

THE RELATIONSHIPS AMONG AUDIENCE
ADAPTATION, SOURCE CREDIBILITY
AND TYPES OF MESSAGE CUES

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ABSTRACT

THE RELATIONSHIPS AMONG AUDIENCE ADAPTATION, SOURCE CREDIBILITY AND TYPES OF MESSAGE CUES

by John R. Wenburg

The present study investigated the relationships among audience adaptation (as perceived by receivers), source credibility and reward-punishment message cues.

Ss' attitudes toward the experimental message topic were pre-tested approximately two weeks prior to the experimental inductions. At the time of the experiment Ss read one of four versions of a persuasive message which was attributed to a high or low-credible source. After reading the appropriate message, Ss responded to measuring instruments designed to assess their perceptions of the adaptation level of the message, their attitudes toward the message topic, their intentions to engage in the behavior advocated in the message, their ratings of the terminal credibility of the message source, and the amount of anxiety they experienced while reading the message. All Ss were randomly assigned to experimental and control conditions. The control Ss received the pretest and posttest without the intervening experimental manipulation. They also functioned as the off-set condition for pretesting source credibility.

Each of the three independent variables was dichotomized into two levels, i.e. adaptation (adapted or unadapted), initial source credibility (high or low), and message cues (reward or punishment). Adapted messages were operationalized by the use of references which related the message cues directly to a specific membership group.

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All receivers were members of this specific reference group.

Unadapted messages were operationalized by the use of references which related the message cues to all people in general. Initial credibility conditions were operationalized in terms of the introductions to the message source. Reward message cues were statements which specified the potential benefits which would result from engaging in the behavior proposed in the messages. Punishment message cues were statements which specified the potential harms which would befall those who failed to engage in the advocated behavior.

One interaction hypothesis was tested in the investigation. This hypothesis stated that in terms of eliciting the desired response in a high-credible condition the main effect predictions of adaptation (adapted > unadapted), source credibility (high > low) and reward-punishment message cues (punishment > reward) would be sustained. However, the hypothesis stated that in a low-credible condition a message containing reward cues would be more effective than a message containing punishment cues in all conditions and adaptation would interact with reward-punishment message cues to the extent that a message which was perceived as adapted would be more effective in the reward condition but the message perceived as unadapted would be more effective in the punishment condition.

The two desired levels of adaptation were not successfully manipulated. The manipulation was successful in only one of the experimental conditions. It was successful in the same condition which had been used in the pilot study to determine the validity of such a

manipulation. The credibility manipulation was successful in that the high-credible source was rated significantly higher than the low-credible source on all three credibility dimensions. However, it was pointed out that the high-credible source was rated as "moderately" high and the low-credible source was rated as "moderately" low. The reward-punishment message cue manipulation was successful in that the punishment message generated significantly more anxiety than the reward message. However, it was noted that neither message created much actual anxiety.

Since the theoretic rationale which was used to generate the interaction hypothesis was based on adaptation as perceived by receivers, the data was analyzed with Ss assigned to adaptation condition on the basis of perception rather than manipulation. Ss were assigned to credibility and reward-punishment message conditions on the basis of manipulation.

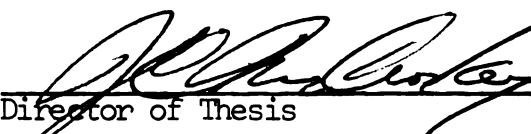
In order to analyze the data acquired on posttest attitude measures and terminal credibility ratings, $2 \times 2 \times 2$ factorial analyses of covariance with the attitude pretest as the covariate were employed. The arcsin transformation of each cell proportion was used to examine the data acquired by the intent to behave instrument. The results of the study failed to support the interaction hypothesis. Examination of the results indicated that the experimental condition differences which were observed best be explained in terms of main effects. There was a significant main effect for perceived adaptation on posttest attitude scores and

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terminal credibility ratings. There was a trend registered for this main effect on the intent to behave variable. There was a main effect for source credibility on posttest attitude scores and terminal ratings of credibility. There was a main effect for reward-punishment message cues on the dynamism dimension of credibility.

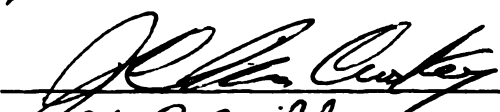

Implications for further research, suggested by the findings of the investigation, were discussed.

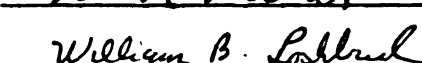
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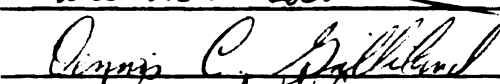


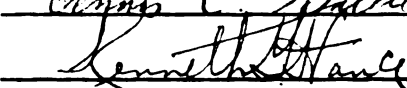
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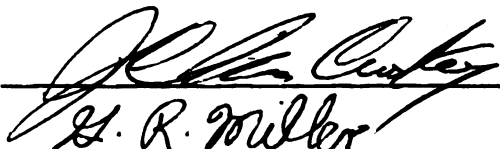



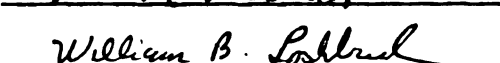
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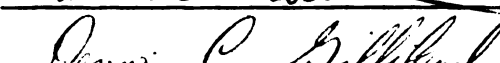


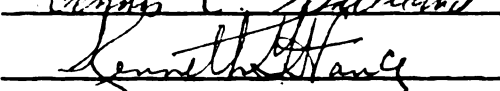
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THE RELATIONSHIPS AMONG AUDIENCE ADAPTATION, SOURCE
CREDIBILITY AND TYPES OF MESSAGE CUES

By
John R. Wenburg

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To
Carolyn

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CHAPTER I

INTRODUCTION

Plato declared that in order to be successful a speaker must be a psychologist who understands the nature of the soul. Aristotle reinforced this notion in the Rhetoric by emphasizing the distinction between knowledge of subject matter and knowledge of the audience (Cooper, 1932). He maintained that subject matter is a concern for the scientist and that audience treatment is a concern for the rhetorician. Accordingly, he devoted a large portion of his treatise on rhetoric to the elaboration of a procedure for the study of the audience (Utterback, 1925). Quintilian (Watson, 1856) allegedly the first "Speech Teacher," once stated,

"It is the part of an acute pleader to observe, above all, by what remarks the judge is most impressed and to what he listens with disapprobation; . . . It is the part of judgment to adapt your speech to places and circumstances and characters."

Similar statements and principles of audience adaptation can be gleaned from the writings of most scholars who have concerned themselves with understanding the process of communication.

Today, communication scholars still acknowledge the importance of the audience in their formulations. Interest in audiences inevitably focuses attention on the ways audiences feel about subject matters, and the ways these feelings affect their responses to speeches (Nebergall, 1966). Contemporary persuasion books--both prescriptive and descriptive in orientation--contain treatments of audience adaptation.

One can sense the amount of emphasis that is being placed on "audience adaptation" by examining only a few of the writings authored by members of this researcher's guidance committee. McCroskey (1968) postulates that the first step toward rhetorical communication is the encoding process (defined as the process of translating an already conceived idea into a message appropriate for transmission to a receiver). He contends that this process is based on the source's perception of the way the receiver will perceive messages. He argues that the source who creates messages without regard for a receiver is not engaged in rhetorical communication, but is only concerned with self expression. Miller (1966) posits that regardless of the means employed, the end of any communicative act is some sort of behavioral effect; and success in determining how this effect may best be achieved is contingent upon extensive analysis of the people for whom the communication is intended. Hance, Ralph, and Wiksell (1969) state,

" . . . analysis of and adaptation to the listener are necessary in all forms of effective human communication . . . audience analysis and adaptation are at the very core of the communication process--you begin with your audience, you gather material with your audience in mind, you compose for your audience, you present your communication to your audience, and when the job is completed, your audience judges you."

Another member of this committee has developed a computer program for the purpose of dealing with the problem of audience adaptation from a new, creative vantage point.¹ The notion that a source must analyze and adapt to an audience in order to be a successful communicator

¹William B. Lashbrook, Assistant Professor, Department of

extends beyond the contemporary communication textbook writers at Michigan State University. Audience adaptation is stressed in persuasion texts from Winans to Arnold.

There are many "rules" for audience adaptation contained in the communication literature. Today's students are told to look at things such as "the who, what, when, where, why, and how" (Clevenger, 1966); the "primary, secondary, and tertiary dimensions of audience behavior" (Baird and Knower, 1963); the "physical setting"; the "religious and political beliefs of the receivers"; and the "audience reference groups." Granted, all of these dimensions are relevant to accurate understanding of one's audiences. But the textbook writers have been saying primarily the same thing for years--yet the validity of the principal adaptation speculations has never actually been directly tested. It does not seem that much substantive progress has been made in terms of understanding the audience adaptation phenomenon since Aristotle's original treatment of rhetoric. Much energy has been exerted to instill a sense of the importance of the concept in the minds of students of communication, but little has been done directly to systematically investigate the effects of adaptation. One could infer certain principles of adaptation from experimental research which deals with variables such as fear appeals, order effects, sidedness, and evidence; but these investigations were not directly concerned with audience adaptation, per se.

Communication, Michigan State University has developed a computer program referred to as Aristotle. It is a computerized technique for the analysis of real or simulated audiences.

The prescriptive principles of adaptation that have been set forth would lead one to believe that a communicator should always attempt to adapt his message to his specific receivers. The main rationale on which the present study was based was the belief that the above general rhetorical principle of adaptation may not be generalizable to some communication situations. It was believed that there are certain variables which may interact with adaptation. The major purpose of this study was to investigate the relationships among audience adaptation (as perceived by a receiver), high and low source credibility, and reward-punishment message cues. To facilitate the report of the present investigation, this paper has been organized in the following manner: Chapter I--Introduction and Review of Literature; Chapter II--Report of Pilot Study; Chapter III--Theoretic Rationale and Generation of Hypothesis; Chapter IV--Method; Chapter V--Results; Chapter VI--Discussion.

RELEVANT RESEARCH

Audience Adaptation

Theories of audience adaptation in a persuasion paradigm generally center around the notions of "Common Ground," "Reference to Experience," or "Identification." Central to each of these three notions is the belief that a speaker must associate himself or identify his purpose with the knowledge, interests, and motives of his audience (Day, 1960).

Henry E. McGuckin, Jr. (1967) attempted to test the effects of one type of adaptation. McGuckin was interested in answering the questions:

"How does an advocate win esteem, or ethos, over and above that already due his initial prestige? What are the elements of esteem where little or nothing is known of the advocate at the outset of the communication?"

As noted by McGuckin, the present responses to these questions are largely intuitive. Many of the intuitive responses center around principles of common ground, reference to experience, or identification. These principles, Aristotelian in origin, are still being expressed in what McGuckin calls "contemporary manuals of persuasion," e.g. the texts by Abernathy; Brembeck and Howell; Minnick; and Eisenson, Auer, and Irwin. McGuckin, by relating these principles of adaptation to some of the empirical findings about source credibility, tested the assertion:

"That esteem for the advocate is a variable of apparent similarity between advocate and audience."

He also tested the accepted generalization that source credibility enhances persuasion. He hypothesized that a subject will tend to esteem an advocate implying a cognitive style (operationalized as dogmatism score on form "C" of the Rokeach scale) similar to his own more highly than he esteems an advocate implying a dissimilar cognitive style. He also hypothesized that a subject will tend to change opinion more readily the more he esteems the advocate, and that the esteem effects on change of opinion will disappear with time. He confirmed his predictions about the persuasive impact of esteem and its dissipation over time, but he failed to confirm his predicted relationship between similar cognitive style and esteem. Even though he failed to confirm his specific prediction pertaining

to a particular technique of audience adaptation, at least his study was an attempt to empirically test one of the generally accepted principles in the area.

The only other experiment which has been located that dealt directly with the adaptation concept is the pilot study which preceded this present investigation. Chapter II of this paper consists of a report of the theory, method, and results of the pilot study.

Source Credibility

Another body of research relevant to this study appears under the rubric of source credibility (ethos). There have been many studies dealing with this variable, most of which have found that credibility is positively correlated with attitude change (Andersen and Clevenger, 1963). Some recent experiments have been designed to examine possible interactions between source credibility and variables such as fear appeals, evidence usage, nonfluencies, opinionated language, etc. Of particular importance to this study were the studies which examined the relationship between source credibility and fear appeals.

Fear Appeals

In the area of fear appeals, the primary focus has been on the construction of messages which contain various levels of fear or anxiety-arousing language that stresses the harmful physical consequences that can befall an individual for failure to conform to, or adopt, a recommended course of action (Baseheart, 1968). Most

of the evidence from these studies indicates that strong fear appeals are less effective than mild fear appeals in eliciting desired audience responses (Miller, 1963).

More recently some attention has been given to the variables of source credibility and types of fear appeals. Appeals other than those which stress harmful physical consequences have been used. For example, researchers have been experimenting with fear appeals that stress harms against persons highly valued by the listener and appeals that emphasize the harmful social consequences derived from the failure to conform to message recommendations.

Miller and Hewgill (1964), in two unpublished studies looked at the relationships of fear appeals, source credibility, and attitude change. They hypothesized that a high-credible source would be more effective in eliciting attitude change by using strong fear appeals directed toward persons highly valued by the listener than when using mild fear appeals. They predicted just the opposite for a low-credible source. In terms of resultant recipient ratings of source credibility, they hypothesized that a low-credible source using strong appeals would be rated lower than the same source using mild appeals. For terminal recipient ratings of credibility in the high-credible condition, they predicted that any differences would be in favor of the strong fear-arousing message.

They found that strong fear appeals produced greater attitude change than mild fear appeals in the high-credible condition. In the low-credible condition, there was no significant difference

between the strong and mild fear-arousing messages. In a summary of their findings, they stated that their data indicated that Ss in the strong fear-low credibility condition presented more unfavorable post-communication ratings of source credibility than Ss in the mild fear-low credibility condition. The theoretical explanation for the post-communication credibility rating finding was that the differences were due to the greater cognitive imbalance induced by the strong fear message which lead to subsequent reduction of this imbalance by further discrediting the low-credible source of the message.

In another study, Hewgill and Miller (1965) reasoned that a message containing strong threats against persons highly valued by the listener may produce a greater change in attitude than one employing mild fear appeals. They predicted that source credibility would interact with the level of fear appeal. Specifically, they hypothesized:

1. If a source has high credibility with a listener, appeals that elicit strong fear for persons highly valued by the listener will effect greater attitude change than appeals that elicit mild fear.
2. If a source has low credibility with a listener, appeals that elicit mild fear for persons highly valued by the listener will effect greater attitude change than appeals that elicit strong fear.
3. The level of fear appeal and the credibility of the source will interact.

The results of this study again demonstrated that strong fear-arousing messages produce more attitude change than mild fear-arousing messages when they are attributed to a high-credible source. However, this was not true for messages attributed to a low-credible source.

There was no significant difference in attitude change between strong-fear and mild-fear messages when the source had low credibility. They also found that in the high-credible conditions, Ss who were exposed to strong fear messages experienced significantly more anxiety than Ss who were exposed to mild fear messages. In the low-credible conditions there were no differences between amounts of anxiety experienced by the Ss receiving the varying levels of fear-arousing messages. They concluded that low credibility may negate the anxiety-producing character of differing levels of fear-arousing message appeals. This would, in turn, thwart the differential persuasive effects of such appeals.

Powell (1965) examined the effectiveness of fear appeals directed toward the listener, the listener's family, and the nation. He also looked at the interactions between the level of fear and the person against whom it was directed. With respect to referent of the appeal, he hypothesized that greater attitude change would occur when the appeal was directed at members of the listener's family. He predicted that the least amount of change would occur with an appeal directed at the nation rather than at the listener or the listener's family. With respect to level of fear appeals, he predicted: (1) when the referent was the listener, a strong anxiety appeal would be less effective than a mild one; (2) with the listener's family as the referent, the strong appeal would be the more effective; (3) with an impersonal referent, a mild appeal would be the more effective.

He failed to confirm the hypothesis that more attitude change would occur when the appeal was directed at the listener's family, but he did confirm that the least amount of attitude change would

occur when the appeal was directed at the nation (impersonal referent). He supported his prediction that strong fear is more effective than mild when the referent is the listener's family. He found directional support for his prediction that mild fear is more effective than strong fear when the referent is the listener. He found no support for his hypothesis that a mild fear appeal would be the more effective when the referent was impersonal; as a matter of fact, the resulting trend was in the opposite direction.

Powell and Miller (1967) investigated the effects of anxiety-arousal appeals that stress harmful social consequences resulting from failure to conform to message recommendations; and, conversely, appeals that stress desirable social consequences resulting from such conformity. They utilized three versions of a message; a social approval version (low fear), a social disapproval version (high fear), and a neutral version with no approval or disapproval cues. They hypothesized that both the approval and disapproval versions would be more effective than the neutral version and that the disapproval message would be more effective than the approval message. They also included the variable of source credibility in this study. In keeping with the results obtained in the Hewgill-Miller study, they hypothesized that a message containing social disapproval cues would affect greater attitude change than a message containing social approval cues in both the high-credible and unattributed source conditions. However, in the low-credible condition they predicted no significant difference in attitude change resulting from messages containing social approval or disapproval cues. In terms of

credibility and attitude change, they predicted the high-credible message would be the most effective, the unattributed message would be ranked second in effectiveness, and the low-credible message would be the least effective.

The results provided support for all of their predictions. Messages containing social disapproval cues were more effective in eliciting attitude change than messages containing social approval cues, and both types of cues were more effective than neutral messages containing neither the approval nor disapproval cues. They also found that high-credible messages were the most effective, unattributed next, and low-credible the least effective. They concluded that the most crucial finding of the study was in the high-credible condition, the social disapproval cues were more effective than the approval cues, and in this condition both types of cues produced more attitude change than neutral messages. However, in the low-credible condition, the neutral message affected greater attitude change, while messages containing social approval or disapproval cues did not differ significantly in effects on attitude change. They found that in the unattributed source condition, the pattern of attitude change effects were similar to those found in the high-credible condition.

Reference Groups

Another body of literature that was relevant to this investigation was "Group" research. Most of the specific experimental investigations of the psychology of group pressures and group relationships

were not directly applicable to the present study because they were not conducted in a source-receiver persuasion paradigm. However, the overall results of these studies were relevant in that they provided empirical support for the idea that a person's group relationships are an important determining factor of individual attitudes. Attitudes are not acquired in a social vacuum. Their acquisition is a function of relating oneself to some group or groups--positively or negatively (Newcomb, 1963).

In the book Attitude and Attitude Change, Sherif, Sherif, and Nebergall (1965) relate the importance of group research findings to communication researchers. They posit the theory that the categories used by individuals to evaluate their social worlds are determined primarily by the standards of the groups in which they move or to which they relate themselves psychologically (their reference groups). These authors state that the typical form of the context for attitude formation and change is the human group; the family group, the gang of agemates, the club, the party organization, the church group, the business or occupational group, and the community group. These authors contend that the human group is necessarily part of the frame of reference in the study of attitudes. They underline the importance of dealing with the concept of frame of reference for anyone who would study the problems of attitude formation and change--especially the communication scholar. They state that any research into attitude change that is to provide realistic and valid directions for theory must fully recognize and explicitly deal with the individual's reference group ties if it is to hope for

any kind of a coherent or general predictive system. They develop the idea that any communication (any deliberate effort to reinforce or to change existing attitudes) must take these group contexts into account to be successful.

This researcher used the above theory and findings found in the adaptation literature, fear appeals literature, source credibility literature, and group literature to generate the experimental hypothesis of the present investigation.

CHAPTER II

PILOT STUDY

Rationale and Hypotheses

The major hypotheses of the pilot study were derived from learning theory as applied to the communication paradigm by Hovland and his colleagues at Yale University. According to Deutsch and Krauss (1965), the central notion of the theoretical "instrumental learning model" set forth by Hovland, et al., is that an opinion (an habitual judgment or prediction) or an attitude (an habitual evaluative orientation) becomes habitual because its overt expression or internal rehearsal is followed by the experience or anticipation of positive reinforcement. The Hovland team was concerned with anticipated reinforcers which are brought into play by a message from a communicator who is trying to change the opinions or attitudes of an audience. Insko (1967) states,

"When exposed to a persuasive communication an individual is assumed to react with two distinct responses; to think of his own answer to the question, and the answer suggested by the communication. . . . The acceptance of the new opinion is contingent upon the incentives that are offered in the communication. These incentives may take the form of arguments or reasons supporting the opinion or conclusion, or other expected rewards or punishments that follow upon the acceptance of the new opinions. (Underlining added)"

Hovland, Janis, and Kelley (1953) discuss three types of expectation that may be of importance--the expectation of being right

or wrong, the expectation of manipulative intent, and the expectation of social approval or disapproval.

In the pilot study, this learning theory notion was related to the rhetorical theory ideas about common ground, reference to experience or identification as well as to the group theory postulates about the importance of an individual's reference groups in forming attitudes. It was reasoned that receivers use the opinions and attitudes derived from the groups to which they belong as one basis of judging the persuasive communications to which they are exposed (Bettinghaus, 1968). Therefore, a communicator, by making reference in his message to a group to which his receivers belong or aspire, should be perceived as adapting to his receivers more than a source who delivers basically the same message but fails to refer to any receiver groups. This type of adaptation should serve as one method a source can use for identifying with his receivers. Source awareness of receiver groups should lead the receivers to perceive the source as one who can identify with them because he is aware of their particular associations. A communicator can relate cues in his message which specify the potential desirable effects that adoption of certain attitudes will have on receivers who belong to a specific group. The receivers should perceive the cues as potential reinforcement.

The terms "membership group" and "reference group" were used in the generation of the experimental hypotheses for the pilot study. According to Hyman (1942), a membership group is a group which one employs as a basis of comparison for self-appraisal. A communicator

who has information about the membership groups of his receivers can call a particular membership group to the attention of the receivers. The communicator would attempt to focus the receiver's attention on a membership group which is favorable to the message. This should guide the receiver to use the specified membership group as a reference group in his evaluation of the message. If the source depicts particular benefits which can be derived by members of the particular group, the receiver should perceive these benefits as potential reinforcement. Thus, the receiver should be more favorably disposed to the position specified in the message than a receiver exposed to a similar message which lacks references to the membership group.

From the above rationale three hypotheses were generated. It was assumed in the statement of these hypotheses, that the subjects in the experimental group who were exposed to the "adapted" message would perceive their message as significantly more adapted than the subjects in the "moderately adapted" condition. By the same token, it was assumed that the Ss in the "moderately adapted" condition would perceive their messages as significantly more adapted than the Ss in the "unadapted" condition. The actual success of the intended manipulation is reported later in this chapter.

- H₁: Subjects in the adapted message condition will experience significantly more attitude change than subjects in the moderately adapted message condition who will in turn experience significantly more attitude change than the subjects in the unadapted message condition.

The experimental message stimuli included three versions of a message dealing with the topic of "Communication 305 (Persuasion)."

The "Unadapted" message (Level I) was an essay describing the purpose of and the procedures used in the persuasion course offered at Michigan State University. This message was purely descriptive. It might be viewed as a rather lengthy catalog description of the course. The "Moderately Adapted" message (Level II), was the same message used in Level I with the exception of two sentences which were added to the message. These sentences indicated why the persuasion course would be a beneficial course for students in general to take. For example, one of the two sentences asserted,

"This course was beneficial because it gave students an in depth understanding of the persuasion process."

The "Adapted" message (Level III), was the Level II message with two additional sentences which indicated why the persuasion course would be a beneficial course especially for students who had taken Communication 101. For example, one of the two additional sentences stated,

"Also, the course was especially valuable to those who had previously taken Communication 101 because it supplemented the brief introduction to the elements of oral communication which they had already received."

It was reasoned that a message with a specific membership group as a referent would be perceived as more adapted than a message with a general membership group as a referent. It followed that the message with a general membership referent would be perceived as more adapted than a message with no membership group referent.

Attitude was operationalized as the total score a S received on seven seven-item semantic differential scales. (The same scales were used in the present study, see Appendix C.)

- H₂: Subjects in the adapted message condition will respond significantly more favorably on the "intent to behave" dimension than subjects in the moderately adapted message condition who will in turn respond significantly more favorably on this dimension than the subjects in the unadapted message condition.

According to Arnold (1968), intention to engage in behavior is a dependable measure of actual overt behavior. In his study on the effects of communicator credibility on attitude change and subsequent overt behavior, Arnold found close agreement between a listener's written intention to do a particular term project and his actual behavior. Arnold attributed this agreement to the fact that the Ss in his experiment were in a forced-choice situation. However, as Arnold points out, Leventhal and Niles (1964) found similar agreement of intention to behave and overt behavior in experiments providing more open-choice behavior conditions.

This researcher thought it would be interesting to tap the "intent to behave" threshold of behavior to supplement the attitude response threshold which was measured by the semantic differential scales. This hypothesis was generated from the same theoretical reinforcement position that was used to hypothesize the relationship between attitude change and adaptation. The intent to behave responses were operationalized on both the pretest and posttest in terms of the following question:

"Do you intend to take Communication 305?
Yes _____ No _____ Undecided _____"

A favorable response was (1) a shift from a "No" response on the pretest to an "Undecided" or "Yes" response on the posttest; or (2)

a change from "Undecided" on the pretest to "Yes" on the posttest.

H₃: Ss in the adapted message condition will confer significantly higher terminal credibility ratings on the message source than subjects in the moderately adapted message condition who will in turn confer significantly higher terminal credibility ratings on the message source than Ss in the unadapted message condition.

It has been repeatedly demonstrated that highly credible sources elicit more favorable audience responses than do sources whose credibility is low (Andersen and Clevenger, 1963). Even though there is much empirical evidence which supports the many predictions about the effects of source credibility on message acceptance, one question which has not been given much attention is the query posed by McGuckin (1967):

"How does an advocate win esteem or ethos (credibility), over and above that already due his initial prestige?
What are the elements of esteem where little or nothing is known of the advocate at the outset of the communication?"

In other words, what are the endogenous determinants of credibility? Some of the endogenous determinants which have been examined are use of evidence, organization, nonfluencies, and language usage (Miller, 1966).

Following the same general theory about the relationship between adaptation and attitude change--this researcher believed that adaptation would serve as one positive endogenous determinant of credibility. If a receiver perceives a source to be reinforcing him, he should raise his esteem for the source.

In order to test this idea, the same credibility induction was used in all conditions, i.e.

Last quarter, upon completing certain courses students were asked to write their own personal descriptions of the courses they had just completed. On the following page of this booklet you will find one of the course descriptions that was written by a student.

The researcher was interested, as hypothesized, in measuring the endogenous effects of adaptation on receiver conferred credibility. Thus, credibility was measured on the posttest only.

Source credibility was operationalized in terms of S's responses to eighteen seven-item semantic differential source credibility scales. The eighteen scales were used to measure the three dimensions of credibility (six scales for each dimension). The scales were taken from the ones suggested by Berlo, Lemert and Mertz (1966).

Method

The Ss were Communication 101 students at Michigan State University (N = 103). There were three experimental groups and one control group. The experimental groups received a pretest, and then two weeks later an experimental manipulation and an immediate posttest. The control group received the pretest and posttest without the intervening experimental manipulation. Ss were randomly assigned to the four conditions. Group I contained 27 Ss, Group II contained 27 Ss, Group III contained 23 Ss, and Group IV (Control) contained 26 Ss.

On the pretest, all Ss responded to six sets of seven seven-item semantic differential type scales. Six different college courses were used as concepts for measurement. The only concept which was relevant to the pilot study was "Communication 305 (Persuasion)."

The posttest booklets were of four types. The booklets for the three experimental conditions were identical except for the three different forms of the message. Experimental Ss read a cover sheet indicating that the College of Communication Arts curriculum committee is in the process of developing new course descriptions. They were asked to read the message and respond to the questions which followed. To promote careful reading, the Ss were asked to underline what they felt were the main ideas in the message. These Ss responded to the "adaptation" scale, the posttest "attitude toward concept" scales, the "intent to behave" questions, and the "source credibility" scales. Two content questions regarding information contained in the messages were included to mask against demand characteristics (Orne, 1962).

The control Ss responded to the attitude toward concept scales and the intent to behave question. They were given several irrelevant tasks to perform so that the amount of time required for completion of the booklets would be approximately equal in all conditions. This was necessary because of random assignment within intact groups.

Statistical Procedures

Manipulation Check The responses of the Ss to a semantic differential scale provided data bearing upon the validity of these three messages as representations of message levels of adaptation. The Ss replied to a seven-item scale ranging from "Adapted" to "Unadapted" on the following question:

"Was the course description you have just read adapted to Communication 101 students?"

The Kruskal-Wallis One-Way Analysis of Variance test was applied to the data to test the null hypothesis that the three experimental samples came from identical populations with respect to responses to the above question (Siegel, 1963). The Kruskal-Wallis test yielded a significant H value of 11.00 ($p < .05$). Separate comparisons of the three experimental samples were then applied by the use of the Mann-Whitney U test. The following U values were obtained: comparison of Levels I and II, U value = 364; comparison of Levels I and III, U value = 455; and comparison of Levels II and III, U value = 467. Since the n in each group was larger than 20, the U values had to be transposed to "z" scores for determination of significance level (Siegel, 1963). The "z" score for the first comparison (Levels I and II) was .81 which was not significant. The "z" score for the second comparison (Levels I and III) was 2.62 ($p < .05$); and the "z" score for the third comparison (Levels II and III) was 2.74 ($p < .05$).

Thus, in terms of checking the manipulation of adaptation, Groups I and II did not differ significantly in their responses to

the adaptation question, but Level III differed significantly from both of the other groups. That is to say that message II (moderately adapted) was not perceived to be significantly more adapted than message I (unadapted). However, message III (adapted) was perceived to be significantly more adapted than either of the other two messages.

Attitude Toward The Concept Since the results of Bartlett Tests gave no reason to question the homogeneity of either the pretest or posttest data, the use of parametric tests to analyze the means of the attitude scores of the experimental and control groups was justified (Winer, 1962). Examination of the group means of the pretest scores revealed that there were significant differences between the pretest means ($p < .05$). These significant differences between the groups' original attitudes toward the message concept necessitated that the researcher apply an analysis of covariance on the posttest scores. The covariate was original attitude and the dependent variable was the posttest. The analysis of covariance yielded a significant F-ratio of 3.05 ($p < .05$). In accordance with the a priori hypothesis subsequent t-tests were applied to determine which conditions differed from each other significantly.

Intent To Behave The data obtained on this dimension was not deemed sufficient for statistical analysis. As can be seen in Table 1, there was an equal number of positive shifts in all the groups. The only differences occurred in the negative shifts. Relatively few Ss shifted at all.

Table 1. Number of Shifts in Intent to Behave Responses from Pretest to Posttest.

Group	I	II	III	IV
Positive Shifts	5	5	5	5
Negative Shifts	7	5	2	4

Source Credibility The scores for each of the three dimensions of credibility were subjected to the parametric one-way analysis of variance. One of the F-ratios which was obtained was significant ($p < .05$). Subsequent t-tests were applied to determine which of the group differences were significant.

Results

Message Adaptation Inductions Since the Level II induction was not successful, the results were looked at primarily in terms of what were perceived as the "unadapted" messages in Levels I and II as compared with the "adapted" message in Level III.

H_1 : Attitude Change In terms of attitude change between experimental and control conditions, the analysis of covariance of the posttest scores produced significant effects ($F = 3.05, p < .05$). As shown in Table 2, application of subsequent t-tests between each experimental condition and the control condition revealed that the only group which experienced significantly more attitude change than the control group was Group III ($t = 3.02, p < .05$).

Upon examining the differences among the experimental conditions, it was found that Group III experienced significantly more attitude

Table 2. t-test Results of Comparing Each Experimental Group With the Control Group.

Group	Adjusted \bar{X}	\bar{X} Difference from Control	\underline{t}
I	37.96	2.02	1.6
II	37.81	1.87	1.2
III	40.99	5.05	3.02*
IV (control)	35.94	--	--

*Significant at the $< .05$ level.

change than the other experimental groups (\underline{t} between III and I = 1.8, $p < .05$; \underline{t} between III and II = 1.9, $p < .05$). Thus, where the manipulation induction was successful, the first hypothesis was confirmed.

H_2 : Intent to Behave The second hypothesis was rejected. As can be seen in Table 1, there was an equal number of positive shifts in all conditions. The only differences obtained on this dimension were in the number of negative shifts. In Group III, there were less negative shifts than in any of the other groups, but the results were not significant.

H_3 : Source Credibility The analysis of variance of the scores on the three dimensions of source credibility produced a significant F-ratio ($F = 2.93$, $p < .05$) on the Qualification (Authoritativeness) dimension. Application of \underline{t} -tests on the differences of group means on this dimension produced significant group differences (\underline{t} between III and I = 2.00, $p < .05$); \underline{t} between III and II = 2.17, $p < .05$). Group III perceived their source as significantly

more qualified than either of the other groups perceived their source.

Even though significance was not found on each of the three credibility dimensions, Table 3 shows that the highest mean for each of the dimensions was found in Group III.

Table 3. Experimental Group Means on Source Credibility Dimensions.

Group	Safety (Character)	Qualification (Authoritativeness)	Dynamism
I	29.11	30.52	28.85
II	28.40	30.44	27.70
III	30.04	33.48*	30.49

*Significant at the $< .05$ level.

Discussion

Although these findings did not completely confirm the hypotheses, there was a fairly strong indication that the theoretical position has merit. One problem in the study was the only partial success of inducing the three levels of adaptation. The failure of Group II to perceive their message as significantly more adapted than Group I perceived their message suggested that reference to "people" in general does not provide a meaningful group reference. However, the findings in Group III were encouraging. The use of "Communication 101" was effective in producing perceived adaptation. The attitude scores in this group did confirm the first hypothesis. These findings indicated the superiority of the message that was perceived to be adapted.

The second hypothesis was not confirmed; but it should be noted that none of the messages explicitly advocated a definite course of action, i.e. there was no direct attempt to get anyone to enroll in the course. The data was merely collected from an open-ended question and there were no specific message arguments stating that they should take the course. The lack of confirmation of this hypothesis underlined the differences of behavioral thresholds between this dimension and an attitude dimension. This suggests that if one wants to penetrate the intent to behave threshold, he should make a specific attempt to do so rather than relying on attitudinal changes to supply the needed incentive.

The findings in this study gave qualified support for the third hypothesis. Predicted significant differences appeared on the qualification dimension of source credibility.

Confirmation of the first hypothesis and partial support of the third hypothesis helped generate the proposal for the present investigation. In the next chapter, the theory and hypothesis for the present study are set forth. In most cases, the present experiment was an extension of the pilot study that was described in this chapter.

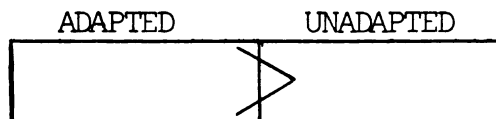
CHAPTER III

THEORETIC RATIONALE AND GENERATION OF HYPOTHESES

The primary hypothesis of this study was concerned with an interaction among the variables of perceived adaptation, source credibility and reward-punishment message cues. In order to explain the rationale which was used in the generation of the interaction prediction, the researcher proceeded from the main effect and first-order interaction hypotheses, which existing literature would support, to the second-order interaction which served as the primary hypothesis of this investigation.

As indicated earlier, most communication literature posits that adaptation is a desirable characteristic which aids a source who attempts to persuade receivers. From the general rhetorical principle of adaptation, one would state the following main effect hypothesis:

- H: For eliciting the desired response, a source who delivers a message which is perceived as adapted will be more effective than a source who delivers a message which is perceived as unadapted.²



²The term "desired response" refers to significantly more positive attitude change, significantly more positive shifts on the intent to behave dimension, and significantly higher terminal credibility ratings.

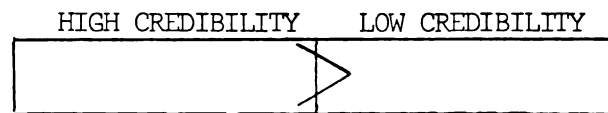
The above principle was given empirical support by the pilot study for the present investigation. It was found that a source who adapted his message to his receivers by making references to audience membership groups was perceived as adapting to his receivers more than a source who delivered the same message with no audience membership group cues. The audience which perceived their message as adapted experienced significantly more attitude change and conferred higher terminal ratings of credibility on their source than the audiences which did not perceive their messages as adapted. On the credibility ratings these differences were significant for the authoritativeness (Qualification) dimension and there were positive, though nonsignificant, trends for the character and dynamism dimensions.

In general, the results of the pilot study gave support to the principle that adaptation will have a positive effect on attitudes and on terminal source credibility ratings. However, the question still remains, "How generalizable is the rhetorical principle of adaptation?" It must be remembered that in the pilot study adaptation was found to be positively linked with attitude change and perceived credibility only in a situation where (1) adaptation level of messages was perceived by auditors, (2) all messages contained cues denoting potential rewards for receivers and (3) initial credibility of the source was not manipulated. Thus, the main question which this present investigation addressed was, "Will a source be more effective in eliciting a desired response by adapting his message to his receivers in other communication situations?"

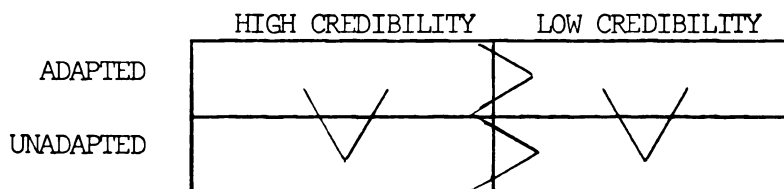
Certain balance theory notions, along with the findings of some of the fear appeals studies, led this researcher to question the overall validity of the common-sense adaptation principle.

It was found in the pilot study that a source who offers potential reinforcements that apply to certain audience membership groups will be perceived as adapting to his receivers and will be more effective in generating a desired response than a source who fails to use the audience membership group cues. What happens to the main effect of adaptation when initial source credibility manipulations are added to the communication situation? In terms of a source credibility main effect, all of the literature would lead one to hypothesize that:

H: For eliciting the desired response, a high-credible source will be more effective than a low-credible source.

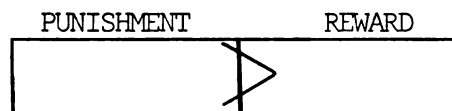


When looking at perception of adaptation and source credibility jointly, one would have no reason to predict any interaction. Both main effect predictions should be sustained.



However, the main effect predictions become altered when the variable of types of reinforcement message cues (reward versus punishment) are added to the communication transaction. In general, homeostatic theory formulations would indicate that there is a positive relationship between anxiety-arousal and attitude change. Of course, this positive relationship does not exist when the amount of anxiety-arousal is so extreme that a boomerang effect is created. But, given an amount of anxiety-arousal that is cognitively palatable, the prediction should hold. When comparing a message containing punishment cues with one containing reward cues, one would predict that the message containing punishment cues should generate more anxiety than the message containing reward cues. This type of an effect was found by Powell and Miller (1967) when they discovered that a message containing social disapproval cues was more effective than a message containing social approval cues. In terms of a main effect, existing literature would lead one to predict that a message containing punishment cues should be more effective in eliciting the desired audience response than the message containing reward cues. Specifically, one would hypothesize:

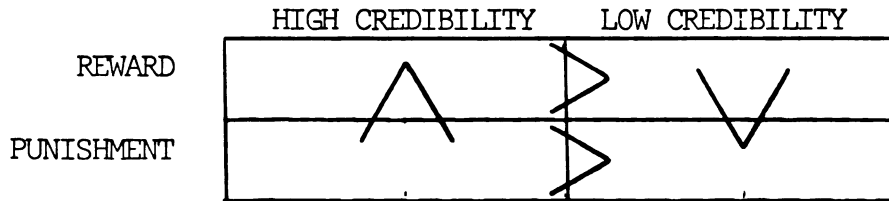
H: For eliciting the desired response, a message containing punishment cues will be more effective than a message containing reward cues.



It seems reasonable to predict that an interaction will occur when the variable of initial source credibility manipulations is added to the reward-punishment message situation. The fear appeals findings would predict that, in the high-credible condition, the message containing punishment cues (high fear) would be more effective than a message containing reward cues. However, the effectiveness differentiation dissipates in the low-credible condition. There appears to be no difference between the effectiveness of the high-fear and low-fear messages. The rationale offered for this finding is that the high-fear message generates more anxiety than the low-fear message; therefore, when confronted with a high-credible source on the one hand and cognitive anxiety on the other, the natural way to restore cognitive balance is to change attitudes in the direction which the source is advocating. Also, the more anxiety created by the high-credible source, the more attitude change necessary to restore balance. But, given the same conflict in a low-credible condition, one can more easily derogate the source rather than change attitude in order to reduce anxiety. Thus, in this condition the high-fear message no longer emerges as being superior to the low-fear message. The fact is, neither of the messages is more effective than the other in eliciting attitude change. This same type of interaction between source credibility and message cues should be found with reward-punishment message cues.

Therefore, this researcher predicted that for eliciting the desired response, in the high-credible condition a message containing punishment cues will be more effective than a message containing

reward cues; however, in the low-credible condition a message containing reward cues will be more effective than a message containing punishment cues.



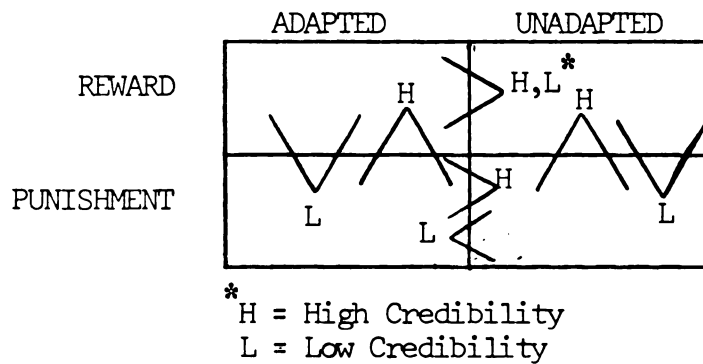
The prediction in the high-credible condition was based on the fear appeals research. But from the fear appeals results, one would not be able to predict directional effectiveness in the low-credible condition. However, in this present investigation, it did seem justifiable to make the directional prediction. In terms of attitude change results in the fear appeals research, the inferior message (low fear) in the high-credible condition became equally as effective as the high-fear message in the low-credible condition. But with respect to terminal source credibility ratings, the low-credible source with the low-fear message was rated slightly higher than the low-credible source with the high-fear message. As indicated earlier, the theoretical explanation for these observed post-communication credibility ratings was that the differences were due to the greater cognitive imbalance induced by the strong-fear message which led to subsequent reduction of the imbalance by further discrediting the already low-credible source of the message (Miller and Hewgill, 1964). Thus, neither message was "effective" for the low-credible source in terms of generating attitude change; but the low anxiety

creating message was better for the low-credible source in that he did not suffer from terminal credibility derogation. Given these results, this researcher predicted that a "reward" message would serve the interests of a low-credible source better than a punishment (fear) message. It was reasoned that for a low-credible source, the benefits he might reap by selecting a low-fear message as opposed to a high-fear message would be accented by using a reward message as opposed to a punishment message.

When adding perception of adaptation to the investigation, the first-order "credibility-message cue" interaction became part of an ABC interaction prediction. This researcher predicted that the general rhetorical principle of adaptation would not be sustained in the low-credible, punishment condition. From the same rationale that was used to predict that the reward message would be superior to the punishment message for the low-credible source, it was hypothesized that the unadapted-punishment message would be superior to the adapted-punishment message. A message which contains punishment cues and is perceived as adapted should create more anxiety than a message with punishment cues that is not perceived as adapted. Thus, in the low-credible, punishment condition the unadapted message should be more effective than the adapted message in eliciting the desired response. Specifically, the following interaction hypothesis was set forth:

- H₁: For eliciting the desired response, in the high-credible condition the main effect predictions of adaptation, source credibility and reward-punishment message cues will be sustained; however,

in the low-credible condition the message containing reward cues will be more effective than the message containing punishment cues in all conditions, but adaptation will interact with reward-punishment message cues to the extent that the message which is perceived as adapted will be more effective in the reward condition but the message which is perceived as unadapted will be more effective in the punishment condition.



CHAPTER IV

METHOD

Overview

Ss' attitudes toward the experimental message topic were pretested approximately two weeks prior to the experimental inductions. At the time of the experiment Ss read one of four versions of a persuasive message which was attributed to a high or low-credible source. After reading the appropriate message, Ss responded to (1) a scale designed to assess their perception of the adaptation level of the message, (2) seven semantic differential scales designed to measure attitude toward the message topic, (3) one seven-step, bipolar scale designed to measure intent to behave, (4) eighteen semantic differential scales designed to assess terminal source credibility, and (5) two seven-step, bipolar scales designed to index the amount of anxiety experienced by the Ss while reading the persuasive messages. All Ss were randomly assigned to experimental or control conditions. The control Ss received the pretest and posttest without the intervening experimental manipulation. The control Ss also functioned as the off-set condition for pretesting source credibility inductions. Figure 1 describes the over-all design of the experiment.

Figure 1

Design of Study

	Pretest Attitude	Pretest Credibility	Manipulation	Posttest Attitude	Posttest Credibility
C o n t r o l s	YES	YES	NO	YES	NO
E x p e r i m e n t a l	YES	NO	YES	YES	YES

Experimental Messages

The basic experimental message was an essay dealing with the persuasion course which is offered in the Department of Speech and Dramatic Arts at Central Michigan University. The message described the alleged content and procedures of the course. The reward message focused on the benefits to be gained from taking the course; and, conversely, the punishment message focused on the harms to be realized from not taking the course. The message was designed to increase the favorableness of a receiver's attitudes toward the course.

Punishment and Reward Cues

Four versions of the experimental message were prepared. In the adapted-reward message, references were made to the "potential benefits" that would be gained by "students who take the basic communication course" and subsequently take the persuasion course. In the unadapted-reward message, references were made to the "potential benefits" that would be gained by "students in general" who take a persuasion course. In the adapted-punishment message, references were made to the "potential harms" that would be experienced by "students who take the basic communication course" and subsequently fail to take the persuasion course. In the unadapted-punishment message, references were made to the "potential harms" that would be experienced by "students in general" who do not take a persuasion course. (For copies of the four versions of the experimental message, see Appendix D.)

Source Credibility

Introductions of the source of the message were varied in an attempt to manipulate high and low levels of credibility. For copies of the credibility inductions, see Appendix B. Thus, with four message variations and with two credibility conditions, there were eight different message-source combinations:

High credibility-----Adapted-----Reward
 Low credibility-----Adapted-----Reward
 High credibility-----Unadapted-----Reward
 Low credibility-----Unadapted-----Reward
 High credibility-----Adapted-----Punishment
 Low credibility-----Adapted-----Punishment
 High credibility-----Unadapted-----Punishment
 Low credibility-----Unadapted-----Punishment

Subjects

Ss were 588 undergraduate students from the introductory speech course at Central Michigan University. Ss were randomly assigned to conditions. This experiment was administered while the students were attending a regularly scheduled Speech 101 television lecture.

Measurement of Independent Variables

Audience Adaptation As stated earlier, adapted messages contained statements which related the reward or punishment cues directly to the basic communication course membership group. The unadapted messages contained the same reward or punishment cues, but these messages contained references which related the cues to "students in general" rather than to the receiver membership group. To measure the success of the adaptation manipulation, the experimental Ss were asked to respond to the following question:

"Was the message you have just read adapted to you?"

Adapted: __:__:__:__:__:__:__:Unadapted

Initial Source Credibility As stated earlier, level of source credibility was manipulated by the technique of varying the introductions of the source. In order to check the induction of high and low credibility, Ss in each of the two control groups were given one of the two forms of the introduction and were asked to rate the credibility of the source.

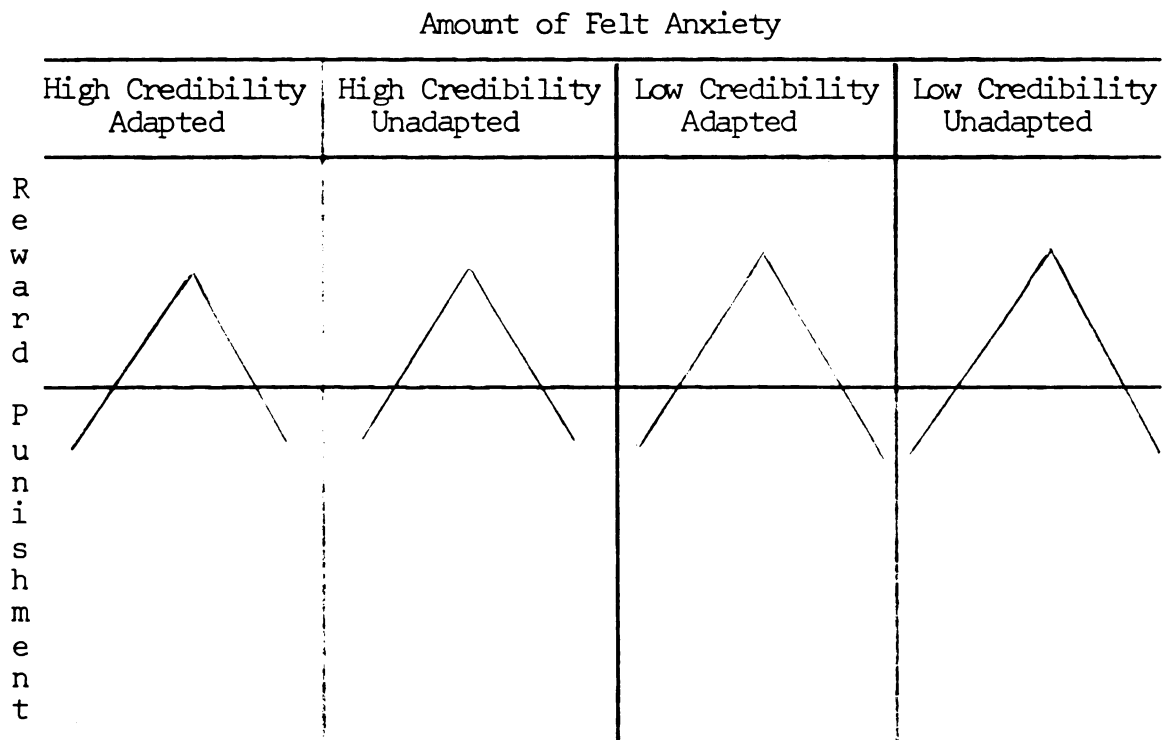
In both cases, the source was described as a former Central Michigan University student (See Appendix B). In the high-credible condition he was described as a former Student Senate president and a member of Phi Kappa Phi scholastic honor society and is now attending graduate school at Columbia University. In the low-credible condition the source was a former student who had been on scholastic probation and was later dismissed from the University for plagiarizing a research paper. In this condition a disclaimer indicating that the Central Michigan University curriculum committee (the committee which was allegedly conducting this study) neither endorsed nor opposed the views expressed in the message.

The measuring instruments were six, seven-interval scales (scored from 1-7) for each credibility dimension, i.e. authoritative-ness, character, and dynamism (See Appendix C). The following scales were used to assess the authoritativeness of the source: qualified-unqualified, valuable-worthless, reliable-unreliable, informed-uninformed, intelligent-unintelligent, and expert-inexpert (McCroskey, 1966). The scales: friendly-unfriendly, nice-awful, honest-dishonest, selfish-unselfish, pleasant-unpleasant, and sinful-virtuous were used to measure the character of the source (McCroskey, 1966). For measuring the dynamism of the source, the following scales were used: emphatic-hesitant, tired-energetic, frank-reserved, meek-aggressive, bold-timid, and active-passive (Berlo, Lemert and Mertz, 1966).

The three credibility scores recorded by each S were determined by totaling the S's responses to each of the three sets of six scales, i.e. each S developed a credibility score on each of the three dimensions.

Reward and Punishment Cues Reward cues were statements specifying potential benefits which would result from taking the persuasion course. Punishment cues were statements specifying potential harms which would result from not taking the persuasion course. In each of the credibility and adaptation conditions, punishment cues should have generated more anxiety than the reward cues. Figure 2 illustrates the anxiety manipulation which was attempted.

Figure 2



To measure the success of this manipulation, Ss were asked to respond to two statements intended to measure the amount of anxiety they experienced while reading the messages. The following two statements were used with the scales: "I felt at ease while reading the

the message." Ss responded to each of these statements on a seven-interval scale (scored from 1-7) ranging from "Strongly Agree" to "Strongly Disagree." Level of anxiety was determined by totaling a S's responses to these questions.

Measurement of Dependent Variables

Attitude Ss' attitudes toward the message concept were determined on the pretest and posttest by having them rate the message concept on the following evaluative scales: good-bad, foolish-wise, beneficial-harmful, right-wrong, positive-negative, useful-useless, valuable-worthless (Osgood, Suci and Tannenbaum, 1957). The respondents' pretest and posttest attitudes were determined by totaling their responses to the scales.

Intent to Behave In the present investigation the intent to behave dimension was employed in the same manner as in the pilot study. The intent to behave responses were operationalized on both the pretest and posttest in terms of the following question:

"Do you intend to take Speech 370?
Yes___ No___ Undecided___"

A favorable response was (1) a shift from a "No" response on the pretest to an "Undecided" or "Yes" response on the posttest; or (2) a change from "Undecided" on the pretest to "Yes" on the posttest.

Terminal Source Credibility Three terminal source credibility scores were recorded by each S. Each of these three scores was determined by totaling responses to the six, seven-interval scales which were used to measure each of the three dimensions of credibility.

The scales which were used for terminal credibility ratings were the same eighteen scales (three sets of six scales) which were listed as the scales which were used in the control groups to check the credibility inductions.

Procedures

Ss' attitudes toward the message concept and their intent to behave responses were pretested. Concurrent with the testing of their attitudes toward the message concept and their intentions to engage in behavior, Ss also responded to attitude scales and intent questions on five irrelevant concepts.

Approximately two weeks later, the experimental manipulations and posttests were administered. The Ss were randomly assigned to experimental and control conditions. In all the experimental conditions, the Ss were given booklets. First, they read a cover sheet which was designed to mask the experiment. Next, the experimental Ss were exposed to a credibility induction and then asked to read a message. To insure careful reading they were asked to underline the main ideas of the message as they read. Upon completion of the reading task, they were asked to respond to the adaptation-perception scale, the attitude toward message concept scales, the intent to behave question, the source credibility scales, and the anxiety scales. The control Ss read a cover sheet and then responded to three sets of attitude scales. Two of the concepts were irrelevant, and the third was the message concept being manipulated in the experimental conditions. Next, the control Ss were exposed to one of the credibility

inductions and then asked to respond to the credibility scales. Both groups of Ss, control and experimental, were given fifteen minutes to complete the entire task. At the end of that time all materials were collected from the Ss and their television lecture began.

CHAPTER V

RESULTS

Manipulation Checks

Message Adaptation Manipulation The responses of the Ss to a seven-step, bipolar scale provided data bearing upon the validity of the experimental messages as representations of the two induced message levels of adaptation. It was assumed that the "adapted" messages (messages which contained references to the specific audience membership group) would be perceived as significantly more adapted than the "unadapted" messages (messages which contained references to students in general).

In order to check the success of this manipulation, the results of the $2 \times 2 \times 2$ analysis of variance with adaptation as the dependent variable were examined (Appendix E, Table 10). There was a significant effect on perceived adaptation attributable to credibility ($F = 12.5, p < .05$), to reward-punishment message cues ($F = 7.8, p < .05$), and a significant ABC interaction ($F = 6.8, p < .05$). However, there was no significant effect registered for the adaptation manipulation ($F = .74$).

In an attempt to discover what had taken place in the various experimental conditions the group \bar{X} 's for perception of adaptation were examined. A significant ABC interaction was observed ($F = 6.84$,

$p < .05$). Table 4 illustrates the individual group \bar{X} 's.

Table 4. Perceived Adaptation Means.

	High-Reward	High-Punishment	Low-Reward	Low-Punishment
Adapted	5.1*	4.5	4.2	4.0
Unadapted	4.4	4.5	4.6	3.7

*The scores ranged from 1 (Unadapted) to 7 (Adapted).
The higher the \bar{X} , the greater the perceived adaptation.

The \bar{X} 's in Table 4 indicate that the induction was extremely weak. In one of the four conditions, the \bar{X} 's for perception of adaptation were identical in the adapted and unadapted groups, i.e. high-punishment. In another condition (low-reward) the results of the intended inductions were in the opposite direction; the \bar{X} for the unadapted message was higher than the \bar{X} for the adapted message. In two of the four conditions, the \bar{X} 's were in the right direction. In the low-punishment condition, the \bar{X} 's were not significantly different ($t = 1.1$, $df\ 127$). It was only in the high-reward condition where the induction was statistically successful. The high-adapted-reward group perceived their message as significantly more adapted than the high-unadapted-reward group perceived their message ($t = 2.5$, $df\ 131$, $p < .05$).

It should be pointed out that in the pilot study, making references to specific audience membership groups as opposed to having general referents was a successful manipulation of adaptation level. As indicated in Chapter III of this paper, the pilot study condition which also existed in this investigation was the high-credible, reward

condition. It is interesting to note that it was only in this high-credible, reward condition that the manipulation was successful in this present study. Thus, in terms of the pilot study, the same results for the success of the manipulation were obtained in this study; however, as a manipulation technique it was not successful in any other condition.

Given this general lack of success in the manipulation, it was decided that the induction was not strong enough to provide a meaningful interpretation of results. Since the theoretic rationale for this study was predicated on Ss actually perceiving adaptation, it was decided that the "adapted" and "unadapted" conditions should be determined on the basis of adaptation perception rather than adaptation manipulation. The \bar{X} across all conditions for perception of adaptation was 4.4. Thus, all who responded to the adaptation question with a 4 or below were placed into the unadapted condition while those responding 5 or above were placed into the adapted condition.

The decision to classify on the basis of perception caused an alteration in the original cell sizes. Table 5 notes those changes.

Upon examination of the changes in cell sizes as a result of perception versus manipulation classification, it was discovered that credibility and reward-punishment manipulations had affected the adaptation manipulation. In the high-credible conditions, there was a tendency to over-perceive adaptation while in the low-credible conditions there was a tendency to under-perceive adaptation

Table 5. Cell Sizes--Original and Altered.

N	High Adapted Reward	High Unadapted Reward	High Adapted Punishment	High Unadapted Punishment
Based on Manipulation	64	69	69	70
Based on Perception	81	52	73	66
	Low Adapted Reward	Low Unadapted Reward	Low Adapted Punishment	Low Unadapted Punishment
Based on Manipulation	64	67	65	64
Based on Perception	61	70	38	91

($X^2 = 20.34$, $p < .05$).³ By the same token, there was a tendency to over-perceive adaptation in the reward conditions while just the opposite took place in the punishment conditions ($X^2 = 10.87$, $p < .05$).

As far as accuracy of perception in terms of manipulation was concerned, 279 Ss perceived the induction as intended while 253 misperceived it ($X^2 = 1.26$). Apparently chance and other variables, not adaptation manipulation, ruled perception of adaptation.

Initial Credibility Manipulations The Control groups served

³This researcher, in a study with Miller (1969) found this same tendency of credibility to influence perception of adaptation. It was found that a message containing no adaptation cues when attributed to a high-credible source was perceived as significantly more adapted than a message containing adaptation cues when attributed to a low-credible source.

as off-set measures for a pretest rating of the credibility of the two message sources. Table 6 reports the \bar{X} 's obtained on each of the credibility dimensions.

Table 6. Pretest Source Credibility Rating Means.

Dimension	High-Credibility n = 29		Low-Credibility n = 27		<u>t</u>
Authorita- tiveness	$\bar{X} = 32.6^*$	s = 5.2	$\bar{X} = 20.0$	s = 4.4	9.6**
Character	$\bar{X} = 26.9$	s = 3.6	$\bar{X} = 20.7$	s = 3.1	6.8**
Dynamism	$\bar{X} = 30.1$	s = 4.6	$\bar{X} = 24.5$	s = 3.3	5.1**

*The scales were scored from 1 (low) to 7 (high).

There were 6 scales on each dimension. The higher the \bar{X} , the higher the credibility rating.

**Significant at < .05 level.

In terms of statistically significant differences, the inductions were successful. But, it should be pointed out that the high-credible source was only "moderately" high and the low-credible source was only "moderately" low. The biggest absolute difference between the two sources was on the authoritativeness dimension. The \bar{D} was 12.6 which was more than two scale units. There was one scale unit difference on the character dimension ($\bar{D} = 6.2$) and slightly less than one scale unit difference on the dynamism dimension ($\bar{D} = 5.6$).

Factor Analysis of Source Credibility Scales In an attempt to check the validity of the source credibility measuring instruments, the results were submitted to a factor analysis. Examination of the factor analyzed source credibility data suggested that three dimensions

of credibility (Authoritativeness, Character and Dynamism) existed. (See Appendix F, Table 18, for a listing of the scales which had factor loadings above .60 on one factor and below .40 on all other factors.)

A three factor solution (54% of the variance accounted for) was selected. On the two factor solution (49% of the variance accounted for) character and authoritativeness loaded together; whereas, they divided perfectly into the intended dimensions on the three factor solution. The four factor solution (60% of the variance accounted for) was not selected because the fourth dimension which was gained by this solution had only one scale with a loading of .60 or above. It is interesting to note that the scale which evolved on this new dimension was a character scale (Selfish-Unselfish) which had failed to emerge on either the two or three factor solutions. For these reasons, the three factor solution was selected.

The results indicate that the most stable dimension was authoritativeness, and the least stable dimension was character. The reason for this statement is that the authoritativeness dimension emerged on the two factor solution and remained quite stable on both the three and four factor solutions. The dynamism dimension emerged in a similar pattern; but it did not contain as many of its original six scales, i.e. on a two factor solution authoritativeness emerged with four of its original six scales and dynamism emerged with four of its original six; on a three factor solution authoritativeness emerged with six scales and dynamism with four, and on a four factor solution authoritativeness emerged with five and dynamism with four.

The character dimension loaded with authoritativeness on a two factor solution emerged as a separate dimension with four of its original six scales on a three factor solution, and began to spread on a four factor solution.

On the selected three factor solution, the scales which had satisfactory loadings on the authoritativeness dimension were: qualified-unqualified, reliable-unreliable, informed-uninformed, intelligent-unintelligent, expert-inexpert, and honest-dishonest (a character scale). The scales with satisfactory loadings on the dynamism dimension were: emphatic-hesitant, meek-aggressive, bold-timid, and passive-active. The scales with satisfactory loadings on the character dimension were: friendly-unfriendly, nice-awful, pleasant-unpleasant, and virtuous-sinful.

Anxiety Manipulation Check There was a main effect for reward-punishment message cues ($F = 20.8$, $p < .05$). Table 7 reports the various anxiety score \bar{X} 's.

Table 7. Anxiety Score Means.

	High Adapted	High Unadapted	Low Adapted	Low Unadapted
Reward	5.9*	6.7	5.6	6.9
Punishment	6.9	8.2	6.5	7.7

* There were two scales. They were scored from 1 (low) to 7 (high). The higher the score, the higher the anxiety response.

Table 7 matches the "intended anxiety manipulation" grid (Figure 2) which appears in Chapter IV of this paper. However, it

became clear by looking at the over-all reward-punishment \bar{X} 's that the manipulation, although successful in terms of statistically significant differences, did not actually produce much anxiety. Both of the conditions had over-all \bar{X} 's which were below the hypothetical neutral score of 8 (reward \bar{X} = 6.3: punishment \bar{X} = 7.3).

The manipulation was successful in terms of the theory that punishment cues should generate more anxiety than reward cues ($F = 20.8$, $p < .05$). However, the theory that a high-credible source should create more anxiety than a low-credible source was not supported ($F = 1.24$). Also, the theoretical position that a message that is perceived as adapted will generate more anxiety than one which is perceived as unadapted did not receive support. As a matter of fact, there was a significant effect in the opposite direction ($F = 26.74$, $p < .05$). That is to say, when classified on the basis of perceived adaptation, the messages which were perceived as unadapted generated more anxiety than those perceived as adapted.

After checking all of the manipulations, it was decided that for the main $2 \times 2 \times 2$ factorial analysis of variance the Ss would be assigned to credibility conditions on the basis of manipulation, to adaptation conditions on the basis of perception, and to anxiety conditions on the basis of manipulation.

A $2 \times 2 \times 2$ factorial analysis of variance was performed on the eight experimental groups' pretest attitude scores to ensure that prior attitudes did not have an effect on posttest responses. The analysis (See Appendix E, Table 11) revealed that prior attitudes may have had a significant effect on the posttest results. A

significant ABC interaction was recorded ($F = 4.2, P < .05$). Thus, it was decided that an analysis of covariance would be employed.

Posttest Attitude Scores

Control Group In order to determine the over-all effectiveness of the experimental message stimuli, control group Ss' attitudes toward the message concept were acquired on the pretest and posttest. Upon examination of the Control Group \bar{X} 's, it became apparent that most attitude change which was recorded in the experimental conditions could be attributed to the experimental manipulation. From pretest to posttest, the attitudes of members of the control group shifted negatively, i.e. in the direction opposite from the advocated position contained in the experimental stimuli (pretest $\bar{X} = 30.84$; posttest $\bar{X} = 29.01$). Comparison of the \bar{X} 's revealed a significant negative shift ($t = 2.27, p < .05$).

The negative shift in attitude experienced by the control group can be partially attributed to events which had taken place on the Central Michigan University campus during the two weeks between the pretest and posttest. During that period of time, a movement was started in an attempt to abolish all required courses at the University. Speech 101 was selected as the first course to try to have abolished as a requirement. As indicated earlier, the Ss for this study were Speech 101 students. This movement could have affected the Ss' attitudes toward the courses offered by the Speech Department. Since the message concept was Persuasion 370, it seems likely that the campus events caused an abnormal negative shift of

attitude against the message topic.

Test of Experimental Hypothesis

- H₁: For eliciting the desired response, in the high-credible condition the main effect predictions of adaptation, source credibility and reward-punishment message cues will be sustained; however, in the low-credible condition the message containing reward cues will be more effective than the message containing punishment cues in all conditions, but adaptation will interact with reward-punishment message cues to the extent that the message which is perceived as adapted will be more effective in the reward condition but the message which is perceived as unadapted will be more effective in the punishment condition.

The experimental hypothesis was concerned with an interaction (ABC) among the variables of source credibility, perceived adaptation, and reward-punishment message cues. As indicated earlier, in the hypothesis the term "desired response" referred to significantly higher posttest attitude scores, significantly more positive shifts on the intent to behave dimension, and significantly higher terminal credibility ratings.

In order to analyze the experimental data in terms of differences between posttest attitude scores and terminal source credibility ratings, 2 x 2 x 2 factorial analyses of covariance with the attitude pretest as the covariate were employed. These analyses failed to reveal the hypothesized ABC interaction on any of the dependent variables (See Appendix E, Tables 12-15).

In order to analyze the experimental data in terms of positive shifts on the intent to behave dimension, the proportion of positive shifts in each cell was calculated. Table 8 reveals the differences

between the number of positive shifts and negative shifts in each cell.

Table 8. Difference Between Total Positive and Total Negative Pre-test Shifts on the Intent to Behave Measure.

	High-Credibility		Low-Credibility	
	Adapted	Unadapted	Adapted	Unadapted
Reward	+22*	+4	+15	-2
Punishment	+23	+8	+13	+5

* A positive number indicates how many more positive shifts there were than negative shifts in a particular cell, and a negative number indicates how many more negative shifts there were than positive shifts.

Table 9 exhibits the proportions of total positive shifts as compared with the total n in each cell.

Table 9. Proportion of Positive Shifts in Each Cell.

	High-Credibility		Low-Credibility	
	Adapted	Unadapted	Adapted	Unadapted
Reward	.31*	.19	.30	.10
Punishment	.38	.17	.35	.12

* The individual cell proportions were calculated by dividing the total number of positive shifts by the n in a particular cell.

In order to stabilize the variance, the arcsin transformation on each cell proportion was used (Winer, 1962). The transformation included the factor square root of cell sample size so that all the transformed data would have approximately unit variance. The sum of

squares was partitioned into sums of squares attributed to various factorial effects (Appendix G, Table 19). The hypothesized ABC interaction did not emerge ($X^2 = .08$).

Thus, the major hypothesis of the investigation did not receive any support from the results of the analyses. There was no evidence that source credibility, perceived adaptation, and reward-punishment message cues work differentially at the various levels of the variables.

Tests of Rationale Hypotheses

First-Order Interactions Since the hypothesized ABC interaction was not confirmed, the major analyses (the three-factorial analyses of covariance and the analysis of the intent to behave data) of the experimental data were then examined to determine the validity of the first-order interaction hypothesis that was utilized in the development of the rationale on which the major hypothesis of the investigation was based. The first-order interaction hypothesis stated:

- H: For eliciting the desired response, in the high-credible condition a message containing punishment cues will be more effective than a message containing reward cues; however, in the low-credible condition a message containing reward cues will be more effective than a message containing punishment cues.

The prediction stipulated an interaction (AC) between the variables of source credibility and reward-punishment message cues. Upon examination of the results of the $2 \times 2 \times 2$ analyses of

covariance, it was found that in terms of posttest attitude scores and terminal source credibility ratings there were no AC interactions which emerged on any of the dependent variables (See Appendix E, Tables 12-15).

The arcsin transformation provided data bearing on the validity of the existence of the predicted AC interaction on the intent to behave dimension. The AC interaction obtained ($X^2 = .01$) was not significant (See Appendix G, Table 19).

Thus, the first-order interaction prediction which was generated as part of the rationale on which the major hypothesis of the investigation was based did not receive support. Again, there was no evidence that source credibility and reward-punishment message cues function differentially at the various levels of the variables.

Further examination of the major analyses indicated that there were no other first-order interactions. Credibility, perceived adaptation, and reward-punishment message cues had apparently operated consistently in all conditions since there were no significant treatment effect variations from level to level.

Main Effects Next, the analyses were examined to determine the validity of the main effect predictions which formed the foundation of the rationale which was used to generate the experimental hypothesis. The order of examination was from the third main effect which was predicted (Reward-Punishment Message Cues), to the second main effect which was predicted (Credibility), to the first main effect which was predicted (Adaptation).

Reward-Punishment Message Cues (C Effect) This main effect prediction, based on the assumption that a message containing punishment cues would create more anxiety than a message containing reward cues, stated:

H: For eliciting the desired response, a message containing punishment cues will be more effective than a message containing reward cues.

As indicated earlier, the assumption that the message containing punishment cues would generate more anxiety than the message containing reward cues was sustained ($F = 20.8, p < .05$). The main effect prediction was not upheld on posttest attitude scores or the credibility ratings of authoritativeness and character (see Appendix E, Tables 12-14). However, the source, when utilizing a message containing punishment cues was perceived as being more dynamic on terminal ratings of credibility than the source who utilized a message containing reward cues ($F = 13.70, p < .05$).

The arcsin transformation data did not reveal a main effect for messages containing punishment cues ($\chi^2 = .01$). Thus, the reward-punishment main effect prediction was upheld only on the dynamism dimension of credibility (See Appendix E, Table 15).

Source Credibility (A Effect) This main effect prediction stated:

H: For eliciting the desired response, a high-credible source will be more effective than a low-credible source.

This theoretical prediction received support from most of the analyses of the experimental data (See Appendix E, Tables 12-15;

Appendix G, Table 19). In terms of posttest attitude scores, the $2 \times 2 \times 2$ analysis of covariance revealed that the high-credible source was more effective than the low-credible source ($F = 5.02$, $p < .05$). The covariance analyses of the terminal credibility ratings showed that the high-credible source received better terminal ratings on all three dimensions of credibility. The results were as follows: Authoritativeness dimension ($F = 90.88$, $p < .05$); Character dimension ($F = 20.03$, $p < .05$); Dynamism dimension ($F = 16.23$, $p < .05$).

The credibility main effect prediction was not confirmed by the arcsin transformation of the intent to behave dimension data ($X^2 = .33$). The high-credible source was more effective in eliciting the desired response in terms of posttest attitude scores and terminal source credibility ratings; but given the inherent weaknesses of the intent to behave response data, the credibility main effect did not emerge on this dependent variable.

Perceived Adaptation (B Effect) The general rhetorical principle of adaptation which served as the core of the development of the theoretic position on which the experimental hypothesis of this investigation was based was stated as follows:

H: For eliciting the desired response, a source who delivers a message which is perceived as adapted will be more effective than a source who delivers a message which is perceived as unadapted.

This main effect prediction obtained strong support (See Appendix E, Tables 12-15; Appendix G, Table 19). The results of the analysis of covariance of posttest attitude scores indicated the

message which was perceived as adapted was more effective than the message which was not perceived as adapted ($F = 64.73, p < .05$).

The covariance analyses of the terminal credibility ratings also indicated that the source who delivered the message which was perceived as adapted was more effective than the source who delivered the message which was perceived as unadapted. The terminal credibility rating results were as follows: Authoritativeness dimension ($F = 38.33, p < .05$); Character dimension ($F = 24.60, p < .05$); Dynamism dimension ($F = 16.76, p < .05$). The perceived adaptation main effect prediction was not confirmed by the arcsin transformation of the intent to behave dimension data ($X^2 = 1.36, p < .25$), however, the observed difference was in the direction predicted.

Thus, the general rhetorical principle of adaptation was statistically supported on four dependent variables: posttest attitude scores and the three dimensions of terminal source credibility ratings. It also received directional support on the remaining dependent variable, intent to behave.

Supplemental Analysis

The analysis just reported was based on the a priori decision to analyze the data in terms of perceived adaptation. There is some justification for analyzing the data on the basis of manipulation of adaptation in conjunction with perception. A supplementary analysis of the attitude and credibility data which included only those Ss who perceived the adaptation manipulation as intended was performed.

This supplementary analysis produced results comparable to those

reported. One exception was that on posttest attitude scores, the credibility main effect did not reach significance. Another exception was that on the authoritativeness and dynamism dimensions of credibility, a significant ABC interaction occurred in addition to the credibility and adaptation main effects. This interaction can be explained by the fact that the adapted condition was always superior to the unadapted condition except when administered in conjunction with high credibility and punishment cues (See Appendix H, Tables 21-25).

CHAPTER VI
CONCLUSIONS, DISCUSSION, AND IMPLICATIONS
FOR FURTHER RESEARCH

Conclusions

Primary Analyses The present study investigated the effects of source credibility, perceived adaptation, and reward-punishment message cues on attitudes, intent to behave responses and terminal credibility ratings. The major hypothesis of the investigation, which stipulated an interaction among the variables of source credibility, perceived adaptation, and reward-punishment message cues was not confirmed. It had been hypothesized that in terms of eliciting the desired response in a high-credible condition the main effect predictions of adaptation, source credibility and reward-punishment message cues would be sustained; however, in a low-credible condition a message containing reward cues would be more effective than a message containing punishment cues in all conditions and adaptation would interact with reward-punishment message cues to the extent that a message which was perceived as adapted would be more effective in the reward condition but the message perceived as unadapted would be more effective in the punishment condition. As indicated above, the data failed to confirm the hypothesis. Thus, source credibility, perceived adaptation and reward-punishment message cues, at least for

the levels and manipulations which were employed in this study, did not significantly interact.

The adaptation manipulation was attempted by the use of specific receiver membership group reference cues in an "adapted" message as opposed to the use of general receiver reference cues in an "unadapted" message. Upon analysis, it became apparent that this manipulation was unsuccessful in all conditions except the high-credible, reward condition. Since the theoretic rationale on which the adaptation prediction rested was generated from a "perception of adaptation" vantage point, it was decided to classify the Ss on the basis of how they perceived the adaptation level of a message rather than according to the intended manipulation.

The experimental manipulation of source credibility was attempted by the use of two different source introductions. That this manipulation was successful was evidenced by comparing the initial credibility ratings of the two sources. The high-credible source was rated as significantly more credible than the low-credible source on the three dimensions of credibility. However, it was pointed out that although there were significant differences between the sources, the high-credible source was actually "moderately" high and the low-credible source was "moderately" low.

The reward-punishment message cue manipulation was tested in terms of the amount of anxiety created by the different messages. The manipulation was successful in that messages containing punishment cues generated significantly more anxiety than the messages containing reward cues. However, neither type of message produced much actual

anxiety because all messages had over-all anxiety score \bar{X} 's which were below the hypothetical neutral point of the anxiety measuring instruments.

Examination of Rationale In an effort to examine the theoretic rationale on which the experimental hypothesis was originally based, the data was examined for first-order interactions. As stated earlier, the main ABC hypothesized interaction did not emerge, nor did the predicted AC interaction on which the ABC relationship was partially based. The credibility and reward-punishment message cue interaction (AC) was not found on any of the dependent variables.

Next, the data was analyzed in terms of main effects. The main effect prediction that a message containing punishment cues would be more effective than one containing reward cues was supported on the dynamism dimension of source credibility. A source, when utilizing a message containing punishment cues was perceived as being significantly more dynamic than a source who utilized a message containing reward cues.

The main effect prediction pertaining to the superiority of a high-credible source over a low-credible source was supported on the dependent variables of posttest attitude scores and the three dimensions of credibility. The high-credible source generated significantly higher posttest attitude scores and was rated as significantly more authoritative, higher in character and more dynamic than the low-credible source.

The original purpose of the present investigation was to examine the generalizability of the rhetorical principle of adaptation,

i.e. a source who delivers a message which is perceived to be adapted to his receivers will be more effective than a source who delivers a message which is not perceived as adapted to his receivers. The data revealed support for this adaptation principle. The source of the message perceived as adapted affected significantly higher posttest attitude scores and was the recipient of significantly higher terminal credibility ratings than the source of the message perceived as unadapted. The principle of adaptation also received directional support on the intent to behave dimension.

Discussion

Manipulations One of the major problems encountered during the present investigation was the lack of success in the adaptation level manipulation. The technique of employing specific audience membership group referent cues as opposed to general referent cues was a successful method of manipulating perception of adaptation in the pilot study, but less successful in this study. In the pilot study condition which existed in this investigation (high-credible, reward), the manipulation was successful; but it was unsuccessful in all of the other conditions.

An important question which needs to be answered in order to discuss the results of this study is "Why was the adaptation manipulation unsuccessful?" The reason this is such an important question is that the rationale on which the experimental hypothesis was based was to some extent dependent on the success of the adaptation manipulation. One of the assumptions on which the hypothesized ABC

interaction was based was that a message which was perceived as adapted would generate more anxiety than a message which was perceived as unadapted. As reported in Chapter V, the opposite effect was registered. The messages perceived as unadapted generated more anxiety in all conditions than the messages perceived as adapted. This finding denied the original theoretic position that one would experience more anxiety when exposed to a message which was perceived as adapted than when exposed to a message perceived as unadapted.

There seem to be two plausible explanations for this finding. One explanation is that the use of a specific group referent is an inherently weak method of adapting to an audience. Perhaps group references provide only a small portion of the total types of adaptation cues which are necessary before one is willing to indicate that a message is adapted. Of course, the salience of the particular group referent which is employed will bear on the over-all impact of this type of adaptation. If the particular membership group is not salient, then the learning theory notion of potential reinforcement that was used in this study may not actually be operating in the communication situation. In order for potential reinforcements to be perceived as worthwhile, the particular membership group referent may need to be quite important to the receivers.

Another possible explanation for the finding might be that if a message arouses anxiety in a receiver, one way the receiver could reduce some of the anxiety would be to say that the message was not adapted or did not apply to him. One factor which negates much of

the impetus of this explanation is that none of the messages was highly anxiety producing. However, the punishment messages were significantly more anxiety producing than the reward messages; and the messages which were perceived as unadapted produced significantly more anxiety than the messages perceived as adapted.

There may be other possible explanations for the lack of success of the manipulation and for the finding that the messages perceived as unadapted created the most anxiety. No matter what the explanation might be, the fact remains that the lack of success of the manipulation coupled with the findings about the anxiety-creating patterns of the messages, made it difficult to confirm the experimental hypothesis of the study. The theoretical position that a low-credible source will be more successful with an unadapted-punishment message than with an adapted-punishment message may still have merit. In order to test it more accurately, improvements will have to be made in inducing real adaptation levels and in corollary measurement of actual perception of adaptation. Also, the way in which other variables such as credibility affect perception of adaptation will need to be explored more fully.

As stated earlier, the manipulation of credibility was successful. The initially high-credible source was rated as significantly more credible than the initially low-credible source on all three dimensions of credibility. These differences were sustained on the posttest. The initially high-credible source remained more credible than the low-credible source. However, as can be seen in Appendix E, Table 17, the initially low-credible source was the recipient of more

improvement in credibility ratings than was the initially high-credible source. One possible explanation for this is that the initial credibility ratings were "moderately" high and "moderately" low. Thus, given a persuasive message, receivers might tend to minimize the terminal differences between the sources. Another possible explanation is that the low-credible source was perceived as speaking against his own self-interest. If this were the case, existing literature (McCroskey and Wenburg, 1967; Walster, Aronson and Abrahams, 1966) would predict the obtained result. An initially low-credible source can improve his credibility by speaking against what his receivers perceive to be his best interests. That type of situation may have been in operation in this investigation, for the low-credible source who was on academic probation and later dismissed from the University for plagiarizing a research paper, prepared a message which was extremely complimentary about a college course he had failed. One might normally expect such a person to speak against the particular course.

Although the differences between the initial credibility ratings were not as large as they could have been, the manipulation was strong enough to achieve the expected credibility results. The initially high-credible source was significantly more effective than the initially low-credible source in terms of posttest attitude scores and on all three dimensions of terminal credibility.

The other manipulation, i.e. reward-punishment message cues, was generally successful. As reported earlier, the punishment cues generated significantly more anxiety than the reward messages;

although neither message generated much actual anxiety. Perhaps if the membership group references had been more salient, the potential punishments or rewards would have had more impact in generating anxiety. Even though neither message generated much actual anxiety, the manipulation, in terms of differences in anxiety-arousal, was successful. The main effect prediction that a message containing punishment cues would be more effective than a message containing reward cues was upheld only on the dependent variable of dynamism. Perhaps if more actual anxiety would have been realized by the Ss, the main effect prediction of punishment over reward may have been registered on all dependent variables.

Experimental Hypothesis This researcher believes that even though the experimental hypothesis was not confirmed in this study, the hypothesis might still have merit. In the present investigation, the lack of success in manipulating the independent variables may have prevented the occurrence of the hypothesized interaction. The rationale on which the prediction was based received support in all but two instances.

One of the two places in which the rationale was not completely supported was in the prediction of the first-order (credibility, reward-punishment) interaction. The literature which was reviewed concluded that a message containing punishment cues would be more effective than a message containing reward cues. This main effect was found on the dynamism dimension of credibility. This writer, as a result of the fear appeals findings, predicted that a punishment message would be more effective in a high-credible condition but that

a reward message would be more effective in a low-credible condition. The results indicated that neither message was superior except for the punishment message effect on terminal dynamism ratings. The interaction prediction, although not supported, was not disproven. The researcher feels that if more felt anxiety had been created, the interaction might have emerged.

The other place where the theoretic rationale was not supported was that the messages which were perceived as adapted did not create more anxiety than the messages perceived as unadapted. Possible explanations of this finding were discussed earlier in this chapter. It still seems reasonable to assume that a message which is perceived as adapted will have more impact and create more anxiety than a message perceived as unadapted. If perception of adaptation is measured accurately, surely it would become apparent that a source who adapts his message will create more concern and more anxiety within his receivers than a source who fails to adapt to his receivers. If a message is not adapted, a receiver can respond by simply saying the message does not apply to him. But if the receiver perceives that the message is adapted to him it will be more difficult to dismiss the message without attending to the substance of it. The above position seems intuitively obvious and the results of this study do not deny the underlying logic of the rationale. But, the position cannot be empirically supported or denied until the manipulations are more successful.

Implications for Further Research

Most of the discussion about the failure to confirm the experimental hypothesis has centered around the unsuccessful manipulations rather than weaknesses in the theoretic rationale. Thus, it seems that the biggest immediate concern for further research is to find methods to successfully manipulate adaptation, initial source credibility and reward-punishment message cues.

As indicated earlier, the use of receiver membership cues may be an inadequate technique of inducing adaptation. Further research may be concentrated on other possible adaptation techniques. One possibility would be to ask Ss on a pretest what they think makes a message "adapted" rather than "unadapted." Given Ss' responses to this type of pretest, one could construct messages which meet the Ss' own notions about requirements of adapted and unadapted messages.

Also, as already noted, credibility has been found to effect perception of adaptation. Future research might consider removing various levels of initial credibility so that adaptation can be examined in isolation. The same holds true for reward-punishment message cues as with credibility. Once adaptation can be understood more clearly, then adaptation induction can be assumed and other variables can be introduced so that interactions such as the one predicted in this study can be examined more carefully. Since post-test measures of perception of adaptation may be used to reduce anxiety, it is necessary to be able to determine on an a priori basis that a message is either adapted or unadapted so that the data can be

classified on the basis of the intended experimental conditions.

However, it might also be possible to measure perception of adaptation more accurately on a posttest basis. Differences between pretest and posttest measures of salience of an issue could be used as indicators of actual perception of adaptation. If Ss consider an issue to be more important to them after being exposed to a message on the issue, one might be able to infer that the message was adapted to the Ss whether or not posttest responses to a perception of adaptation scale reveal that the Ss perceived the message as adapted. Differences in responses by various experimental conditions to the salience of the issue might reveal actual adaptation levels.

Thus, in terms of the manipulation of adaptation, further research can be geared both toward determining necessary adaptation ingredients as well as more accurate measures of actual perception of adaptation. If adaptation levels can be manipulated successfully, then the adaptation phenomenon can be examined more carefully. Perhaps it will still be found that the rhetorical principle of adaptation is generalizable. There is no existing empirical data which denies it. However, this researcher believes that if the manipulations of the levels of adaptation can be made successful and are tested with levels of credibility and types of message cues that it will become evident that in some cases a source will be more effective if he uses unadapted messages as opposed to adapted messages.

Although it may be discovered that with proper manipulations the rhetorical principle of adaptation may not be generalizable to some particular communication situations, the element of reality must

not be overlooked. The present study was realistic in that the manipulations of adaptation, source credibility, and reward-punishment message cues were believable. That is to say, in the real world the use of membership groups is a common technique employed to adapt messages, sources such as the ones used do exist, and sources do employ reward-punishment message cues. In this study, as well as in the pilot study, the rhetorical principle of adaptation received full support. If the principle continues to be sustained in most normal communication situations, but perhaps does not hold under situations employing extreme manipulations, then the social significance of a finding which suggests that the principle is not valid in some instances will be suspect. At this time, it appears that the adaptation principle is generalizable to at least most communication settings while the theory set forth in this study asserts that this is not the case in certain communication transactions. In order to challenge the principle within a socially significant context, the element of reality in manipulations will have to be retained in the experimental laboratory.

The effects of initial credibility on the perception of adaptation cannot be ignored in future research. Again, the present study and the study by this researcher with Miller (1969) indicate that credibility has an impact on perception of adaptation. Ss tend to over-perceive adaptation in a high-credible condition and under-perceive adaptation in a low-credible condition. In order to understand the relationship between these two variables, "time of source attribution to a message" might be considered. If the source is not

identified until after the Ss have been exposed to a message, credibility might not have as strong of an impact on perception of adaptation. It was found by Greenberg and Miller (1966) that a low-credible source affected more attitude change when he was identified after Ss had been exposed to a message than when identified before the Ss were exposed to a message. The same type of result may be found with perception of adaptation. Perhaps the tendency to over-perceive adaptation in a high-credible condition and under-perceive adaptation in a low-credible condition would be minimized if the source were identified after message exposure.

In terms of attitude change, existing research indicates a positive correlation between perception of adaptation and attitude change. Do these two variables always correlate with each other? Is one a prerequisite to the other, or is it possible to perceive a message as adapted and still not experience attitude change, or vice versa? Future studies may provide answers to these questions.

Also, the intent to behave dimension still remains an important consideration. The data obtained in this study did not provide a fully adequate measure of this dependent variable. More data needs to be collected than was collected in this study, and the data needs to be of a higher order than nominal. Also, follow-up data in terms of actual behavior patterns could be obtained. For example, with an issue like the one used in this study, it could be determined whether or not the various experimental manipulations had any differing effect on ultimate behavior.

Endogenous improvement in credibility still remains an important area of concern for communication researchers. Examination of the effect of adaptation levels on terminal credibility is an important area for further research. Adaptation might prove to be an important endogenous determinant of terminal credibility ratings--especially for initially low and relatively unknown sources.

Communication scholars have always maintained that there is a necessity to adapt messages to receivers. If adaptation is truly such an important ingredient in successful communication, it merits the concern of future research. Hopefully, this study sheds some light on the existence of the effect of adaptation and on the complexities and difficulties involved in examining the phenomenon experimentally. The communication field will surely profit if researchers concentrate some of their future efforts on examining the effects of the important variable of message adaptation.

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APPENDICIES

APPENDIX A

PRETEST

NAME _____

CLASSIFICATION (Circle One) Freshman-Sophomore-Junior-Senior

STUDENT ATTITUDE SURVEY

The purpose of this study is to measure student's concepts of a number of college courses by having them judge the courses against a series of descriptive scales. In filling out the scales, please make your judgments on the basis of what these courses mean to you. The information will be held confidential. On each page of this booklet you will find different courses to be judged. Beneath each of the courses you will find a set of scales to be filled out and two questions to be answered.

Here is how you are to use these scales:

If you feel that the course at the top of a set of scales is very closely related to one end of the scale, you should place your "X" as follows:

Foolish: X : ____ : ____ : ____ : ____ : ____ : ____ : Wise

or

Foolish: ____ : ____ : ____ : ____ : ____ : ____ : X : Wise

If you feel that the course is quite closely related to one or the other end of the scale (but not extremely), you should place your "X" as follows:

Good: ____ : X : ____ : ____ : ____ : ____ : ____ : Bad

or

Good: ____ : ____ : ____ : ____ : ____ : X : ____ : Bad

If the course seems only slightly related to one side as opposed to the other side, then you should check as follows:

Positive: __:__: X :__:__:Negative

or

Positive: __:__:__: X :__:__:Negative

If you feel neither adjective applies to your concept of the course, or if you feel that both adjectives apply equally, or if you "don't know" because you have never taken the course or have no prior attitude you should mark your "X" in the middle space.

Wrong: __:__:__: X :__:__:Right

- IMPORTANT: (1) Place your check-marks in the middle of the spaces, not on the boundaries.
- (2) Check every scale for every course--do not omit any.
- (3) Never put more than one check on a single scale.
- (4) Answer both questions at the end of each set of scales.

BIOLOGY 222 (BACTERIOLOGY)

Good: ___:___:___:___:___:___:___:Bad _____
 Foolish: ___:___:___:___:___:___:___:Wise _____
 Beneficial: ___:___:___:___:___:___:___:Harmful _____
 Wrong: ___:___:___:___:___:___:___:Right _____
 Positive: ___:___:___:___:___:___:___:Negative _____
 Useless: ___:___:___:___:___:___:___:Useful _____
 Valuable: ___:___:___:___:___:___:___:Worthless _____

Have you taken the above course? Yes ___ No ___. If "No," do you
 intend to take the course? Yes ___ No ___ Undecided ___

ENGLISH 304 (SHAKESPEARE)

Good: ___:___:___:___:___:___:___:Bad _____
 Foolish: ___:___:___:___:___:___:___:Wise _____
 Beneficial: ___:___:___:___:___:___:___:Harmful _____
 Wrong: ___:___:___:___:___:___:___:Right _____
 Positive: ___:___:___:___:___:___:___:Negative _____
 Useless: ___:___:___:___:___:___:___:Useful _____
 Valuable: ___:___:___:___:___:___:___:Worthless _____

Have you taken the above course? Yes ___ No ___. If "No," do you
 intend to take the course? Yes ___ No ___ Undecided ___

GEOGRAPHY 240 (GEOGRAPHY OF POPULATION)

Good: ___:___:___:___:___:___:___:Bad _____
 Foolish: ___:___:___:___:___:___:___:Wise _____
 Beneficial: ___:___:___:___:___:___:___:Harmful _____
 Wrong: ___:___:___:___:___:___:___:Right _____
 Positive: ___:___:___:___:___:___:___:Negative _____
 Useless: ___:___:___:___:___:___:___:Useful _____
 Valuable: ___:___:___:___:___:___:___:Worthless _____

Have you taken the above course? Yes ___ No ___. If "No," do you
 intend to take the course? Yes ___ No ___ Undecided ___

SPEECH 370 (PERSUASION)

Good: __:__:__:__:__:__:__:Bad _____
 Foolish: __:__:__:__:__:__:__:Wise _____
 Beneficial: __:__:__:__:__:__:__:Harmful _____
 Wrong: __:__:__:__:__:__:__:Right _____
 Positive: __:__:__:__:__:__:__:Negative _____
 Useless: __:__:__:__:__:__:__:Useful _____
 Valuable: __:__:__:__:__:__:__:Worthless _____

Have you taken the above course? Yes___ No___. If "No," do you
 intend to take the course? Yes___ No__ Undecided___

HISTORY 220 (ANCIENT GREECE AND ROME)

Good: __:__:__:__:__:__:__:Bad _____
 Foolish: __:__:__:__:__:__:__:Wise _____
 Beneficial: __:__:__:__:__:__:__:Harmful _____
 Wrong: __:__:__:__:__:__:__:Right _____
 Positive: __:__:__:__:__:__:__:Negative _____
 Useless: __:__:__:__:__:__:__:Useful _____
 Valuable: __:__:__:__:__:__:__:Worthless _____

Have you taken the above course? Yes___ No___. If "No," do you
 intend to take the course? Yes___ No__ Undecided___

MATHEMATICS 320 (DIFFERENTIAL EQUATIONS)

Good: __:__:__:__:__:__:__:Bad _____
 Foolish: __:__:__:__:__:__:__:Wise _____
 Beneficial: __:__:__:__:__:__:__:Harmful _____
 Wrong: __:__:__:__:__:__:__:Right _____
 Positive: __:__:__:__:__:__:__:Negative _____
 Useless: __:__:__:__:__:__:__:Useful _____
 Valuable: __:__:__:__:__:__:__:Worthless _____

Have you taken the above course? Yes___ No___. If "No," do you
 intend to take the course? Yes___ No__ Undecided___

APPENDIX B

INDUCTIONS

CONTROL - HIGH-CREDIBILITY

As you probably know, the curriculum committee is attempting to develop a booklet of written evaluations of the courses within the college. An attempt is being made to examine various existing evaluations of particular courses from a wide variety of former students. Although the evaluations in the final booklet will be anonymous, we would like to determine how the students who are currently enrolled at Central react to the various former students who wrote the evaluations we have located. Following is a brief description of one of the many students who evaluated some of the courses. We would like to tell you about the particular student and have you rate him on some scales. Based on the information about the student, how would you rate him in terms of the descriptive attitude scales on the following page?

While at Central, this student was elected President of the Student Senate. He graduated with high academic honors and was a member of Phi Kappa Phi scholastic honor society. He is now attending graduate school at Columbia University.

Please turn the page and fill out the scales.

EXPERIMENTAL - HIGH-CREDIBILITY

As you probably know, the curriculum committee of the College of Arts and Sciences is attempting to develop a booklet of written evaluations of the courses within the college. An attempt is being made to examine various existing evaluations of particular courses from a wide variety of former students. On the following page of this booklet you will find one of these evaluations. As you read, please underline what you feel are the main ideas.

The particular evaluation you are being asked to read was written by a former CMU Student Senate President. He graduated with high academic honors and was a member of Phi Kappa Phi scholastic honor society. He is now attending graduate school at Columbia University. One of the courses he took as an undergraduate at Central was Speech 370-Persuasion. Upon completion of the course, the members of the class were asked to write an evaluation of the course.

Go to the next page, read the evaluation, underline the main ideas and proceed through the rest of the booklet. Please work as rapidly as possible. Do not be concerned if your neighbor's booklet is different from this one. The committee is attempting to obtain information on a number of different evaluations for different courses.

EXPERIMENTAL - LOW-CREDIBILITY

As you probably know, the curriculum committee of the College of Arts and Sciences is attempting to develop a booklet of written evaluations of the courses within the college. An attempt is being made to examine various existing evaluations of particular courses from a wide variety of former students. On the following page of this booklet you will find one of these evaluations. As you read, please underline what you feel are the main ideas.

Although the evaluations in the final booklet will be anonymous, you may be interested in knowing about the former student who prepared the evaluation you will read. While attending Central, he was on academic probation. He was later dismissed from the University because he was caught plagiarizing a research paper in an English course. One of the courses he took at CMU was Speech 370-Persuasion. At the end of the course, the members of the class were asked to write an evaluation of the course. He failed the course, but he did complete the assignment to evaluate the course. The evaluation he wrote is on the following page.

It should be stressed that the curriculum committee neither endorses nor opposes the views expressed in the evaluation. It is merely one of the many that have been located. The committee, in an attempt to remain objective has decided to examine all of the existing evaluations no matter who prepared them. Go to the next page, read the evaluation, underline the main ideas and proceed through the rest of the booklet. Please work as rapidly as possible. Do not be con-

cerned if your neighbor's booklet is different from this one. The committee is attempting to obtain information on a number of different evaluations for different courses.

APPENDIX C

POSTTEST MEASURING INSTRUMENTS

A. Perception of Adaptation:

Was the course description you have just read adapted to you?

Adapted: __:__:__:__:__:__:__:Unadapted

B. Attitude:

SPEECH 370-PERSUASION

Good: __:__:__:__:__:__:Bad

Foolish: __:__:__:__:__:Wise

Beneficial: __:__:__:__:__:Harmful

Wrong: __:__:__:__:__:Right

Positive: __:__:__:__:__:Negative

Useless: __:__:__:__:__:Useful

Valuable: __:__:__:__:__:Worthless

C. Intent to Behave:

Do you intend to take the above course? Yes__ No__ Undecided__

D. Anxiety:

I felt at ease while reading the message.

Strongly Agree: __:__:__:__:__:Strongly Disagree

I felt I was being threatened while reading the message.

Strongly Agree: __:__:__:__:__:Strongly Disagree

E. Source Credibility:

The person who wrote the particular evaluation you just read was:

Qualified: __:__:__:__:__:__:__:Unqualified
 Unfriendly: __:__:__:__:__:__:__:Friendly
 Emphatic: __:__:__:__:__:__:__:Hesitant
 Worthless: __:__:__:__:__:__:__:Valuable
 Nice: __:__:__:__:__:__:__:Awful
 Tired: __:__:__:__:__:__:__:Energetic
 Reliable: __:__:__:__:__:__:__:Unreliable
 Dishonest: __:__:__:__:__:__:__:Honest
 Frank: __:__:__:__:__:__:__:Reserved
 Uninformed: __:__:__:__:__:__:__:Informed
 Unselfish: __:__:__:__:__:__:__:Selfish
 Meek: __:__:__:__:__:__:__:Aggressive
 Intelligent: __:__:__:__:__:__:__:Unintelligent
 Unpleasant: __:__:__:__:__:__:__:Pleasant
 Bold: __:__:__:__:__:__:__:Timid
 Inexpert: __:__:__:__:__:__:__:Expert
 Virtuous: __:__:__:__:__:__:__:Sinful
 Passive: __:__:__:__:__:__:__:Active

APPENDIX D
EXPERIMENTAL MESSAGES
ADAPTED REWARD

Speech 370 consists of the study of and experience in the process of influencing human behavior through persuasive oral communication. Variables which affect the source, the message, the channel, and the receiver are examined from a theoretic framework. Emphasis is placed on the examination of message variables. Attention is given to the question of applicability in the real world, e.g., how can one apply the research findings about a variable such as "order effects in message construction" in daily communication situations.

Students experiment with different persuasive techniques in two oral performance assignments during the term. The communication situations are analyzed from two vantage points: (1) How can a source become aware of and interpret audience feedback? (2) How can a receiver recognize and resist certain types of "impressive" persuasion techniques?

This persuasion course is especially beneficial to students who have taken Speech 101 because it gives them an "in depth" understanding of the persuasion process. In an article entitled "What Happens to Central Michigan University Graduates?" evidence indicated that students who have been exposed to this type of study after having

taken the introductory speech course are more likely to be financially successful in their chosen profession than students who have taken the basic course but have not elected to enroll in the persuasion course. Also, the students who have studied persuasion after having been exposed to the basic course are less likely to fall prey to false persuasive appeals to which they are exposed via the mass media and interpersonal relationships. Thus, basic speech course students who have engaged in the subsequent detailed study of persuasion are more effective sources and more intelligent consumers of persuasion than are basic speech course students who have not taken the persuasion course.

UNADAPTED REWARD

Speech 370 consists of the study of and experience in the process of influencing human behavior through persuasive oral communication. Variables which affect the source, the message, the channel, and the receiver are examined from a theoretic framework. Emphasis is placed on the examination of message variables. Attention is given to the question of applicability in the real world, e.g., how can one apply the research findings about a variable such as "order effects in message construction" in daily communication situations.

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This persuasion course is beneficial because it gives people an "in depth" understanding of the persuasion process. Evidence indicates that people who have been exposed to this type of study are more likely to be financially successful in their chosen profession. Also, these same people are less likely to fall prey to false persuasive appeals to which they are exposed via the mass media and interpersonal relationships. Thus, they are more effective sources of persuasion and more intelligent consumers of persuasion.

ADAPTED PUNISHMENT

Speech 370 consists of the study of and experience in the process of influencing human behavior through persuasive oral communication. Variables which affect the source, the message, the channel, and the receiver are examined from a theoretic framework. Emphasis is placed on the examination of message variables. Attention is given to the question of applicability in the real world, e.g., how can one apply the research findings about a variable such as "order effects in message construction" in daily communication situations.

Students experiment with different persuasive techniques in two oral performance assignments during the term. The communication situations are analyzed from two vantage points: (1) How can a source become aware of and interpret audience feedback? (2) How can a receiver recognize and resist certain types of "impressive" persuasion techniques?

Failure to take this persuasion course is definitely harmful to students who have taken Speech 101 because without taking the persuasion course they fail to get an "in depth" understanding of the persuasion process. In an article entitled, "What Happens to Central Michigan University Graduates?" evidence indicated that students who have not been exposed to this type of study after having taken the introductory speech course are more likely to be financially unsuccessful in their chosen profession than students who have taken both the basic speech course and the persuasion course. Also, the students who have not studied persuasion after having been exposed to the basic course are more likely to fall prey to false persuasive appeals to which they are exposed via the mass media and interpersonal relationships. Thus, basic speech course students who have not engaged in the subsequent detailed study of persuasion are harmed because they are less effective sources of persuasion and less intelligent consumers of persuasion than are basic speech course students who have taken the persuasion course.

UNADAPTED PUNISHMENT

Speech 370 consists of the study of and experience in the process of influencing human behavior through persuasive oral communication. Variables which affect the source, the message, the channel, and the receiver are examined from a theoretic framework. Emphasis is placed on the examination of message variables. Attention is given to the question of applicability in the real world, e.g., how can one apply the research findings about a variable such

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Failure to take this persuasion course is definitely harmful to people because without taking the course they fail to get an "in depth" understanding of the persuasion process. Evidence indicates that people who have not been exposed to this type of study are more likely to be financially unsuccessful in their chosen profession. Also, these same people are more likely to fall prey to false persuasive appeals to which they are exposed via the mass media and interpersonal relationships. Thus, they will be harmed because they are less effective sources of persuasion and less intelligent consumers of persuasion.

APPENDIX E

2 x 2 x 2 ANALYSIS OF COVARIANCE WITH SUBJECTS ASSIGNED ON PERCEPTION

Table 10. Summary of Analysis of Variance for Adaptation Manipulation.

Source of Variation	Sums of Squares	d.f.	MS	F
(A) Credibility	30.8	1	30.8	12.54*
(B) Adaptation	1.8	1	1.8	.74
(C) Reward-Punishment	19.2	1	19.2	7.83*
AB	3.3	1	3.3	1.35
AC	2.4	1	2.4	.99
BC	.02	1	.02	.01
ABC	16.8	1	16.8	6.84*
Error	1285.7	524	2.45	
Total	1357.5	531		

*Significant at < .05 level.

Table 11. Summary of Analysis of Variance for Attitude Pretest.

Source of Variance	Sums of Squares	d.f.	MS	F
(A) Credibility	33.3	1	33.3	.67
(B) Adaptation	11.2	1	11.2	.22
(C) Reward-Punishment	150.0	1	150.0	3.00
AB	2.3	1	2.3	.05
AC	20.9	1	20.9	.42
BC	156.3	1	156.3	3.12
ABC	212.1	1	212.1	4.24*
Error	26209.2	524	50.0	
Total	26784.8	531		

*Significant at $< .05$ level.

Table 12. Summary of Analysis of Covariance for Attitude Posttest.

Source of Variation	Sums of Squares	d.f.	MS	F
Covariate (Attitude Pretest)	2224.2	1	2224.2	63.78*
(A) Credibility	175.1	1	175.1	5.02*
(B) Adaptation	2257.2	1	2257.2	64.73*
(C) Reward-Punishment	20.9	1	20.9	.60
AB	24.7	1	24.7	.71
AC	6.4	1	6.4	.18
BC	37.0	1	37.0	1.06
ABC	6.3	1	6.3	.18
Error	18238.2	523	34.9	
Total	24002.4	531		

*Significant at $< .05$ level.

Table 13. Summary of Analysis of Covariance for Terminal Rating of Authoritativeness.

Source of Variation	Sums of Squares	d.f.	Ms	F
Covariate (Attitude Pretest)	196.0	1	196.0	9.06*
(A) Credibility	1967.5	1	1967.5	90.88*
(B) Adaptation	829.9	1	829.9	38.33*
(C) Reward-Punishment	.7	1	.7	.03
AB	50.3	1	50.3	2.32
AC	60.4	1	60.4	2.79
BC	20.1	1	20.1	.93
ABC	.02	1	.02	.001
Error	11322.7	523	21.7	
Total	15211.9	531		

*Significant at $< .05$ level.

Table 14. Summary of Analysis of Covariance for Terminal Rating of Character.

Source of Variation	Sums of Squares	d.f.	Ms	F
Covariate (Attitude Pretest)	130.4	1	130.4	8.17*
(A) Credibility	319.5	1	319.5	20.03*
(B) Adaptation	392.4	1	392.4	24.60*
(C) Reward-Punishment	11.8	1	11.8	.74
AB	6.3	1	6.3	.40
AC	24.6	1	24.6	1.54
BC	.5	1	.5	.03
ABC	14.4	1	14.4	.90
Error	8342.3	523	16.0	
Total	9469.9	531		

*Significant at $< .05$ level.

Table 15. Summary of Analysis of Covariance for Terminal Rating of Dynamism.

Source of Variation	Sums of Squares	d.f.	MS	F
Covariate				
(Attitude Pretest)	192.3	1	192.3	9.73*
(A) Credibility	320.9	1	320.9	16.23*
(B) Adaptation	331.2	1	331.2	16.76*
(C) Reward-Punishment	271.0	1	271.0	13.70*
AB	29.4	1	29.4	1.5
AC	63.2	1	63.]	3.2
BC	.4	1	.4	.02
ABC	18.3	1	18.3	.93
Error	10338.0	523	19.8	
Total	11771.0	531		

*Significant at $< .05$ level.

Table 16. Summary of Analysis of Covariance for Posttest Anxiety Scores.

Source of Variation	Sums of Squares	d.f.	MS	F
Covariate				
(Attitude Pretest)	26.5	1	26.5	4.43*
(A) Credibility	7.5	1	7.5	1.25
(B) Adaptation	160.2	1	160.2	26.74*
(C) Reward-Punishment	124.6	1	124.6	20.79*
AB	1.4	1	1.4	.24
AC	5.3	1	5.3	.89
BC	1.7	1	1.7	.28
ABC	2.1	1	2.1	.34
Error	3133.5	523	5.99	
Total	3514.1	531		

*Significant at $< .05$ level.

Table 17. Summary of Dependent Variable Means and Manipulation Check Means by Experimental Condition.

	High Adapted Reward	High Unadapted Reward	High Adapted Punishment	High Unadapted Punishment	Low Adapted Reward	Low Unadapted Reward	Low Adapted Punishment	Low Unadapted Punishment
Posttest Credibility Authorita- tiveness	38.8	35.2	38.9	34.7	38.0	34.1	38.2	32.6
Character	29.0	27.3	28.6	26.3	27.1	25.1	26.8	25.7
Dynamism	31.2	28.6	31.5	29.8	28.0	27.2	30.5	29.0
Anxiety	5.9	6.7	6.9	8.2	5.6	6.9	6.5	7.7

APPENDIX F
FACTOR ANALYSIS

Table 18. Factor Loadings of Source Credibility Scales.

Scales	Dimensions and Factor Loadings		
	Authoritativeness	Character	Dynamism
Qualified-Unqualified	-.78		
Friendly-Unfriendly		.73	
Emphatic-Hesitant			.65
Nice-Awful		.81	
Reliable-Unreliable	-.68		
Honest-Dishonest	-.64		
Informed-Uninformed	-.69		
Aggressive-Meek			.75
Intelligent-Untelligent	-.66		
Pleasant-Unpleasant		.63	
Bold-Timid			.81
Expert-Inexpert	-.65		
Virtuous-Sinful		.61	
Active-Passive			.66

APPENDIX G

ARCSIN TRANSFORMATION OF INTENT TO BEHAVE DATA

Table 19. Sums of Squares of Factorial Effects From Arcsin Transformation of Intent to Behave Data.

Effect	Sum of Squares	d.f.	χ^2	
A	.33	1	.33	n.s.d.
B	1.36	1	1.36	n.s.d.
AB	.13	1	.13	n.s.d.
C	.01	1	.01	n.s.d.
AC	.01	1	.01	n.s.d.
BC	.04	1	.04	n.s.d.
ABC	.08	1	.08	n.s.d.

APPENDIX H

2 x 2 x 2 ANALYSES OF COVARIANCE FOR Ss WHO PERCEIVED THE ADAPTATION MANIPULATION AS INTENDED

Table 20. Summary of Analysis of Covariance for Attitude Posttest
for Ss Who Perceived Adaptation Manipulation As Intended.

Source of Variation	Sums of Squares	d.f.	MS	F
Covariate (Attitude Pretest)	1586.8	1	1586.8	48.96*
(A) Credibility	72.5	1	72.5	2.24
(B) Adaptation	1235.6	1	1235.6	38.12*
(C) Reward-Punishment	24.6	1	24.6	.76
AB	87.4	1	87.4	2.70
AC	24.7	1	24.7	.76
BC	3.2	1	3.2	.10
ABC	26.0	1	26.0	.80
Error	8751.1	270	32.4	
Total	12555.3	278		

*Significant at < .05 level.

Table 21. Summary of Analysis of Covariance for Terminal Rating of Authoritativeness for Ss Who Perceived Adaptation Manipulation As Intended.

Source of Variation	Sums of Squares	d.f.	MS	F
Covariate (Attitude Pretest)	62.8	1	62.8	3.34
(A) Credibility	1454.3	1	1454.3	77.39*
(B) Adaptation	182.09	1	182.09	9.73*
(C) Reward-Punishment	.1	1	.1	.01
AB	30.1	1	30.1	1.60
AC	14.4	1	14.4	.76
BC	40.3	1	40.3	2.14
ABC	138.5	1	138.5	7.37*
Error	5074.2	270	18.8	
Total	7413.07	278		

*Significant at < .05 level.

Table 22. Summary of Analysis of Covariance for Terminal Rating of Character for Ss Who Perceived Adaptation Manipulation As Intended.

Source of Variation	Sums of Squares	d.f.	MS	F
Covariate (Attitude Pretest)	63.6	1	63.6	4.45*
(A) Credibility	252.1	1	252.1	17.64*
(B) Adaptation	168.4	1	168.4	11.79*
(C) Reward-Punishment	39.20	1	39.20	2.74
AB	14.4	1	14.4	1.01
AC	42.6	1	42.6	2.98
BC	8.5	1	8.5	.60
ABC	13.4	1	13.4	.94
Error	3858.2	270	14.3	
Total	4622.4	278		

*Significant at < .05 level.

Table 23. Summary of Analysis of Covariance for Terminal Rating of Dynamism for Ss Who Perceived Adaptation Manipulation As Intended.

Source of Variation	Sums of Squares	d.f.	MS	F
Covariate (Attitude Pretest)	128.3	1	128.3	7.04*
(A) Credibility	241.6	1	241.6	13.27*
(B) Adaptation	219.3	1	219.3	12.04*
(C) Reward-Punishment	80.6	1	80.6	4.43*
AB	6.5	1	6.5	.36
AC	35.4	1	35.4	1.94
BC	1.5	1	1.5	.08
ABC	83.5	1	83.5	
Error	4916.3	270	18.2	4.59*
Total	5859.1	278		

*Significant at < .05 level.

Table 24. Summary of Analysis of Covariance for Posttest Anxiety Scores for Ss Who Perceived Adaptation Manipulation As Intended.

Source of Variation	Sums of Squares	d.f.	MS	F
Covariate (Attitude Pretest)	41.7	1	41.7	7.83*
(A) Credibility	8.2	1	8.2	1.54
(B) Adaptation	37.3	1	37.3	7.01*
(C) Reward-Punishment	58.3	1	58.3	10.93*
AB	3.1	1	3.1	.57
AC	.2	1	.2	.04
BC	9.7	1	9.7	1.82
ABC	2.5	1	2.5	.46
Error	1439.2	270	5.33	
Total	1616.2	278		

*Significant at $< .05$ level.

Table 25. Summary of Dependent Variable Means and Manipulation Check Means by Experimental Condition for Ss Who Perceived Adaptation Manipulation As Intended.

	High		High		High		Low		Low	
	Adapted Reward	Unadapted Reward	Adapted Punishment	Unadapted Punishment	Adapted Reward	Unadapted Punishment	Adapted Reward	Unadapted Punishment	Adapted Punishment	Unadapted Punishment
Posttest	39.5	35.4	38.7	36.3	39.6	34.5	38.8	32.8		
Credibility Authorita- tiveness	33.8	30.5	31.1	32.4	27.8	26.1	29.0	26.0		
Character	30.3	27.4	27.9	26.6	26.6	25.6	26.7	25.5		
Dynamism	32.3	28.9	31.4	30.6	28.2	27.7	31.1	28.6		
Anxiety	5.8	6.9	7.4	7.3	5.5	6.6	6.5	7.3		

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