It is clear, however, that none of the above considerations provide a very cogent explanation of the attitude change data of the present study. They do not help explain the greater attitude change demonstrated by passive participants. First of all, all subjects were supplied with a set of counterattitudinal arguments. While active participants may have been unprepared to use the material, the nature of the experimental task would suggest that active participants would be more strongly motivated than passive participants to use the information since active participants expected to make a public statement based on the information. Furthermore, pilot studies indicated that the issue was in fact a very salient one for college students--particularly male students. Finally, active participants obtained near significantly greater recall scores than passive participants, suggesting that the active participation did not interfere with learning.

Although the suggestions by McGuire were of little value in the present study, they should not be lightly dismissed. The "suspension of critical judgment approach" also suggests that there are situations in which active participation in expressing a counterattitudinal position will be no more effective and perhaps even less effective than passive exposure to the same counterattitudinal material. In situations in which the role-playing calls attention to the negative

aspects of a sponsor, communicator, or the role-playing situation, role-playing is not expected to be superior to passive exposure as far as attitude change is concerned.

In another context, Greenwald (1969) has suggested that the less biased evaluation disposition associated with assignment to a counterattitudinal position may be of little or no consequence on highly familiar issues or on issues which provide little new information. As a related point it was previously noted that the suspension of critical judgment approach suggests that differences between active and passive forms of exposure to counterattitudinal information will be minimal on low ego-involving issues--issues about which few defensive reactions and little resistance can be expected.

An examination of the means on the attitude toward an all-volunteer army issue (Table 4) suggests that there is no simple explanation of the data. Particularly troublesome for any sort of parsimonious speculation are the data from the conditions in which the attention of passively exposed subjects was directly called to the persuasive intent of the essay material. Passive participation subjects who received mention of intent after reading the essay material demonstrated attitudes most similar (of all eight experimental groups) to unexposed control subjects, while subjects in the other two

conditions where there was explicit mention of persuasive intent were least similar to the unexposed controls. The mention of intent did not have a uniform effect on passively exposed subjects. All that can be safely inferred is that some aspect(s) of the experimental procedure was (were) particularly effective in inducing subjects in some conditions to change their attitudes. Perhaps a different explanatory proposition is necessary for each mention of intent condition. Further speculation about reasons for the observed effect seems rather fruitless. None of the various theoretical positions on role-playing would have predicted the obtained results.

In view of the complex and ambiguous effect of the mention of intent variable, little will be said about the failure of dissonance theory to predict the attitude change effects. The findings were not inconsistent with the suspension of critical judgment approach, if it is assumed that the manipulation led to less interfering responses for "passive participants." That this was partially the case is seen in the ratings of essay fairness (see Table 3). Nevertheless, as in the case of dissonance theory, speculation about the explanation of the obtained data is of dubious value. The only role-playing hypothesis about which conclusive evidence was obtained was the attention hypothesis. An examination of Table 4 and Table 6 indicates that the hypothesis was

not confirmed. Active participants demonstrated higher recall scores but less attitude change than passive participants.

Replicating a finding in many other studies, objective ratings of the overall persuasiveness of the role performance demonstrated no support for the improvisation hypothesis. However, within cell correlations between length of role-play performance and attitude change were weak but consistently positive and the overall correlation between the two variables approached conventional levels of significance.

Self-ratings of performance (how sincere, and how convincing) were found to be consistently correlated with attitude change across the four role-playing conditions. This can be taken as partial support for the satisfaction hypothesis, that a subject will tend to be convinced by his performance the more he feels he has done a good job. However, it is possible that the ratings of sincerity and convincingness are only indirect attitude measures not independent from the critical attitude issue. Or perhaps they are indirect measures of the absence of interfering responses. Stronger tests of all the various hypotheses can be made when significant between-condition attitude effects are obtained--a condition not met in the present study.

What does become clear from an examination of the data is the importance of more closely examining the

procedures used in the present study. While the conditions established for active participants were quite similar to those employed in many other studies, the circumstances for passive participants were somewhat unusual. In no other study were conditions preceding role assignment so suspenseful. Before the actual coin toss to decide which of the pair of subjects would deliver an informal talk and which would outline the material, both subjects were well aware of the strongly discrepant stand that it would be necessary for one of them to publicly project. Informal observations indicated that the subjects receiving the outlining task expressed a great deal of relief (smiling, sighs of relief, exclamations, etc.).

This can be contrasted to the more sober expressions often accompanied by explicit references by the subjects who had "won" the task of delivering an informal talk to uncertainty about ability to deal with the assignment. To what extent relief about task assignment mediated the attitude change effects is not clear, but it seems plausible that the relief may have accounted for some of the observed change. The mention of persuasive intent just before the second processing (preparation for talk on outlining) of the counterattitudinal material may have dampened the facilitating effect of the positive effect resulting from task assignment. The study by Janis and King (1954) employed procedures most similar to the ones used here.

The differences are that in the Janis and King study there were three subjects per experimental session and each subject was asked to deliver a speech. Since each subject had to deliver a speech the "relief" factor would not seem to be relevant.

The foregoing discussion points to certain troublesome aspects of the particular paradigm chosen for the present study. Specifically, the decision to schedule both an active and a passive participant in each experimental session seems to have introduced certain unintended dynamics. That is, the role assignment procedures seem to have also manipulated the subject's feelings of relief, which apparently interacted with the mention of intent manipulation. The complex pattern of attitude differences is taken as a reflection of these unintended dynamics. As was mentioned in the introduction, this design decision derived from a concern about the serious problem of inequalities between active and passive participants in exposure to counterattitudinal information.

On the basis of the present study, it is recommended that future research exploring role-playing related hypotheses and propositions schedule only one subject per experimental session. To equate for exposure to counterattitudinal information, passive participants could be

exposed to written material, audio tapes, or video tapes of an active participant's counterattitudinal performance.

Another aspect of the present study which should receive at least passing attention concerns the nature of the task set out for passive participants. Phrased as a question of general research import, the issue is, how passive is the passive participant? In this study, so-called passive participants read a persuasive essay, outlined the essay material, and listened to the counterattitudinal performance of a peer. Only in a very relative sense does it seem correct to call these activities passive participation or passive exposure. Perhaps overt and covert role-playing would have been more appropriate labels. That the passive participants were so active may partially account for the nearly identical persuasive effect of active and passive forms of participation for subjects not explicitly told about the persuasive intent of the essay.

The present research does not support or refute the propositions of the suspension of critical judgment approach. The utility of this new position remains to be fully examined. The possible directions to be taken are many. A modified replication of the present design was previously suggested; specifically that was to schedule only one subject per session but take precautions to equate for exposure of information. Another possible

method of validating the suspension of critical judgment approach would be to use the technique presented by Osterhouse and Brock (1970). This would involve giving active and passive role-playing subjects a brief time period following the counterattitudinal performance to list their ideas about the experimental issue. This material could then be content analyzed for counterarguments. The suspension of critical judgment prediction would be that active participants would obtain lower counterargument scores and demonstrate more attitude change.

REFERENCES

REFERENCES

- Aronson, E. The psychology of insufficient justification: An analysis of some conflicting data. In S. Feldman (Ed.), Cognitive consistency. New York: Academic Press, 1966.
- Brehm, J. W., & Cohen, A. R. Explorations in cognitive dissonance. New York: Wiley, 1962.
- Brock, T. C. Communication discrepancy and intent to persuade as determinants of counterargument production. Journal of Experimental Social Psychology, 1967, 3, 296-309.
- Carlsmith, J. M., Collins, B. E., & Helmreich, R. L. Studies in forced compliance: I. The effect of pressure for compliance on attitude change produced by face-to-face role playing and anonymous essay writing. Journal of Personality and Social Psychology, 1966, 4, 1-13.
- Chapanis, N. P., & Chapanis, A. Cognitive dissonance: Five years later. Psychological Bulletin, 1964, 61, 1-22.
- Cohen, A. R. An experiment on small rewards for discrepant compliance and attitude change. In J. W. Brehm & A. R. Cohen, Explorations in cognitive dissonance. New York: Wiley, 1962.
- Cohen, A. R., Brehm, J. W., & Fleming, W. H. Attitude change and justification for compliance. Journal of Abnormal and Social Psychology, 1958, 56, 276-278.
- Collins, B. E. Social psychology. Reading, Mass.: Addison-Wesley, 1970.
- Collins, B. E., & Helmreich, R. L. Studies in forced compliance II: Contrasting mechanisms of attitude change produced by public-persuasive and private-true essays. Journal of Social Psychology, 1970, 81, 253-264.

- Crano, W. D., & Messé, L. A. When does dissonance fail? The time dimension in attitude measurement. Journal of Personality, 1970, 38, 493-508.
- Culbertson, F. M. Modification of an emotionally held attitude through role playing. Journal of Abnormal and Social Psychology, 1957, 54, 230-233.
- Elms, A. C. The influence of fantasy ability on attitude change through role-playing. Journal of Personality and Social Psychology, 1966, 4, 36-43.
- Elms, A. C. Role playing, incentive, and dissonance. Psychological Bulletin, 1967, 68, 132-148.
- Elms, A. C., & Janis, I. L. Counter-norm attitudes induced by consonant versus dissonant conditions of role-playing. Journal of Experimental Research in Personality, 1965, 1, 50-60.
- Ferguson, G. A. Statistical analysis in psychology and education. New York: McGraw-Hill, 1966.
- Festinger, L. A theory of cognitive dissonance. Evanston, Ill.: Row, Peterson, 1957.
- Festinger, L., & Carlsmith, J. M. Cognitive consequences of forced compliance. Journal of Abnormal and Social Psychology, 1959, 58, 203-210.
- Greenwald, A. G. Cognitive learning, cognitive response to persuasion, and attitude change. In A. G. Greenwald, T. C. Brock, & T. M. Ostrom (Eds.), Psychological foundations of attitudes. New York: Academic Press, 1968.
- Greenwald, A. G. The open-mindedness of the counter-attitudinal role player. Journal of Experimental Social Psychology, 1969, 5, 375-388.
- Greenwald, A. G. When does role playing produce attitude change? Toward an answer. Journal of Personality and Social Psychology, 1970, 16, 214-219.
- Greenwald, A. G., & Albert, R. D. Acceptance and recall of improvised arguments. Journal of Personality and Social Psychology, 1968, 8, 31-34.
- Harvey, O., & Beverly, G. Some personality correlates of concept change through role playing. Journal of Abnormal and Social Psychology, 1961, 63, 125-130.

- Helmreich, R., & Collins, B. E. Studies in forced compliance: Commitment and magnitude of inducement to comply as determinants of opinion change. Journal of Personality and Social Psychology, 1968, 10, 75-81.
- Holmes, J. G., & Strickland, L. H. Choice freedom and confirmation of incentive expectancy as determinants of attitude change. Journal of Personality and Social Psychology, 1970, 14, 39-45.
- Hovland, C., Janis, I., & Kelley, H. Communication and persuasion. New Haven: Yale University Press, 1953.
- Insko, C. A. Theories of attitude change. New York: Appleton-Century Crofts, 1967.
- Janis, I. L., & Gilmore, J. B. The influence of incentive conditions on the success of role playing in modifying attitudes. Journal of Personality and Social Psychology, 1965, 1, 17-27.
- Janis, I. L., & King, B. T. The influence of role-playing in opinion change. Journal of Abnormal and Social Psychology, 1954, 49, 211-218.
- Janis, I. L., & Mann, L. Effectiveness of emotional role-playing in modifying smoking habits and attitudes. Journal of Experimental Research in Personality, 1965, 1, 84-90.
- Kelman, H. Attitude change as a function of response restriction. Human Relations, 1953, 6, 185-214.
- King, B. T., & Janis, I. Comparison of the effectiveness of improvised vs. non-improvised role playing in producing opinion changes. Human Relations, 1956, 9, 177-186.
- Linder, D. E., Cooper, J., & Jones, E. E. Decision freedom as a determinant of the role of incentive magnitude in attitude change. Journal of Personality and Social Psychology, 1967, 6, 245-254.
- McGuire, W. J. Attitudes and opinions. In P. Farnsworth (Ed.), Annual Review of Psychology, 1966, 17, 475-514.
- McGuire, W. J. Personality and susceptibility to social influence. In E. F. Borgotta & W. W. Lambert (Eds.), Handbook of personality theory and research. Chicago: Rand McNally, 1968.

- McGuire, W. J. The nature of attitudes and attitude change. In G. Lindzey & E. Aronson (Eds.), The handbook of social psychology. Vol. 3. Reading, Mass.: Addison-Wesley, 1969(a).
- McGuire, W. J. Suspiciousness of experimenter's intent. In R. Rosenthal & R. L. Rosnow (Eds.), Artifact in Behavioral Research. New York: Academic Press, 1969(b).
- Mann, L., & Janis, I. L. A follow-up study on the long-term effects of emotional role playing. Journal of Personality and Social Psychology, 1968, 8, 339-342.
- Mann, L. The effects of emotional role playing on desire to modify smoking habits. Journal of Experimental Social Psychology, 1967, 3, 334-348.
- Nel, E., Helmreich, R. L., & Aronson, E. Opinion change in the advocate as a function of the persuasibility of his audience: A clarification of the meaning of dissonance. Journal of Personality and Social Psychology, 1969, 12, 117-124.
- Osterhouse, R. A., & Brock, T. C. Distraction increases yielding to propaganda by inhibiting counter-arguing. Journal of Personality and Social Psychology, 1970, 15, 344-358.
- Papageorgis, D. Warning and persuasion. Psychological Bulletin, 1968, 70, 271-282.
- Rosenberg, M. J. When dissonance fails: On eliminating evaluation apprehension from attitude measurement. Journal of Personality and Social Psychology, 1965, 1, 28-43.
- Rosenberg, M. J. Some limits of dissonance: Towards a differentiated view of counterattitudinal performance. In S. Feldman (Ed.), Cognitive consistency. New York: Academic Press, 1966.
- Scott, W. Attitude change through reward of verbal behavior. Journal of Abnormal and Social Psychology, 1957, 55, 72-75.
- Scott, W. Cognitive consistency, response reinforcement, and attitude change. Sociometry, 1959, 22, 219-229.

- Sears, D. O., & Abeles, R. P. Attitudes and opinions. In P. Farnsworth (Ed.), Annual Review of Psychology, 1969, 20, 253-288.
- Steiner, I. D., & Darroch, R. K. Relationship between the quality of counterattitudinal performance and attitude change. Journal of Personality and Social Psychology, 1969, 11, 312-320.
- Wallace, J. Role reward and dissonance reduction. Journal of Personality and Social Psychology, 1966, 3, 305-312.
- Watts, W. A. Relative persistence of opinion change induced by active compared to passive participation. Journal of Personality and Social Psychology, 1967, 5, 4-15.
- Winer, B. J. Statistical principles in experimental design. New York: McGraw-Hill, 1962.
- Zimbardo, P. G. The effect of effort and improvisation on self-persuasion produced by role-playing. Journal of Experimental Social Psychology, 1965, 1, 103-120.
- Zimbardo, P. G., & Ebbesen, E. B. Experimental modification of the relationship between effort, attitude, and behavior. Journal of Personality and Social Psychology, 1970, 16, 207-213.

APPENDICES

APPENDIX A

COUNTERATTITUDINAL COMMUNICATION

APPENDIX A

CONCERNING AN ALL-VOLUNTEER ARMY

An issue of growing interest, especially to draft-age people, centers around the question of an All-Volunteer Army. It is the thesis of this paper that under present conditions an all-volunteer army is neither attainable nor particularly desirable.

Much of the controversy is by an increasingly active student populace. Unfortunately, the cries for change in the present draft-based system are often louder than they are logically reasoned. Despite humanitarian pretensions, it often seems that student advocates of "end the draft" are really concerned with simply keeping themselves out of the service and Vietnam. While this may be an admirable goal, ending the draft may be a rather short-sighted means of accomplishing it. Very little was heard about the "draft" when Selective Service was not conscripting college students or their friends.

Support for an all-volunteer army has not come solely from students. President Nixon himself (backed by the Gate's Commission Report) has said that an

all-volunteer army is a goal which he is working towards. Perhaps this fact in itself is enough to convince us that we should take a long, hard look at the consequences of such a decision (e.g., all-volunteer force vis-a-vis student dissent of government policy).

Why do we need an army at all?

The nation's present foreign policy is inextricably intertwined with questions of military manpower. Although the American public would not readily accept intervention in another Asian conflict, in all likelihood the U.S. foreign policy will continue to be one in which we support existing democratic governments against outside aggression or those internal problems directly caused by outside agitation. To carry out this policy--even to a limited extent--we need the capacity to apply restrained but appropriate force; that is, something short of nuclear confrontation. Potential trouble spots in Central and South America, in Berlin, in Greece and the ever-escalating Arab-Israeli conflict, will require that the United States maintain a strong, mobile striking force which can be expanded with little effort. However desirable it might seem, the abolition of the military structure in this country is not practical in the foreseeable future.

Given that there will be a continuous need for at least some defensive manpower and that there is no ideal solution to the problem of military recruitment, what we

must do is make the best out of a bad business. It is hoped that the following points will clearly illustrate why an all-volunteer army is not the answer to our manpower needs.

(1) Cost of an All-Volunteer Army

A rather obvious objection to an all-volunteer army is that the United States cannot afford it. Substantial pay hikes are included in all proposals which present alternatives to the current system of providing for military manpower. President Nixon's commission (which supported the all-volunteer army) concluded that the pay scales necessary to attract enough volunteers would range between four and seventeen billion dollars a year--a substantial increase over present levels. Even if the true cost is only four billion a year, this increase is more than the country can afford.

The problem of cost becomes important when we consider the great social needs of our country today. Perhaps the extra billions for a volunteer army would be justified if social equality were somehow increased. But this cost is the cause of deep concern if it merely puts further strain on a budget already over-committed to our fighting forces. Since there are so many unmet domestic needs--including housing, education, transportation, and pollution to mention only a few broad categories--even a few extra billion dollars in military

expenditures could be enough to tip the social equilibrium toward widespread rioting and disruption.

(2) Civilian concern about
military involvement

Fully as important as the costs involved is the fact that an all-volunteer force would lessen civilian concern about the use of military forces. The attentions of Congress, the press, the federal courts, and anxious parents would drift far from the indignities of military life as soon as that life was proclaimed to be voluntary. There would similarly be less popular concern about the uses to which volunteer soldiers were put. How many would care and how deeply, about the Vietnam war if their sons and brothers were not being conscripted to fight it? What if proponents of that war could say, "What are you so upset about--every American boy over there is a volunteer?"

(3) Keeping the military insti-
tution flexible

A third objection to an all-volunteer force is that the already sluggish, tortoiselike military institution would be even more resistant to change. An end to the draft would shield the army from the influx of citizen-soldiers who are the yeast of internal change. The army needs Yossarians, Ronald Ridenhours, independent-minded R.O.T.C. junior officers, and J.A.G.

lawyers--soldiers who do their jobs but who are not committed to the cover-your-ass system, whose loyalties are to civilian not careerist values. Given the absence of countervailing powers within the military, it is the civilian-in-uniform who is most likely to point out, articulate and test the areas for change.

To look at this aspect from another perspective, it could be said that an all-volunteer force would tend to lead to the development of a separate military ethos. The result would be an increased probability of military adventures (like those of C.I.A.) and an even less responsible foreign policy.

(4) A Rich man's war, a poor man's fight!

Finally, it has been said that an all-volunteer army would put an end to peacetime induction. But in so doing, it would transfer the burden of military service to those who are most susceptible to being inducted. These would be primarily the poorer, less educated, and less sophisticated segments of our youth--the people who can't get a decent job, for whom the future holds little promise.

Is it proper that our nation should be defended by those who have been favored by it least? Is not the burden of common defense something that all segments of society should share equally, or at least run an equal risk of

sharing? And how much justice is obtained by ending conscription, but replacing it with a recruiting system that feeds on poverty, ignorance, and gullibility of our most disadvantaged youngsters?

There is no such thing as a large painless military. The more socially just course lies not in trying to hide the pain, or transfer it, but in sharing the pain and seeking, through reform of the Army, to reduce it.

APPENDIX B

POSTEXPERIMENTAL QUESTIONNAIRE

APPENDIX B

POSTEXPERIMENTAL QUESTIONNAIRE

Please check the scale position which most closely represents your true opinion.

- (1) Development of the ABM is a realistic response to China's recent military advancements.

1	2	3	4	5	6	7	8	9	10	11
Strongly					Neutral					Strongly
Agree										Disagree

- (2) We need a much tougher approach toward violent demonstrations.

1	2	3	4	5	6	7	8	9	10	11
Strongly					Neutral					Strongly
Agree										Disagree

- (3) The United States should have an all-volunteer army.

1	2	3	4	5	6	7	8	9	10	11
Strongly					Neutral					Strongly
Agree										Disagree

- (4) Given that there is a draft, there should not be college student deferrments.

1	2	3	4	5	6	7	8	9	10	11
Strongly					Neutral					Strongly
Agree										Disagree

- (5) The federal government should do everything in its power to limit family size.

1	2	3	4	5	6	7	8	9	10	11
Strongly					Neutral					Strongly
Agree										Disagree

(6) Nixon's behavior toward the Supreme Court has threatened the dignity of that institution.

1	2	3	4	5	6	7	8	9	10	11
Strongly Agree					Neutral					Strongly Disagree

(1) How convincing was the "talk" which was just given?

1	2	3	4	5	6	7	8	9	10	11
Not at all									Very	
Convincing									Convincing	

(2) Was the presentation interesting?

1	2	3	4	5	6	7	8	9	10	11
Not at all									Very	
Interesting									Interesting	

(3) Was the presentation given sincerely?

1	2	3	4	5	6	7	8	9	10	11
Not at all									Very	
Sincerely									Sincerely	

(4) How logical was the presentation?

1	2	3	4	5	6	7	8	9	10	11
Not at all									Very	
Logical									Logical	

(5) How fair was the essay which you read at the beginning of this session?

1	2	3	4	5	6	7	8	9	10	11
Not at all									Very	
Biased									Biased	

(6) How knowledgeable about the issue do you think the person (persons) who wrote the essay was (were)?

1	2	3	4	5	6	7	8	9	10	11
Not at all								Very		
Knowledgeable								Knowledgeable		

(7) How trustworthy a source of information about the issue would you estimate the person (persons) who wrote the essay to be?

1	2	3	4	5	6	7	8	9	10	11
Not at all								Very		
Trustworthy								Trustworthy		

(8) How much did you think about the essay's intent to influence your feelings?

1	2	3	4	5	6	7	8	9	10	11
Not at all								Constantly		

(9) How many psychological experiments have you taken part in prior to this one?

(10) In the space below, list as accurately and yet as briefly as possible the main thesis and each of the supporting arguments presented in the essay you read at the beginning of this session. (Use the back of the page if necessary.)

NOV 12 1971