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The Effects of Ego-Involvement and Fear Appeals upon Task Performance

Stephen Steinmetz

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THE EFFECTS OF EGO-INVOLVEMENT AND FEAR APPEALS

UPON TASK PERFORMANCE

(TITLE)

BY

STEPHEN STEINMETZ

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

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YEAR

I HEREBY RECOMMEND THIS THESIS BE ACCEPTED AS FULFILLING
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TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION.....	1
The Problem.....	1
Review of Selected Literature.....	5
Fear Appeal Research.....	5
Summary.....	45
Ego-Involvement Research.....	52
Summary.....	58
Summary of Literature.....	60
Object of the Study.....	61
Hypotheses.....	61
Definition of Terms.....	62
Assumptions.....	64
Summary.....	65
II. METHOD.....	66
Preliminaries.....	66
Selection of Subjects.....	66
Tests.....	66
Size of the Groups.....	67
Timing and Regulation of the Experiment.....	67
The Experiment.....	67
Design of the Experiment.....	67
Schedule.....	71

CHAPTER	PAGE
Collection of Data.....	73
Treatment of the Data.....	73
Refinement.....	73
Statistical Treatment of the Data.....	74
Summary.....	75
III. RESULTS.....	76
Summary.....	81
IV. CONCLUSION.....	82
Summary.....	82
Theoretical and Practical Implications.....	84
Suggestions for Further Study.....	88
V. APPENDICES.....	90
A. Classroom Assignments for American Speech Association.....	91
B. Instructors Remarks to Subjects.....	92
C. Speech Profile Test "A".....	93
D. Speech Profile Test "B".....	101
E. Introduction by Speech Department Chairman.....	110
F. Experimenters Instructions to Subjects.....	111
G. Instructions for Section 1-FA.....	112
H. Instructions for Section 1-FI.....	113
I. Instructions for Section 1-EF.....	114
J. Instructions for Section 1-OG.....	115
K. Posttest Data.....	116
L. Posttest Test Battery.....	118
VI. BIBLIOGRAPHY.....	131
VII. ABSTRACT.....	135

LIST OF TABLES

TABLE		PAGE
I.	Synopsis of Experimental Studies Dealing With the Effects of Fear Appeals.....	43
II.	Synopsis of Experimental Studies Dealing With the Effects of Ego-Involvement.....	39
III.	Schedule for the Experiment.....	72
IV.	Control Group Data.....	36
V.	Fear Appeal and No Ego-Involvement Group Data.....	77
VI.	Ego-Involvement and No Fear Appeal Group Data.....	77
VII.	Fear Appeal and Ego-Involvement Group Data.....	78
VIII.	Analysis of Variance Between Groups.....	78
IX.	Analysis of Variance Between Ego Latitude and Ego Positional Choice on the Topic of "Good Grade in Speech Class".....	79
X.	Analysis of Variance Between Ego Latitude and Ego Positional Choice on the Topic of "College Education".....	80
XI.	Analysis of Variance Between Ego Latitude and Ego Positional Choice on the Topic of "High Grade Average".....	80

CHAPTER I

INTRODUCTION

The Problem

One emotional appeal frequently employed by speakers is the so-called "fear-arousing" appeal, or the appeal calculated to elicit anxiety on the part of the listeners. Since the question of the effectiveness of fear-arousing appeals in producing the desired audience response is an empirical one, it is not surprising that researchers in psychology and communication have devoted attention to it.¹

Fear-arousal research has developed within two categories of independent variables: (1) message variables aimed at manipulating the intensity of the fear appeal, and (2) personality variables associated with the audience members' responses to fear appeals. The goal of this past research has been to attempt to discover what factor, be it message variable or audience variable, that makes fear-arousing communications effective. Janis and Paschke (1953 and 1954), Holtz and Thistlewaite (1955), Goldstein (1959), Berkowitz and Cottingham (1960) and Janis and Terwilliger (1962), only to mention a few, have dealt with the relative effectiveness of manipulating fear appeals of varying magnitudes. Hewgill and Miller (1965), Powell (1965), and Powell and Miller (1967), along with other researchers have, dealt not only with the various magnitudes of fear

¹ Gerald R. Miller, "Studies on the Use of Fear Appeals: A Summary and Analysis," Central States Speech Journal, XIV (May 1963), 117.

appeal, but also with certain audience variables, the conflicting results of this research have failed to yield the factor or factors which make fear-arousing communications effective.

Relatively little research has been conducted to determine what audience factors, regardless of the fear appeal magnitude, might make fear appeals effective. Such an investigation is suggested by the findings of Hewgill and Miller (1965) and Powell (1965).

Hewgill and Miller were the first to indirectly suggest that fear appeals were effective on those listeners who heard a highly credible source use a fear appeal to threaten or elicit strong feelings of fear for persons the listener valued highly.

This study provides support for the hypothesis that appeals which are by a highly credible source and which elicit strong feelings of fear for persons whom the listener highly values produce greater attitude change than appeals which elicit mild fear. The primary support for this hypothesis came from the data for the concept "Community Fallout Shelters." Although data for the concept "Family Fallout Shelters" formed a less consistent pattern, the findings again tentatively support the hypothesis. The fact that no other groups differed significantly from the control gives still further support to the position that joining of high credibility and strong fear appeals is effective when it is a member of the family who is threatened.

Caution is advisable in interpreting these findings. The topic of protection against fallout so readily arouses anxiety that even the messages containing the minimal fear appeals produced reported anxieties for family that were high (Low Fear-High Credibility= 5.00; Low Fear-Low Credibility= 5.33).

The conclusions of Hewgill and Miller suggest that the fear appeals

²Murray A. Hewgill and Gerald R. Miller, "Source Credibility and Response to Fear-Arousing Communications," Speech Monographs, XXII (June 1965), 100-101.

they utilized were effective, regardless of their magnitude, in producing anxieties on the part of their audience. Hewgill and Miller's results indicated that this was because the audience members were afraid for persons who they valued highly.³

Following up the Hewgill and Miller study, Powell, by testing the relative effectiveness of appeals posing threats to listener, family, and nation, found that:

(1) The effectiveness of the messages directed at the listener and his family along with the ineffectiveness of those posing a threat to the nation suggests that anxiety appeals will change attitudes significantly only if explicitly directed at the listener or at those with whom he is personally and closely involved. Thus, the study provides quantitative evidence supporting a rhetorical principle previously based only upon unsystematic observation. (2) The present results also suggest that it may make little difference whether the anxiety appeals are directed at the listener or at his family. Seemingly it is not so much the "target" of the threats per se that affects results as it is a more generalized sense of personal involvement. Falling under this overriding principle of involvement are the two subtargets of self and loved ones, and whether the nonsignificant difference in effectiveness between these two indicates the operation of two equally potent separate causes or one that was generalized cannot be determined.⁴

It is the concern of the present investigation to attempt to discover what factor or factors make fear appeals effective. This investigation is designed to continue the research of Hewgill and Miller and of Powell by investigating the apparent relationship between the effectiveness of fear appeals and the personal involvement of the listener. The personal

3

Hewgill and Miller, p. 101.

⁴Fredric A. Powell, "The Effect of Anxiety-Arousing Messages When Related to Personal, Familial, and Impersonal Referents," Speech Monographs, XXXII (1963), 106.

involvement of the listener mentioned by Powell and suggested by Hewgill and Miller would appear to be a key factor in the determination of fear appeal effectiveness. From the works of Sherif, Sherif, and Nebergall (1965), Sereno (1968), and Sereno and Mortensen (1969) it appears plausible that the personal involvement factor indicated by Hewgill and Miller and later by Powell is ego-involvement. The relationship between personal involvement and ego-involvement is clarified by Sereno:

Ego-involvement refers to the relevance, significance, or meaningfulness of the issue or topic to the individual. It reveals itself through a person's commitments or stands on the issue. The more involved an individual is in his stand, the more it becomes the crucial variable determining response to all elements of a persuasive communication.

Thus, the theoretical construct of ego-involvement is a fundamental determinant of an individual's susceptibility to attitude change. In addition, consideration of this construct may clarify some of the apparent confusion about susceptibility to change resulting from conflicting findings and theories that failed to take this variable into account.⁵

If ego-involvement is the personal involvement factor indicated by Powell and the study of Hewgill and Miller, then it would appear to be the key to fear appeal effectiveness. The present study is designed to investigate the possible relationship between ego-involvement and fear appeal effectiveness.

⁵ Kenneth K. Sereno, "Ego-involvement: A Neglected Variable in Speech-Communication Research," Quarterly Journal of Speech, LV (February 1969), 70-71.

REVIEW OF SELECTED LITERATURE

For the purpose of the investigation the review dealt with the major research studies concerning fear appeal. It also considered the research that had been completed in the area of ego-involvement. The review revealed that scholars in the fear appeal area have been unable to isolate any single factor or group of factors which consistently cause fear appeals to be effective. Generally speaking, the results of fear appeal research have been both inconclusive and conflicting. However, the key to fear appeal effectiveness appears to lie in the area of audience variables and not, as was initially thought, in the area of message variables. This conclusion is indicated by the findings of Hewgill and Millar (1965) and of Powell (1965).

In addition, the review of the literature focused on the studies which had been conducted on ego-involvement. The review revealed that very little research has been completed on ego-involvement outside of the area of attitude change. The small amount of research that had been done indicated that the area of ego-involvement is a promising, although previously neglected area of speech-communication research.

Fear Appeal Research

The first, and now classic, study of fear appeals was made by Janis and Feshbach in 1953. They suggested that under certain conditions strong fear appeals may elicit defensive avoidance reactions which interfere with the objectives of the communicator.⁶

⁶Miller, p. 117.

An illustrated lecture on dental hygiene was prepared in three different forms, representing three different intensities of fear appeal: the Strong appeal emphasized and graphically illustrated the threat of pain, disease, and body damage; the Moderate appeal described the same dangers in a milder and more factual manner; the Minimal appeal rarely referred to the unpleasant consequences of improper dental hygiene. Although differing in the amount of fear-arousing material presented, the three forms of the communication contained the same essential information and the same set of recommendations.⁷

Equivalent groups of high school students were exposed to the three different forms of the communication as part of the school's hygiene program. In addition, the experiment included an equated control group which was not exposed to the dental hygiene communication but was given a similar communication on an irrelevant topic. Altogether there were 200 subjects used in the experiment, with 50 subjects in each of four groups respectively. A questionnaire, containing a series of items on dental hygiene beliefs, practices, and attitudes, was administered to all four groups one week before the communications were presented. In order to observe the changes produced by the illustrated talk, postcommunication questionnaires were given immediately after exposure and again one week later.⁸

Janis and Feshbach concluded that:

⁷Irving L. Janis and Seymour Feshbach, "Effects of Fear-Arousing Communications," Journal of Abnormal and Social Psychology, XLVIII (January 1953), 91.

⁸Ibid.

1. The fear appeals were successful in arousing affective reactions. Immediately after the communication, the group exposed to the Strong appeal reported feeling more worried about the condition of their teeth than did the other groups. The Moderate appeal, in turn, evoked a higher incidence of "worry" reactions than did the Minimal appeal.

2. The three forms of the illustrated talk were equally effective with respect to (a) teaching the factual content of the communication, as assessed by an information test, and (b) modifying beliefs concerning four specific characteristics of the "proper" type of toothbrush. The evidence indicates that the emotional reactions aroused by the Strong appeal did not produce inattentiveness or reduce learning efficiency.

3. As compared with the other two forms of the communication, the Strong appeal evoked a more mixed or ambivalent attitude toward the communication. The students exposed to the Strong appeal were more likely than the others to give favorable appraisals concerning the interest value and the quality of the presentation. Nevertheless, they showed the greatest amount of subjective dislike of the communication and made more complaints about the content.

4. From an analysis of the changes in each individual's reports about his current toothbrushing practices, it was found that the greatest amount of conformity to the communicator's recommendations was produced by the Minimal appeal. The Strong appeal failed to produce any significant change in dental hygiene practices, whereas the Minimal appeal resulted in a reliable increase in conformity, as compared with the Control group. Similar findings also emerged from an analysis of responses which indicated whether the students had gone to a dentist during the week following exposure to the illustrated talk, reflecting conformity to another recommendation made by the communicator. The evidence strongly suggests that as the amount of fear-arousing material is increased, conformity to recommended (protective) actions tends to decrease.

5. One week after the illustrated talk had been presented, exposure to counterpropaganda (which contradicted the main theme of the original communication) produced a greater effect on attitudes in the Control group than in the three experimental groups. The minimal appeal, however, proved to be the most effective form of the illustrated talk with respect to producing resistance to the counterpropaganda. The results tend to support the conclusion that under conditions where people are exposed to competing communications dealing with the same issues, the use of a strong appeal is less successful than a minimal appeal in producing stable and persistent attitude change.

6. The main conclusion which emerges from the entire set of findings is that the overall effectiveness of a persuasive communication will tend to be reduced by the use of a strong fear appeal, if it evokes a high degree of emotional tension without adequately satisfying the need for reassurance. The evidence from the present experiment appears to be consistent with the following two explanatory hypotheses:

a. When a mass communication is designed to influence an audience to adopt specific ways and means of averting a threat, the use of a strong fear appeal, as against a milder one, increases the likelihood that the audience will be left in a state of emotional tension which is not fully relieved by rehearsing the reassuring recommendations contained in the communication.

b. When fear is strongly aroused but is not fully relieved by the reassurances contained in a mass communication, the audience will become motivated to ignore or to minimize the importance of the threat.⁹

Janis and Feshbach (1954), in a modified replication of their earlier study, utilized audiences consisting of individuals rated as high or low in anxiety on the basis of an Anxiety Symptoms Inventory. This study was an attempt to investigate the possibility that individual differences among the audience members might act to produce differing responses to messages containing strong fear appeals. They concluded that:

The high anxiety audience members professed significantly less conformity to the recommendations contained in the strong fear appeal lecture than did low anxiety audience members; however, under the condition of minimal fear, the high anxiety group demonstrated significantly greater conformity to the recommendations than did the low anxiety group. Differences in resistance to counterpropaganda were not significant. As a result of the study, Janis and Feshbach conclude that mild threat¹⁰ conditions are especially effective for individuals of high anxiety.

Also in 1954, De Wolf and Governale investigated the use of fear appeals and attitude change on a group of student nurses. The study was conducted during the student nurses' six week assignment to the tuberculosis ward of a large metropolitan hospital. The fear appeal was the threat of contracting tuberculosis during the six week period in the tuberculosis ward.

⁹ Janis and Feshbach, pp. 91-92.

¹⁰ Miller, p. 118.

Before the nurses received their assignments, they were given a Nurse-Patient Relationship Sort test to measure their attitude toward the importance of nursing functions involving interaction with tuberculosis patients. At this time they also completed a Fear of Tuberculosis Questionnaire and a Trait Anxiety Scale. The experimental group consisted of 45 student nurses, who made up three successive tuberculosis affiliation groups. The control group was made up of 50 nurses who were from the same schools as the nurses in the experimental group, but were to have no affiliation with tuberculosis patients. Both the experimental group and the control group were given the Nurse-Patient Relationship Sort test, the Fear of Tuberculosis Questionnaire, and the Trait Anxiety Scale not only on their first day at the hospital, but also after three weeks (or half way through the training period) and at the end of the training period. During the six week period the experimental group was presented with threat-averting information by the hospital staff, who were instructing them.¹¹

The results of this study indicated that the experimental group showed highly significant changes in attitude and fear of tuberculosis scores. Attitude toward the nurse-patient relationship changed favorably, and the fear of contracting tuberculosis decreased in the experimental group. The control group experienced very little change in these areas. The results of this study tend to agree with the conclusions of the 1954 Jania and Reshbach study.¹²

¹¹Alan S. De Wolf and Cathern N. Governale, "Fear and Attitude Change," Journal of Abnormal and Social Psychology, LXIX (July 1954), 119-123.

¹²Ibid.

Moltz and Thistlethwaite (1955) tested the hypothesis that greater anxiety reduction would be associated with significantly better learning and significantly more conformity to recommendations contained in a communication.¹³ This hypothesis was developed after an examination of the 1953 Janis and Feshbach conclusions; one of which stated ". . . overall effectiveness of a persuasive communication will tend to be reduced by the use of a strong fear appeal, if it evokes a high degree of emotional tension without adequately satisfying the need for reassurance."¹⁴

The subjects were 506 newly inducted recruits in basic training at Sampson Air Force Base. The subjects were divided into three groups. The subjects in group 1 (strong anxiety-arousal group) received an illustrated lecture which emphasized the painful consequences of decayed teeth and diseased gums and the secondary diseases that might result from them. Group 2 (weak anxiety-arousal group) received a communication that contained much of the same factual material, but no reference was made to the more serious consequences of tooth decay. In addition, the communication used much less incitive language as well as milder illustrations. The illustrations referred to were slides Janis and Feshbach used in their 1953 study.¹⁵

¹³ Howard Moltz and Donald L. Thistlethwaite, "Attitude Modification and Anxiety Reduction," Journal of Abnormal and Social Psychology, L (March 1955), 231.

¹⁴ Janis and Feshbach, p. 92.

¹⁵ Moltz and Thistlethwaite, p. 231.

A content analysis of the two communications revealed that the strong anxiety-arousal message contained almost four times as many threat references as the weak anxiety-arousal message. The subjects in group 3 (no anxiety-arousal group) were given an irrelevant communication (on the structure and function of the human eye) which contained no mention of tooth decay. The no anxiety-arousal message was also supplemented by slides which illustrated various points made by the speaker.¹⁶

One week prior to the communication all subjects completed a 50-item questionnaire (pretest) ostensibly concerned with general health and hygiene questions. Included with these questions were three groups of key items: (a) fourteen items were intended to obtain an indication of manifest anxiety concerning dental caries and diseases of the mouth and gums (two of these items were identical to those used in a previous experiment by Janie and Vealbach; (b) twelve information items concerned only with the dental hygiene methods later recommended in the assurance and no-assurance communications; and finally, (c) four items were concerned with the individuals current toothbrushing practices.¹⁷

Immediately after the communication each experimental group completed a second questionnaire (posttest) which contained, among other things, the same key anxiety and information items included in the pretest.¹⁸

¹⁶ Molts and Thistlethwaite, p. 231.

¹⁷ Ibid., p. 232.

¹⁸ Ibid.

One week later (delayed posttest), a third questionnaire of 70 items was administered, which included the same four questions concerning the subjects' current toothbrushing practices as had been completed on the posttest.¹⁹

Moltz and Thistlethwaite concluded from their experiment that:

1. The communication materials intended to be differentially fear arousing were not effective in producing differences in anxiety arousal.
2. Explicit assurance as to the efficacy of the recommended procedures was effective in producing anxiety reduction.
3. Greater anxiety reduction was not associated with greater learning nor was it associated with greater reported conformity to the recommendations. Thus neither prediction made on the basis of the present anxiety-reduction hypothesis was confirmed.
4. General methodological difficulties involved in the establishment of ordinal scales for the measurement of anxiety were discussed.²⁰

In 1959, Goldstein purports to have substantiated Janis and Feshbach's (1954) conclusion that mild threat conditions are especially effective for individuals of high anxiety.²¹ Goldstein's study was concerned with the response to fear-arousing propaganda of two classes of persons who characteristically use different means of dealing with tension-producing material. The two classes, "copers" and "avoiders," were selected on the basis of responses to a highly emotionalized form of the Sentence Completion Test (SCT). Avoiders were unable to recognize tension-producing stimuli and relate the stimuli to themselves, while copers demonstrated the capacity to

¹⁹ Moltz and Thistlethwaite, p. 232.

²⁰ Ibid., p. 236.

²¹ Miller, p. 118.

recognize such stimuli and relate them to themselves. Each subject was exposed to one of two propaganda lectures, a strong fear appeal or a minimal fear appeal. These lectures differed in the number of threat references and in the nature of the accompanying slides.²²

Goldstein concluded that:

The results support the hypothesis that a strong fear appeal receives greater acceptance among copers than among avoiders, while the minimal fear appeal receives greater acceptance among avoiders than among copers. The obtained pattern of acceptance is largely due to the marked differential effectiveness of the two appeals on the avoider group, and not as was originally predicted, to any differential acceptance by the copers.

Differences in the effectiveness of the two appeals could not be attributed to differential recall of the content of the lectures. The mediating mechanism for the difference in effectiveness thus remains unclear.

It is suggested that the concept of a "defensive reaction" to the arousal of strong emotional tensions, introduced by Janis and Feshbach, is limited in its explanatory power. The present study indicates that it may be valuable to discriminate between different types of "defensive reactions" in attempting to predict and explain the eventual acceptance or rejection of a propaganda appeal.²³

Berkowitz and Cottingham (1960), hypothesized from the experiment of Janis and Feshbach (1953), that opinion change in the direction advocated by a communication is less likely to occur when the communication arouses strong fear than when it arouses less fear. They reasoned that fear arousal would cause the subjects to defensively avoid accepting the communicator's conclusions. They conducted two experiments which were

²² Michael J. Goldstein, "The Relationship Between Coping and Avoiding Behavior and Response to Fear-Arousing Propaganda," Journal of Abnormal and Social Psychology, LIX (1959), 252.

²³ Ibid.

designed to show that a strong fear appeal could be more convincing than a weak one when (a) the communication is low in interest value and the dramatic nature of the "strong" communication makes it considerably more interesting than the "weak" communication, and (b) the communication is of low relevance to the actions of the audience.²⁴

The two experiments, employing college students who listened either under strong fear or weak fear conditions to a taped lecture advocating the use of automobile safety belts, agreed in confirming the hypothesis. There was little opinion change with the relatively uninteresting minimal fear lecture, while the degree of opinion change produced by the more interesting strong fear lecture was inversely related to the relevance of the material to the subjects. This indicated an additional conclusion:

But what is really needed to buttress the hypothesis that relevance increases the defensive-avoidance reaction to fear-arousing communications is evidence that anxiety (or discomfort) varies directly with relevance. Some of the data suggest that this is indeed the case.²⁵

In 1962 Snider investigated four separate hypotheses dealing with fear arousal and attitude change. Based on an extension of the findings of Janis and Feshbach, Snider hypothesized that:

1. Subjects in a high threat condition will show less acceptance of recommended attitudes than subjects in a low threat condition.
2. Subjects exposed to a high probability of occurrence regarding

²⁴ Leonard Berkovitz and Donald R. Cotttingham, "The Interest Value and Relevance of Fear-Arousing Communications," Journal of Abnormal and Social Psychology, LX (January 1960), 42.

²⁵ Ibid.

a given danger will show less acceptance of recommended attitudes than those exposed to a low level of probability of occurrence.

3. Subjects exposed to a high level of defense against a danger will show more acceptance of recommended attitudes than those subjects exposed to a low level of defense.

4. Threat is expected to have a greater influence in affecting the adoption of recommended attitudes than information regarding probability of occurrence which in turn is expected to have a greater effect than information on the adequacy of defense measures.²⁶

Approximately 1500 male and female subjects in a Boston middle-class suburban junior and senior high school were randomly assigned to one of eight experimental groups or a control group. Each person received a printed communication on the subject of smoking and lung cancer which contained one combination of either high or low threat, high or low occurrence, and one combination of either high or low defense. Level of worry was assessed two weeks before the communication, after threat and occurrence information and immediately after the end of the communication. Attitudes were assessed both before and after the communications.²⁷

Snider concluded that:

Worry was differentially aroused as a result of threat and occurrence information and differentially reduced as a result of defense information. In addition, occurrence and defense information was accepted by the subjects.

(Attitude change) The hypotheses were not confirmed. However high threat was found to be more effective in producing attitude change than low threat, a relationship opposite to the prediction. No other relationships were found with respect to occurrence, defense or any interactions between any of the three variables. In addition fear-arousal was found to be related to attitude change whereas resultant fear (fear which remains after the introduction of defense information) was not related to attitude change.²⁸

²⁶ Marvin Snider, "The Relationship Between Fear Arousal and Attitude Change," unpublished Ph.D. dissertation, Dept. of Psychology, Boston University in Dissertation Abstracts, (1962), 1802.

²⁷ Ibid.

²⁸ Ibid.

In 1962, Rosenblatt hypothesized that, relative to weaker threatening communications, stronger threatening communications become less effective the greater the amount of opinion or attitude change advocated. He used three topics: "water fluoridation," "U.N. membership for Red China," and "tuberculosis chest X-rays." On each topic a matrix of a message was constructed on which were locations for threatening statements and locations for opinion-advocating statements. Threat and opinion-advocated statements could hence be varied independently. For each topic there were three levels of threat (weak, moderate, and strong) and five levels of opinion advocated (ranging from strongly agree to strongly disagree with a reference proposition).²⁹

In a pretest-posttest control group design, each subject was given a dittoed questionnaire booklet containing pretest, treatment, and post-test on each of the three topics. The booklet was to be completed anonymously, in a single session. Data was analyzed from 454 Northwestern University undergraduates.³⁰

Rosenblatt concluded that: ". . . the results gave adequate support to the hypothesis that weaker threats became relatively more effective the greater the amount of attitude change advocated."³¹

Also in 1962, Janis and Terwilliger designed an experiment to test

²⁹ Paul Conrad Rosenblatt, "Persuasive Value of Threat and Amount of Attitude Change Advocated," unpublished Ph.D. dissertation, Dept. of Sociology, Northwestern University in Dissertation Abstracts, (1962), 4771.

³⁰ Ibid.

³¹ Ibid.

the implications of earlier studies by Janis and Feashbach (1953, 1954) bearing on resistance to attitude change induced by the use of fear-arousing appeals in persuasive communications. The pretest study was carried out with 31 adults, ages 18-55, representing a broad range of occupations. On a random basis, the subjects were assigned to two experimental groups, both of which were given an antismoking communication which recommended that everyone should avoid or reduce smoking. The communication also indicated that heavy smoking causes cancer. One group (N=17) were given a low threat version, consisting of 15 paragraphs devoted mainly to authentic quotations from medical authorities. The other group (N=14) was given a high threat version, consisting of the same 15 paragraphs supplemented by seven special "threat" paragraphs that gave vivid descriptions of the pain, suffering, and poor prognosis of cancer victims.³²

The communications were presented in a private session during which the subject was asked to express his thoughts and feelings after reading each paragraph. In order to eliminate cues that might give a distorted picture of the subjects' cognitive and emotional reactions, a special device (auditory feedback suppressor) was used which enabled the subject to give his spontaneous associations aloud without hearing the sound of his own voice. Tape recordings of each subject's verbalizations were analysed according to a systematic content analysis procedure. These results were supplemented by an analysis of changes in the subject's responses in intensive interviews conducted before the communication and again after--

³²Irving L. Janis and Robert F. Terwilliger, "An Experimental Study of Psychological Resistances to Fear Arousing Communications," Journal of Abnormal and Social Psychology, LXV (December 1962), 409.

wards.³³

The main conclusions from this study were as follows:

1. The strong threat version of the communication elicited more verbal expressions of emotional tension and more concern about the danger of cancer than the mild appeal, thus indicating that the intended experimental manipulations were successful.

2. In line with earlier experiments in which mild threat appeals were found to produce more attitude change than strong threat appeals, the mild threat version of the antismoking communication tended to be more effective than the strong threat version, as assessed by blind ratings of the attitudes expressed by the subjects in pre-and post-communication interviews.

3. During the period of exposure to the communication, there were more manifestations of resistance in the high threat group than in the low threat group.

The findings were interpreted as supporting the following general hypothesis: When a relatively high level of fear is induced by the warnings presented in a persuasive communication, the recipients will become motivated to develop psychological resistances to the communicator's arguments, conclusions, and recommendations. This hypothesis had been inferred from earlier experimental findings based solely on measures of communication questionnaire responses. The present study provides more direct measures which indicate that resistances tend to be mobilized by a strong threat appeal during the period of exposure to the communication.³⁴

In 1963, Radelfinger investigated the effects of fear arousing communications on preventive health behavior. The experiment was conducted separately with undergraduate students at San Jose State College (N=90) and Stanford University (N=104). Radelfinger hypothesized that compliance with the recommended action presented in a fear-arousing appeal would correlate positively with the strength of the approach when the action is perceived as being instrumental. High and moderate fear forms of a

³³Janis and Tarwilliger, p. 410.

³⁴Ibid.

communication describing tetanus and recommending preventive inoculations were recorded along with a control message on bacteriology. Subjects were assigned randomly to one of the three communication groups after being matched by sex, previous inoculation history, and a measure of anxiety toward illness. Affective response was measured with an adjective check list and two additional questions. The postcommunication reaction form also contained questions relating to the Behavioral Science Section model and one of intention to obtain an inoculation. Inoculations were available at both colleges, but only on Friday afternoons at San Jose State College.³⁵

Radelfinger found that at both schools the high fear message elicited significantly higher anxiety than the other recordings, and the moderate-fear more than the control. It was also discovered that "none of the messages was very effective in inducing compliance."³⁶ Therefore, the hypothesis was not supported.

Also in 1963, Kenneth D. Frandsen investigated the hypothesis that "...the effectiveness of different levels of threat appeal is a variant of the different media of transmission."³⁷ Six large lecture sections of Ohio University beginning speech students were used as subjects. Three graduate students served as communicators. Random samples from each of the

³⁵Samuel Frederick Radelfinger, "Some Effects of Fear-Arousing Communications on Preventive Health Behavior," unpublished Ph.D. dissertation, Dept. of Education, Stanford University in Dissertation Abstracts, (1963), 301.

³⁶Ibid.

³⁷Kenneth D. Frandsen, "Effects of Threat Appeals and Media of Transmission," Speech Monographs, XXX (June 1963), 101.

preorganized subgroups (the six lecture sections) were assigned to the treatment groups. Each of the eighteen treatment groups consisted of approximately sixty subjects.³⁸

Frandsen employed two messages advocating population control. The "moderate" threat appeal consisted of an elaboration on the demands which population growth would place on succeeding generations. This message contained vivid descriptions of the current consequences of population pressure, both quantitative and qualitative. The "minimal" threat speech, on the other hand, used less vivid description and dealt with the inability of science and technology to provide for increased numbers in the future. Both messages concluded by advocating a "policy" of control.³⁹

Both messages were presented by the second set of variables in the experiment: the media. The media which were used were television, audio tape recording, and a live communicator. Both messages on all three media were ten minutes in length. The data were obtained from a pretest and a posttest.⁴⁰

It was concluded that:

The primary hypothesis under consideration was not substantiated. None of the six possible combinations of media and threat level produced a significantly greater shift of opinion or a significantly greater amount of immediate recall than any other combination.

The data support the following additional conclusions which are true for the speakers, the media, the topic, and the audiences of the experiment: (1) All three media produced opinion shifts toward the communicator's position and amounts of recall that were significant.

³⁸Frandsen, p. 102.

³⁹Ibid.

⁴⁰Ibid.

(2) Both levels of threat produced shifts of opinion and amounts of immediate recall that were significant. (3) None of the three media and neither of the two messages produced a significantly greater amount of immediate recall or a significantly greater shift of opinion when compared with the direction of the communicator's position.

In 1964 Speisman, Lazarus, Davison and Nordkoff analyzed the experimental use of a film as a threatening stimulus. In an effort to identify sources of stress reaction, a threatening film depicting a primitive genital operation was analyzed experimentally by dividing it into three sections of different contents ("mutilation," "nudity," and "neutral"). Impact of the sections was compared on physiological and psychological measures of stress reactions. The threat value of the film depended not only on the genital operation scenes, but also upon other types of contents, such as nudity. In addition to differing in degree of disturbance produced, the film sections resulted in variations in the pattern of effects. Personality factors also determined reactions to the film threats.⁴²

Later in 1964, Lazarus and Alfert used this film in an investigation of the short-circuiting of threat by experimentally altering cognitive appraisal. The subjects were 69 male students at the University of California. Each subject was randomly placed in one of three experimental conditions. In the experimental session all subjects were informed that they would be shown a film and the physiological measurements of skin conductance and

⁴¹ Frandsen, pp. 103-104.

⁴² Joseph C. Speisman, Richard S. Lazarus, Les Davison, and Arnold M. Nordkoff, "Experimental Analysis of a Film used as a Threatening Stimulus," Journal of Consulting Psychology, XXVIII (1964), 23.

heart rate would be recorded simultaneously as they watched.⁴³

In one of the experimental conditions the silent subincision film was presented. Without special introduction or commentary, the subjects watched the silent film for 17 minutes. In the second experimental condition, the showing of the film was preceded by a two minute denial-and-reaction-formation introduction, and accompanied by a denial commentary. In the third experimental condition, the silent film was presented, preceded by the denial-and-reaction-formation statement. The entire statement was moved up so that the denial commentary and the denial-and-reaction-formation statements both preceded the showing of the film. The film was preceded by 10 minutes of this orientation, and no recording was played during the showing of the film.⁴⁴

In addition to the physiological variables, three kinds of behavioral data were obtained. The Nowlis Adjective Check list was administered to all subjects immediately after the showing of the film. Following the Nowlis check list, subjects were asked to rate their tension on two 5-point scales. Finally, the Minnesota Multiphasic Personality Inventory was administered.⁴⁵

It was concluded that:

The findings in this study give strong evidence of the capacity of an orienting denial-and-reaction-formation statement to short-circuit threat by altering the cognitive appraisal of the subjects of film events.

⁴³ Richard S. Lazarus and Elizabeth Alfert, "Short-Circuiting of Threat by Experimentally Altering Cognitive Appraisal," Journal of Abnormal and Social Psychology, LXIX (1964), 196-197.

⁴⁴ Ibid., p. 197.

⁴⁵ Ibid.

With respect to the assessment of beliefs of subjects in each condition about the film events, the fact that the denial-and-reaction-formation statements were ranked higher in the two denial conditions is strong evidence that beliefs were indeed influenced appropriately by the denial passages.⁴⁶

Moreover, the amount of stress reaction and the capacity of the narrative to reduce stress reactions depended upon personality. Subjects high in disposition to deny threat as measured by various MMPI scales did indeed deny affective disturbance more than low deniers, while showing greater autonomic evidence of stress reaction.⁴⁷

Singer, in 1965, attempted to explore the relationship between fear arousal and predispositional measures of dental concern and anxiety with attitude change and behavior. The subjects were 521 high school freshmen. Two levels of fear were manipulated by programs built around color slides and a taped lecture on the topic of oral hygiene. Order of presentation of fear material and recommendations for proper dental care were also varied. The control group was included to test the effects of presenting the recommendations only.⁴⁸

Attitudes were measured prior to the presentation of the communications, immediately after, and again after a time delay. Behavioral measurements (getting a free toothbrush) were also made immediately after the communications were presented and again after a time delay. Additional measurements were obtained on level of fear aroused, amount of factual information acquired from the communications, and the subjects' evaluation of the communications.⁴⁹

⁴⁶ Lazarus and Alfert, p. 203.

⁴⁷ Ibid., p. 195.

⁴⁸ Robert Paul Singer, "The Effects of Fear-Arousing Communications on Attitude Change and Behavior," unpublished Ph.D. dissertation, Dept. of Social Psychology, University of Connecticut in Dissertation Abstracts, (1965), 5574.

⁴⁹ Ibid.

The results of Singer's study are summarized as follows:

1. The two high fear communications elicited significantly more fear and dental concern than the low fear or the recommendations only communications.
 2. There were no significant differences in the amount of factual information acquired from the communications among the treatment groups.
 3. Subjects evaluated the high fear communication more favorably.
 4. The subjects in the three fear treatments perceived the recommendations as being significantly more effective in reducing cavities than the subjects in the recommendations only treatment when measured immediately after the communications were presented. However, no significant main effects were found two weeks later.
 5. The high fear communications facilitated significantly greater intentions to follow the recommendations than did the low fear or recommendations only communications.
 6. Pre-post comparison of attitude change scores indicated that the values in all cells increased in magnitude as a result of exposure to the communications.
 7. Although there were no significant main effects, the subjects in the fear treatments went for toothbrushes immediately after the communications were presented in proportionately greater numbers than the subjects in the recommendations only condition.
- No evidence was found which indicated that order or presentation of high fear material and recommendations significantly affected any of the dependent measures.⁵⁰

Bewgill and Miller, in 1965, investigated the hypotheses that:

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.⁵¹

The stimuli employed were four taped question-and-answer interviews dealing with fallout shelters. The messages emphasized the advantages of community fallout shelters and stressed the disadvantages of family shelters.

⁵⁰ Singer, p. 5574.

⁵¹ Bewgill and Miller, pp. 95-96.

Since both the level of threat and the degree of credibility were manipulated, four messages were utilized: (1) High Fear, High Credibility; (2) High Fear, Low Credibility; (3) Low Fear, High Credibility; and (4) Low Fear, Low Credibility. Two graduate students made the four recordings with as nearly the same deliveries as possible.⁵²

All four messages contained the same basic content, but the high-fear messages contained thirteen statements concerning physical injury or death to spouses and children. The interviews contained only mild threats and were approximately ten minutes long; the thirteen added statements in the high-fear interviews increased their length by approximately two minutes and fifteen seconds.⁵³

Credibility was manipulated through variations in the introductions given the interviews. The highly credible speaker was represented as a professor of nuclear research, recognized as a national authority on the biological effects of radioactivity. The speaker of low credibility was represented as a high school sophomore, whose information was based on a term paper prepared for a social studies class.⁵⁴

The 90 subjects were members of an elementary school PTA group in Flint, Michigan. All subjects had at least one child. Eighteen subjects were assigned to each of the four experimental groups and to a control group. Each of the four experimental groups heard one of the four versions

⁵²Hewgill and Miller, p. 96.

⁵³Ibid.

⁵⁴Ibid.

of the recorded interview. Immediately following the presentation, each subject responded to a series of attitude tests and to a one-item questionnaire. Those in the control group filled out the attitude measuring devices without exposure to any of the interviews.⁵⁵

Hewgill and Miller concluded that:

1. This study provided support for the hypothesis that appeals which are by a highly credible source and which elicit strong feelings of fear for persons whom the listener highly values produce greater attitude change than appeals which elicit mild fear. The primary support for this hypothesis came from the data for the concept of "Community Fallout Shelters." . . . The High Fear-High Credibility group expressed significantly more favorable attitudes toward community fallout shelters than did subjects in any of the other three experimental groups.

Although data for the concept "Family Fallout Shelters" formed a less consistent pattern, the findings again tentatively support the hypothesis. . . . The fact that no other groups differed significantly from the control gives still further support to the position that the joining of high credibility and strong fear appeals is effective when it is a member of the family who is threatened.

2. This study provides no support for the hypothesis that appeals by a low credibility source that evoke mild fear for persons whom the listener values highly produce greater attitude change than appeals that elicit strong fear.

3. The results regarding the hypothesized interaction between the level of fear appeal and the degree of credibility of the source were inconclusive.⁵⁶

Also in 1965, Fredric Powell investigated the following hypotheses:

1. A greater change in attitude will occur when the anxiety appeal is directed at members of the listener's family than when it is directed at the listener himself.

2. An anxiety appeal threatening the nation will produce a lesser change in attitude than one directed at the listener or his family.

3. A strong anxiety appeal directed at the listener will produce less change in attitude than will one that is mild.

⁵⁵ Hewgill and Miller, pp. 96-97.

⁵⁶ Ibid., pp. 99-100.

4. A strong anxiety appeal posing a threat to the listener's family will produce a greater change in attitude than will one that is mild.

5. A strong anxiety appeal presenting an impersonal threat to the listener⁵⁷ will produce a smaller change in attitude than will one that is mild.

Six tape recorded messages dealing with the need for a nationwide program of community fallout shelters were materials for the experiment. The three speeches of high anxiety contained fifteen statements or references to physical dangers that a failure to construct a nationwide system of community fallout shelters would produce, whereas the three of mild anxiety contained only five such references. The six forms were alike in that they all were credited to an official of Civil Defense, all presented the same arguments, and all concluded with a recommendation that the recipients actively support the program of community shelters.⁵⁸

The subjects were 91 male members of a fraternal organization in the metropolitan Boston area. All were married and had at least one child. The number in each of four experimental groups was fourteen each, in the other two experimental groups twelve each, and in the control group only eleven.⁵⁹

Prior to hearing the recorded message, subjects in the six experimental groups were informed that they were to hear a short tape recorded speech dealing with the community fallout program. Their task, so they were told, was to evaluate the message for its "public education" value. Each

⁵⁷ Powell, p. 102.

⁵⁸ Ibid., pp. 102-103.

⁵⁹ Ibid.

group then heard one of the six prepared messages, immediately following which each subject filled out the scales comprising the measuring instrument. Subjects in the control group filled out the scales without hearing any of the speeches.⁶⁰

The results of the experiment are as follows:

1. The hypothesis that a greater change in attitude will occur when the anxiety appeal is directed at members of the listener's family than when it is directed at the listener himself was not confirmed.
2. The hypothesis that an impersonal appeal will be less effective than one that is personal was sustained at the five per cent level.
3. The hypothesis that strong appeal directed at the listener will produce less change in attitude than a mild anxiety appeal was not confirmed.
4. The hypothesis that a strong anxiety appeal posing a threat to the listener's family will produce a greater change in attitude than one that is mild was confirmed.
5. The hypothesis that a strong anxiety appeal presenting an impersonal threat to the listener will produce a smaller change in attitude than will one that is mild was not sustained. Not only was the difference between the two types of appeal nonsignificant, but the mean for the high-level threat was greater than that for the mild threat.⁶¹

Geer investigated the effect of fear-arousal upon task performance and verbal behavior in 1966. All students used as subjects in the study were female undergraduates at the State University of New York. Eighty females were used in all. Forty were designated as "high fear" and 40 as "low fear" on the basis of their response to the item "speaking in front of a group" in the Fear Survey Schedule---II. The judges used in the second part of the study were 36 males and 24 females who were members of an evening

⁶⁰Powell, p. 103.

⁶¹Ibid., pp. 104-105.

section of Introductory Psychology.⁶²

Twenty high fear and 20 low fear subjects were met by an experimenter and told that they were to participate in a study of extemporaneous speech. The experimenter conducted the subjects to a room that contained a large one-way mirror, and the subject sat down facing the mirror. The instructions were played to the subject through a public address system. The instructions told the subject that Dr. Coer and four other persons were seated behind the one-way mirror observing the subject. However, what the subject did not know was that the instructions were prerecorded and that no one was behind the one-way mirror. The subjects were instructed to complete a coding task and then they would have to speak extemporaneously for five minutes about the task. Following the recorded message, the experimenter instructed the subject in the task to be performed. The subject was reminded that the extemporaneous speech would begin as soon as the page was completed. The experimenter sat behind the subject and recorded as many individual codings as were completed every 30 seconds, and the experimenter also recorded the total time each subject required.⁶³

When the subject finished the coding task, she was asked to stand in front of the one-way mirror and speak for five minutes on the task she had just completed. The experimenter started the tape recorder and told the subject to begin. The subject was stopped after one minute. Following the taping the subject was told that there was no one behind the mirror.⁶⁴

⁶²James H. Coer, "Effect of Fear Arousal Upon Task Performance and Verbal Behavior," *Journal of Abnormal Psychology*, LXXI (1966), 119.

⁶³*Ibid.*, pp. 119-120.

⁶⁴*Ibid.*, p. 120.

Control subjects were told that the experimenter was collecting normative data on the coding task. They were not told that they would have to speak nor were they told that there were any observers. When the control subjects finished with the coding task, they were asked to speak into a tape recorder giving their views concerning the task they had just completed.⁶⁵

The second phase of this study consisted on having naive judges rate the verbal productions of the subjects employed in the first part of this study. Judgements were made on a seven point rating scale of the estimated subject's reaction.⁶⁶

The results of Geer's study indicated that:

(1) . . . Experimental subjects took longer to complete the coding task than control subjects. . . There were no significant differences between high fear and low fear subjects within the experimental condition.

(2) There was no evidence that experimental subjects slowed more than the control subjects as the end of the task approached. Also, there was no evidence that high fear subjects differed from low fear subjects in the differential rate of coding as the end of the task approached.

(3) . . . Naive judges were unable to detect voice differences among the subjects on a tense-calm dimension.

(4) Judges rated the high fear subjects as less interested in the task than low fear subjects. High fear subjects under experimental conditions yielded verbal productions that were rated as more angry and more rejecting than other subjects. The data suggested that high fear subjects yielded more speech disruptions. High fear subjects spoke more slowly than low fear subjects. Further, it may be noted that these differences are consistent with a picture of increased tension and fear.⁶⁷

⁶⁵ Geer, p. 120.

⁶⁶ Ibid.

⁶⁷ Ibid., p. 121.

In 1966 Godwin C. Chu tested the following hypotheses:

1. The effectiveness of fear-arousing appeals in inducing the desired response will be a positive function of the intensity of the arousal. Intensity is defined as the product of the magnitude of potential loss and likelihood of potential loss.
2. The effectiveness of fear-arousing appeals in inducing the desired response will be a positive function of the efficacy of the recommended solution in averting the potential loss.
3. The effectiveness of fear-arousing appeals in inducing the desired response will be an inverse function of the time interval between the fear arousal and the occurrence of the potential loss.
4. The tendency of defensive reactions toward fear-arousing appeals will be an inverse function of the efficacy of the recommended solution in averting the potential loss.⁶⁸

The subjects were 1,204 fifth and sixth grade students in a northern Taiwan school. They composed 18 experimental and 2 control groups. The intact class was the unit of sampling. The fear appeal used was the danger of roundworms to health, presented to the subjects in standardized talks of different versions. Actual cases were cited, and a vivid description of the infestation process and realistic illustrations were given. A high infestation of 85% among the children on Taiwan was cited.⁶⁹

The moderate arousal intensity placed less emphasis on serious dangers. No actual cases were cited, and only a few illustrations were shown. There was a lower percentage of 65% of infestation cited.⁷⁰

⁶⁸ Godwin C. Chu, "Fear Arousal, Efficacy, and Imminency," Journal of Personality and Social Psychology, IV (1966), 518.

⁶⁹ Ibid.

⁷⁰ Ibid.

In the mild arousal intensity no mention of serious dangers was made. No actual cases were cited and there were no illustrations or descriptions of the infestation process. The lowest percentage, approximately 30-40%, of infestation was cited.⁷¹

Three levels of efficacy were used: high efficacy, where the drug was described as capable of curing 90% of the cases; medium efficacy, with a 60% curable rate; and low efficacy, with a curable rate described as "way below 30%."⁷²

Under imminent fear, it was emphasized that roundworms would weaken children's health to the point of making them particularly vulnerable to an oncoming brain inflammatory epidemic called encephalitis. This part of the communication was the same for all imminent-fear groups. Under remote fear, encephalitis was not mentioned.⁷³

In each session the experimenter and his assistant were introduced as persons from a nearby university by the class instructor. The experimenter gave a talk on roundworms and distributed a questionnaire, in which the children were asked to indicate their degree of worry about having worms and their willingness to take the drug. Different groups heard different data. The two control groups heard no talks. Two weeks later each experimental group was randomly divided into halves. One half without hearing any counterpropaganda, indicated again their willingness to take the drug. The other half were told that the drug might have uncomfortable side effects,

⁷¹Chu, p. 518.

⁷²Ibid., p. 519.

⁷³Ibid.

and therefore the school must get their parents consent. This constituted
 a mild counterpropaganda.⁷⁴

Chu was able conclude that:

The . . . analysis indicated that the effects of communications using fear appeals (was) a positive function of the intensity of arousal. . . Learning did not seem to influence the main effects of the communications. The advantage of strong arousal was more pronounced when the recommended solution was perceived as being highly efficacious. However, effects achieved under the condition of mild arousal, though initially lower, were found more resistant to counterpropaganda.

The effects of communications were also found to be a function of the efficacy of the recommended solution, particularly when the feared consequences were serious and when the danger was considered imminent. Communications suggesting solutions of high efficacy were found more resistant to counterpropaganda.

Imminency as manipulated did not appear to have influences the main effects of communications, except under conditions of mild arousal and high efficacy of the recommended solution where imminent fear was significantly more effective. However, effects achieved under remote fear were found to have greater resistance to counterpropaganda. With the exception of imminency effects, the above findings supported Proposition 1.

Proposition 2 also received support. It was found that the lower the perceived efficacy of the solution, the less worried the subjects said they were.⁷⁵

Dabbs and Leventhal (1966), in an attempt to explain the divergent effects of fear-arousal on attitude change, investigated the effects of varying the recommendations in a fear-arousing communication. In their study fear was manipulated by presenting differing discussions of the danger of tetanus. Under high and low levels of fear, inoculation was portrayed so that it would seem as being more or less effective in preventing

⁷⁴Chu, p. 519

⁷⁵Ibid., pp. 523-524.

tetanus and more or less painful to take. Subjects' intentions to take shots and their actual shot-taking behavior were used to measure compliance with the recommendations.⁷⁶

The subjects in the experiment were 182 Yale College seniors. Each subject received a communication which was intended to manipulate perceived effectiveness and painfulness of inoculation. Three levels of fear (including a no-fear control level), two levels of effectiveness, and two levels of pain were used.⁷⁷

The experimental sessions were conducted in a classroom. Subjects in each session were randomly assigned to conditions. Control (no-fear) conditions were run separately because of the brevity of the control communications. The communications were ten page pamphlets which discussed the danger of tetanus and the effectiveness and painfulness of inoculation.⁷⁸

Questionnaires containing medical items and personality premeasures were administered at the beginning of the session. Subjects then read the communication on tetanus and gave their reactions to it in a second questionnaire.⁷⁹

The low fear arousal material described the very low incidence of tetanus. High fear arousal material indicated that tetanus can be contracted

⁷⁶James M. Dabbs and Howard Laventhal, "Effects of Varying Recommendations in a Fear-Arousing Communication," Journal of Personality and Social Psychology, IV (1966), 526.

⁷⁷Ibid.

⁷⁸Ibid.

⁷⁹Ibid.

through seemingly trivial means and if contracted the chances of death are high. The effectiveness manipulation stressed either the imperfections or the unusual effectiveness of inoculation. Finally, to produce fear of the recommended behavior, it was pointed out that inoculation against tetanus has always been painful. Subjects were told that the new inoculation requires deep intramuscular injections of tetanus toxoid and alum precipitate, making the injection even more painful than before and the local reaction longer lasting.⁸⁰

Dabbs and Leventhal concluded that:

A positive relationship between fear arousal and persuasion was observed. Increases in the intensity of the fear manipulation were associated with increases in attitude change and behavior change, with high correlations between intentions to take shots and actual shot taking. The subjects' beliefs about the effectiveness of inoculation did not affect their compliance; they responded equally well to recommendations portrayed as low and high in effectiveness. The description of pain produced mixed feelings about the shots, but did not prevent subjects from taking them. Low-self-esteem subjects showed high compliance with the recommendations in both high and low fear conditions, while high-self-esteem subjects showed high compliance only in the high fear condition.⁸¹

Also in 1966, Kraus, El-Assal, and De Fleur examined the area of fear-threat appeals in mass communication. The situations investigated were the reactions of an adult sample to warnings through the mass media that incorrect or unprotected observation of the sun during an eclipse could cause severe eye damage. The newspapers, television, and radio cited cases of persons who had become completely blind after watching previous

⁸⁰Dabbs and Leventhal, p. 527.

⁸¹Ibid., pp. 529-530

eclipses, notably one that had occurred recently in Australia. People were warned either not to look at the sun at all during the eclipse or to follow specifically described procedures, such as looking through at least two thicknesses of exposed and developed black-and-white photographic film and viewing the sun as a projected image through a "pin hole camera." The mass media, although presenting somewhat factual discussions of the causes of the danger to the eyes and of the methods for avoiding it, included references to "complete blindness," "severe eye damage," and "burning the eyes out." The investigators judged these elements to be properly classed as strong fear appeals, and the interviews, as the results demonstrated, supported these subjective conclusions.⁸²

Immediately following the eclipse, trained interviewers completed 87 telephone interviews from a previously selected area probability sample. Of the respondents, 63 were females, and 24 were males. The interviewer talked to the heads of the household when available, and otherwise to an adult over 21 years of age.⁸³

The results of the experiment may be summarized as follows:

1. Almost two-thirds of the respondents stated they had read about the eclipse in the newspapers, but only fifteen per cent of them named the second ranking source---television.
2. In general the respondents perceived the threat to their eyesight as a real danger.

In summary, the warnings and the recommendations of the mass media concerning the eclipse seem to have been fairly successful in affecting

⁸² Sidney Kraus, Elaine El-Assas and Melvin L. De Fleur, "Fear-Threat Appeals in Mass Communication: An Apparent Contradiction," Speech Monographs, XXXIII (March 1966): 24.

⁸³ Ibid.

behavior. Although no control group existed, a cause-effect relation disseminated by the media and the behavior of a large part of the sample is a reasonable assumption.

The findings also indicate that the respondents' adoption or non-adoption of the recommendations was related to the extent to which they recalled the kinds of danger specified: in general, the greater the amount of recall, the greater the tendency to act upon the advice.⁸⁴

Powell and Miller (1967) investigated seven separate hypotheses in their study of social approval and disapproval cues in anxiety-arousing communications. They were:

(1a) A message containing cues denoting social approval or disapproval will affect greater attitude change than will a neutral message.

(1b) A message containing cues denoting social disapproval will effect greater audience attitude change than will a message containing cues denoting social approval.

(2a) When attributed to a high-credible source, a message containing cues denoting social disapproval will effect greater attitude change than will a message containing cues denoting social approval.

(2b) When attributed to a low-credibility source, there will be no significant difference in attitude change resulting from a message containing cues denoting social disapproval and a message containing cues denoting social approval.

(2c) When unattributed (i.e., neither a high-credible nor a low-credible source associated with the message), a message containing cues denoting disapproval will effect more attitude change than will a message containing cues denoting social approval.

(3a) A message attributed to a high-credible source will effect greater attitude change than will an unattributed source.

(3b) An unattributed message will effect greater attitude change than will a message attributed to a low-credible source.⁸⁵

The basic experimental message was a tape recorded "radio interview" dealing with the relative merits of donating one's blood to the Red Cross without pay and selling one's blood to a private blood collecting or

⁸⁴Kraus, El-Assal, and De Fleur, pp. 24-26.

⁸⁵Fredric A. Powell and Gerald R. Miller, "Social Approval and Disapproval Cues in Anxiety-Arousing Communications," *Speech Monographs*, XXXIV (June 1967), 152-153.

banking agency. The intent of the "interview" was to argue for the former action and against the latter alternative. Thus, the message should increase the favorableness of the recipients' attitudes toward donating blood to the Red Cross while simultaneously decreasing their favorableness toward selling their blood for profit.⁸⁶

Three variations of the basic communication were prepared. In the social disapproval variation repeated references were made to the fact that donating blood to the Red Cross was an action looked upon with great public approval, and that "public opinion" generally favored wholehearted, individualistic support of the Red Cross and its many programs. In the social disapproval version it was emphasized that selling one's blood for profit was viewed with great disfavor by the majority of people, that one was really being selfish and mercenary, and that "public opinion" generally was antagonistic toward persons who did not wholeheartedly support the Red Cross. In the neutral version of the message all such cues of social approval or disapproval were omitted, these references being replaced with content describing the disposition and use of blood donated to the Red Cross. Each of the three message variations was approximately 13 minutes long.⁸⁷

Each of the three variations of the basic communication was presented to the subjects under one of three source-credibility conditions (high credibility, low credibility, message unattributed). The high-credible

⁸⁶ Powell and Miller, p. 153.

⁸⁷ Ibid., pp. 153-154.

source was represented as a doctor, the low-credible source was introduced as a blood donor recruiting chairman of the local Red Cross chapter. In the unattributed condition no reference was made to the credibility of the "interviewee."⁸⁸

The subjects were 210 members of four suburban PTA groups in the Boston area. Thirty-seven percent of the subjects were male; 73 percent were female. Within each PTA group subjects were randomly assigned to one of nine experimental groups or to a control group. Each experimental group heard one of the nine tape recorded message-source combinations, after which each subject immediately completed a posttest. The posttest contained items which were intended to assess subjects' attitudes toward the Red Cross program and toward the practice of selling one's blood to a private agency, items to measure the success of the manipulation of anxiety appeal and source credibility, and questions for obtaining necessary demographic and social information.⁸⁹

Subjects in the control group completed the attitude measurement portion of the instrument without exposure to any of the experimental messages. These subjects were told that the Red Cross was vitally interested in obtaining their personal reactions to the blood-donor program.⁹⁰

Powell and Miller concluded that:

⁸⁸Powell and Miller, p. 154.

⁸⁹Ibid.

⁹⁰Ibid.

These results provide support for each of the seven hypotheses investigated. The results suggest that greater immediate attitude change results from cues denoting social disapproval than from social approval cues, and that both types of cues effect greater attitude change than do messages containing neither (neutral messages). It was also found that messages attributed to high-credible sources elicit greater attitude change than do unattributed messages, and that unattributed messages elicit greater immediate attitude change than do messages attributed to a low-credible source.

The most critical finding of this study, however, was the indication that when messages were attributed to a high-credible source, greater attitude change resulted from cues denoting social disapproval than from cues denoting social approval, and that both types of cues produced greater attitude change than did neutral messages. When messages were attributed to a source with low credibility, greater attitude change resulted from the neutral message (containing no cues of social approval or disapproval), while messages containing social approval and disapproval cues did not differ significantly in effects on attitude change. Finally, when the message was unattributed, a pattern of attitude change effects similar to that in the high-credibility condition resulted. The greatest positive attitude change occurred in the social disapproval condition, and the least change in attitude occurred in the neutral message condition.⁹¹

Lundy, Simonson and Landers (1967) investigated the area of conformity, persuasibility and irrelevant fear in two experiments. In their first experiment they hypothesized that:

(1) Irrelevant fear will decrease the effectiveness of the inoculation procedure.

(2) The inoculation will be less effective if fear is introduced before the reading of the attenuated form of the argument rather than afterwards.⁹²

Subjects were 88 female volunteers from an introductory psychology course at the Pennsylvania State University. Subjects were assigned to groups in a random fashion. There were 27 subjects in each condition.

⁹¹Powell and Miller, p. 158.

⁹²Richard M. Lundy, Norman R. Simonson, and Audrey B. Landers, "Conformity, Persuasibility, and Irrelevant Fear," Journal of Communication, XVII (March 1967), 42.

Irrelevant situational fear was the sole independent variable, though it was further manipulated by its introduction at two different points during the inoculation procedure. Two of the conditions involved a high fear manipulation, while the third condition was designed to minimize any fear and it served as a control group. These fear-arousing situations were regarded as irrelevant fear situations because the nature of the situation was unrelated to the content of the persuasive communication.⁹³

All subjects read an inoculation communication, completed a word association task, read the persuasive communication, and completed an attitude questionnaire which served as the dependent variable in the experiment. Condition "A" exposed the subjects to the high fear manipulation immediately before reading the inoculation communication. Subjects in Condition "B" were exposed to the high fear manipulation shortly after reading the inoculation communication. Subjects in Condition "C" were exposed to the low fear manipulation before reading the inoculation communication.⁹⁴

The high fear manipulation is described as follows:

Upon arrival at the Psychological Clinic the subject completed a medical inventory. After a brief wait in the reception room the subject was escorted by a nurse to a small room which contained medical equipment and impressive looking electrical apparatus. . . . A male experimenter explained the purported method and rationale of the study. It was represented as an investigation of the effects of certain drugs on short-term memory. The drugs were to be administered immediately after the subject completed a series of reading tasks and a brief questionnaire. . . . These drugs were to be administered by intravenous

⁹³Lundy, Simonson, and Landers, pp. 41-42.

⁹⁴Ibid., pp. 42-43.

injections which employed long needles (within sight of the subject) and were likely to cause some discomfort. . . . Before the subjects began the "reading task" the nurse administered a bogus patch test to check for any allergic reaction to the drug. The subject was then escorted to an experimental cubicle.

All experimental groups received the same six 500 word messages.

Four of these messages argued against topics which are regarded as cultural truisms. The issues were medical check-ups, X-ray checks for tuberculosis, the use of penicillin, and dental care. These arguments were not presented in a very persuasive manner and there were specific counterarguments in the same communication. The other two messages in the pack were similarly designed, although their subject matter did not deal with cultural truisms. The word association task was administered immediately before the reading of the persuasive communication. The persuasive communication consisted of six 500 word messages which dealt with the same issues originally presented in the inoculation communication. Each persuasive communication presented the same arguments against the truism though they were considerably more powerful and there was no subsequent refutation.⁹⁵

The results supported the experimental hypothesis. "It was suggested that the introduction of an event which occupied the subject's attention (irrelevant fear condition) inhibited the production of counterarguments and hypotheses regarding the issues in the inoculation communication. The inoculation, under these conditions, was not effective, and the subject was vulnerable to subsequent persuasive communications."⁹⁷

⁹⁵ Lundy, Simonson, and Landers, p. 44.

⁹⁶ Ibid., pp. 44-45.

⁹⁷ Ibid., p. 46.

In their second experiment, Lundy, Simonson, and Landers investigated the effect of induced fear on conformity of behavior. They hypothesized that:

. . . Subjects in a high fear condition would exhibit a greater number of yielding responses than subjects in a low fear condition. . . It was further hypothesized that a given subject would be more influenced by others who were perceived as being more calm and unafraid than she. Similarly, a subject would be less influenced by people who seem to be at least as afraid as herself.⁹⁸

The experiment had 68 subjects. They were assigned to groups in a random fashion. A single factor design with four conditions was utilized. Conformity behavior was measured in an Asch-type situation and analysis was completed on 17 subjects in each of the conditions. Subjects were exposed to a fear manipulation, completed a word association test, and participated in the conformity test.⁹⁹

The high and low fear manipulations were identical with the ones used in the previous experiment. Subjects were assigned to one of four conditions:

- (1) High fear and neutral confederates
- (2) High fear and fearful confederates
- (3) High fear and unafraid confederates
- (4) Low fear and neutral confederates¹⁰⁰

There were two undergraduate confederates in each experimental condition. The confederates were instructed to behave in a certain fashion depending upon the condition in which they found themselves. Neutral

⁹⁸ Lundy, Simonson, and Landers, pp. 47-48.

⁹⁹ Ibid., p. 48.

¹⁰⁰ Ibid.

confederates were told to act serious and not to communicate with the subject or each other. Fearful confederates behaved as if they were especially afraid of the impending inoculation. They recited a series of rehearsed comments. Finally, the unafraid confederates behaved as if they were especially unconcerned about the impending injections. They also recited a series of comments.¹⁰¹

After exposure to the fear manipulations and the completion of the word association task, the subjects were escorted to the room in which the conformity task was to take place. The two confederates were already seated in the room. The conformity task involved the presentation and judgement of 30 items. A critical trial was one in which the two answers of the confederates agreed and was given prior to the subject's response.¹⁰²

In addition it was found that:

. . . A comparison of the two experimental groups with neutral confederates finds the low fear group conforming more than the high fear group. Only when the high fear group interacted with the unafraid confederates were the low fear conformity scores surpassed. The trend of the results is in a direction which suggests a negative relationship between irrelevant fear and conformity.¹⁰⁴

Summary of Fear Appeal Literature

Table I on the following pages was constructed to serve as a summary of the fear appeal literature that was reviewed.

¹⁰¹Lundy, Simonson, and Landers, p. 49.

¹⁰²Ibid., p. 50.

¹⁰³Ibid., p. 51.

¹⁰⁴Ibid., pp. 51-52.

TABLE I

Synopsis of Experimental Studies Dealing With the Effects of Fear Appeals

Year	Investigator	Independent Variable	Dependent Variable	Conclusions
1953	Janis and Feshbach	1. Strong fear 2. Moderate fear 3. Minimal fear	1. Emotional tension 2. Retention 3. Attitude toward communication 4. Conformity to recommendations 5. Resistance to counterpropaganda	1. Emotional tension greatest in strong fear group 2. Results were n.s. 3. Strong fear created greatest attitude change toward communication 4. Minimal appeal was most effective in producing conformity to recommendations 5. Minimal appeal most effective in resistance to counterpropaganda
1954	Janis and Feshbach	1. Strong fear 2. Minimal fear 3. High anxiety 4. Low anxiety	1. Conformity to Recommendations 2. Resistance to Counterpropaganda	1. High anxiety S's exposed to strong fear appeals had less conformity to recommendations than S's of low anxiety exposed to strong fear appeals 2. Results n.s.
1954	De Wolf and Governale	1. Fear of tuberculosis	1. Attitude toward nurse-patient relationship	1. Attitude toward nurse-patient relationship changed favorably Anxiety about contracting tuberculosis decreased

TABLE I--Continued

Year	Investigator	Independent Variable	Dependent Variable	Conclusions
1955	Moltz and Thistlethwaite	1. Strong anxiety arousing material 2. Weak anxiety arousing material 3. No anxiety arousal	1. Anxiety 2. Retention 3. Conformity to Recommendations	1. Results n.s. 2. Results n.s. 3. Results n.s.
1962	Rosenblatt	1. Strong fear 2. Moderate fear 3. Weak fear 4. Five levels of advocated opinion	1. Attitude change	1. Weaker threats more effective the greater amount of attitude change advocated
1962	Janis and Terwilliger	1. High threat 2. Low threat	1. Emotional tension 2. Attitude change	1. Strong threat version elicited more emotional tension 2. Low threat caused more attitude change than high threat 3. High threat group more hostile than low threat group
1963	Radelfinger	1. High fear 2. Moderate fear	1. Anxiety 2. Conformity to recommendations	1. High fear elicited greatest anxiety Moderate fear elicited more anxiety than control 2. Weather message was effective in inducing compliance

TABLE I--Continued

Year	Investigator	Independent Variable	Dependent Variable	Concluded
1963	Frandsen	1. Moderate fear 2. Minimal fear 3. Media of presentation (TV, tape-recording, live speaker)	1. Opinion change 2. Recall	1. None of the 6 possible combinations produced a significantly greater shift of opinion or amount of recall than any other combination
1964	Lazarus and Alfert	1. High fear 2. Denial-reaction 3. Denial	1. Opinion change 2. Cognitive appraisal 3. Stress reactions	1. Denial passages influenced beliefs 2. Threat was "short-circuited" by denial-reaction-statements altering cognitive appraisal 3. Amount of stress reaction depended upon personality 4. Denial orientation more effective than denial and reaction statements
1965	Singer	1. High fear 2. Low fear 3. Organization	1. Attitude change 2. Behavior change 3. Anxiety 4. Learning	1. Attitude change took place in both high and low fear cells 2. High fear led to greater intentions to change behavior 3. High fear caused greater anxiety than low fear 4. Results n.s. 5. Organization had no significant effect on dependant variables

TABLE I--Continued

Year	Investigator	Independent Variable	Dependent Variable	Conclusions
1965	Hewgill and Miller	1. High fear 2. Low fear 3. High credibility 4. Low credibility	1. Attitude change	1. HF-HC caused greater attitude change than LF-HC 2. HF-HC had more favorable attitude toward communication than any other group 3. Strong fear more effective than LF-LC 4. HF-HC effective when member of family is threatened 5. Interaction between level of fear and degree of source credibility---n.s.
1965	Powell	1. Strong fear 2. Mild fear 3. Personal appeal 4. Impersonal appeal	1. Attitude change	1. Personal appeal more effective than impersonal appeal in attitude change SF directed at family member more effective than mild fear
1966	Geer	1. High fear 2. Low fear	1. Task performance 2. Verbal behavior	1. HF and LF S's did not differ in task performance 2. HF S's less interested in task HF S's more angry and rejecting than other S's HF S's had more speech disruptions HF had more tension as judged from verbal behavior

TABLE I--Continued

Year	Investigator	Independent Variable	Dependent Variable	Conclusions
1966	Chu	1. Strong fear 2. Moderate fear 3. Low fear 4. High efficacy 5. Medium efficacy 6. Low efficacy 7. Imminent fear 8. Remote fear	1. Anxiety 2. Resistance to counterpropaganda 3. Effectiveness	1. SF groups most anxious MF groups least anxious Direct relationship between level of efficacy and level of anxiety Imminent fear group significantly less anxious than remote fear group 2. Greatest resistance to counterpropaganda under remote fear 3. SF most successful MF least effective Direct relationship between high efficacy and high effectiveness
1966	Debbe and Leventhal	1. High fear 2. Low fear 3. More effective 4. Less effective 5. More painful 6. Less painful	1. Attitude change 2. Conformity to recommendations 3. Self-esteem	1. Positive relationship between fear arousal and persuasion Direct relationship between intensity of fear and increases in attitude change 2. Effectiveness did not affect conformity Pain did not affect conformity 3. High self esteem showed high conformity only under HF Low self esteem had high conformity under both HF-LF

TABLE I---Continued

Year

1966	Kraus, El-Astal and De Fleur	1. Fear of eye damage 2. Media	1. Conformity to recommendations	1. Newspaper most effective media Warnings of the mass media were effective in changing behavior Greater amount of recall of warning, the greater the tendency to conform
1967	Powell and Miller	1. Social approval 2. Social disapproval 3. Neutral 4. High credibility 5. Low credibility 6. Unattributed	1. Attitude change	1. Greater attitude change from SA cues SA and SD cues had greater attitude change than N HC had greater attitude change than unattributed Unattributed had greater attitude change than LC HC greater than LC HC-SD had greater attitude change than HC-SA N more effective than LC
1967	Lundy, Simonson and Landers Experiment I	1. Irrelevant fear (high fear)	1. Task success	1. Irrelevant fear inhibited arguments regarding issues in inoculation communi- cation. Inoculation not successful

TABLE I--Continued

Year	Investigator	Independent Variable	Dependent Variable	Conclusions
1967	Landy, Simonson and Landers Experiment II	1. High fear 2. Low fear 3. Afraid confederates 4. Unafraid confederates 5. Neutral confederates	1. Conformity to recommendations	1. No relationship between fear and conformity LF-NC conformed more than HF-NC Negative relationship between conformity and irrelevant fear

Ego-Involvement

Ego-involvement, as defined and explained by Sherif et al.,¹⁰⁵ is closely related to attitude change research. The present study is concerned with ego-involvement as an independent audience variable which is unrelated to attitude change. Therefore, the review of literature linking ego-involvement research to the present study is necessarily limited.

In 1941 Klein and Schoenfeld attempted to answer the question:

Would the confidence ratings of a group of subjects in a variety of tasks change significantly in another situation where important ego factors, e.g. social prestige, self-esteem, fear of academic standing, are closely bound up in the tasks, and where, because of this, performance is of more vital consequence to the subject?¹⁰⁶

The subjects were 36 students enrolled in a class in elementary psychology at the College of the City of New York. The subjects were to complete two versions of four tests which were especially constructed for this experiment. The four tests were: (a) Opposites; (b) Mental Additions; (c) Definitions; and (d) Deep Apprehension. In addition, two dummy tests were included in the second testing session.¹⁰⁷

The purpose of the first experimental session was to have the subjects perform, in succession, four tests without introducing any undue emotional

¹⁰⁵ Carolyn W. Sherif, Muzaffer Sherif and Roger E. Nebergall, Attitude and Attitude Change: The Social Judgement-Involvement Approach (Philadelphia, 1965), pp. 60-91.

¹⁰⁶ George S. Klein and Nathan Schoenfeld, "The Influence of Ego-Involvement on Confidence," Journal of Abnormal and Social Psychology, XXXVI (1941), 249.

¹⁰⁷ Ibid., pp. 251-252.

strain. They were informed in an easy manner that they were to participate as observers in an experiment. Each subject was given an answer sheet on which to record their responses. The subject was to record his answer to each question and then to indicate his confidence in that answer. This process was repeated for each of the four tests.¹⁰⁸

The second session of the experiment came 11 days after the first experimental session. The same subjects were used in both sessions. The subjects were not informed on the first occasion that there was to be a second testing session. At the second testing session the subjects were told that the tests they were to take comprised an intelligence test, the results of which were to be recorded for them in the Personnel Bureau of the College of the City of New York. They were informed that both sessions were an attempt, under different motivation conditions, to standardize a battery of tests. This time they were to try hard to do their very best, since these results were to be recorded for them on their college records. The tests used in the second testing session were alternate versions of the tests used in the first testing session, together with dummy Figure Reproductions and Syllogisms Tests. Each subject occupied the same seat for both experimental sessions.¹⁰⁹

Klein and Schoenfeld concluded that:

1. Under the "neutral" experimental situation-set of the first session, both score intercorrelations and confidence intercorrelations were low.
2. Under "stress" or "ego-involvement" situation-set of the second

¹⁰⁸Klein and Schoenfeld, pp. 252-253.

¹⁰⁹Ibid., p. 258.

session, score intercorrelations were low; but confidence intercorrelations were all positive and four were significant.

3. It is possible to conclude. . . that generality of confidence may be evoked under certain conditions of situation-set, especially those which bring into play ego or personality factors like the "level of aspiration." . . .¹¹⁰

Sherif's Ego-Involvement Approach¹¹¹ (1965) has treated ego-involvement as the predictive factor of attitude change research. Sherif's theoretical construct of ego-involvement has led to later experimental studies which have treated ego-involvement as an independent variable to be manipulated in speech and communication research.¹¹²

Kenneth K. Sereno, in 1968, investigated the relationship between ego-involvement, high credibility of a source, and attitudinal responses to a belief-discrepant message. Sereno noted that:

The Sherif's basic assumption, that ego-involvement is a major determinant of response to communication, has been empirically supported. The effect of ego-involvement upon response when certain other relevant communication variables are also operative has not as yet been empirically determined.¹¹³

Students from fundamentals of speech classes at the University of Washington served as subjects. The independent variable was ego-involvement in the topic, with high and low levels. The dependent variables were attitudinal responses to the topic and source, measured by semantic differential scales. The "own-categories" procedure developed by Sherif was

¹¹⁰ Klein and Schoenfeld, p. 258.

¹¹¹ Sherif, Sherif, and Nebergall, pp. 60-91

¹¹² Sereno, "Ego-Involvement: A Neglected Variable . . .", pp. 69-77.

¹¹³ Kenneth K. Sereno, "Ego-Involvement, High Source Credibility, and Response to a Belief-Discrepant Communication," Speech Monographs, XXXV (November 1968), 476.

used to select subjects who were highly and lowly involved in the topic. During the pretest all subjects went through the own-categories procedure on the experimental topic: "Use of the contraceptive pill by unmarried females."¹¹⁴

Semantic differential scores were used during the pretest to obtain responses to the experimental topic and source. The scales "good-bad," "wise-foolish," and "warranted-unwarranted," were used to evaluate the topic. The scales "good-bad," "wise-foolish," and "honest-dishonest," were used to evaluate the source.¹¹⁵

Two weeks after the pretest, the experimental treatment was presented. All subjects who participated in the pretest received a belief-discrepant message presented by a highly credible source. The message was presented in the form of a reproduced newspaper article. Depending upon whether a subject's pretest evaluation of the topic was positive or negative, one of two messages were presented: "Salk (Dr. Jonas Salk was found to be a highly credible source in a pilot study) Calls for Wider Birth Control Use," or "Salk Sees Birth Control Dangers." After reading the articles, subjects responded to the topics and sources on semantic differential scales.¹¹⁶

Two hypotheses were tested: (1) Highly involved subjects should change their attitudes on the topic in the direction advocated less than

¹¹⁴Sereno, "Ego-Involvement, High Source Credibility. . .", p. 477.

¹¹⁵Ibid., p. 478.

¹¹⁶Ibid.

lowly involved subjects. (2) Highly involved subjects should lower their evaluation of the source more than lowly involved subjects. Hypothesis one was clearly supported. Effects of high source credibility upon change of attitude toward the topic are greater among lowly involved than highly involved subjects. Hypothesis two received moderately strong support. Highly involved subjects tended to lower their evaluation of the highly credible source more than lowly involved subjects. Sereno also notes that: "The findings also emphasize the importance of the variable of ego-involvement in responses to communication."¹¹⁷

In 1969 Sereno and Mortensen investigated two hypotheses: (1) Dyads consisting of slightly involved subjects will reach public agreement with greater frequency than dyads consisting of subjects who are highly involved; and (2) dyads consisting of slightly involved subjects will exhibit greater attitude change between private pretest and posttest responses than will subjects who are highly involved.¹¹⁸

Subjects were obtained from fundamentals of speech classes at the University of Washington. The method of determining the level of ego-involvement consisted of a modification of Sherif's "own-categories" procedure. Attitude positional choice was determined by the use of the semantic differential scale. Three semantic differential scales were used. Summed scores of three to six on the positive indicated highly involved subjects. Summed scores of 18 to 21 on the negative indicated lowly involved subjects. The

¹¹⁷ Sereno, "Ego-Involvement, High Source Credibility. . .", p. 481.

¹¹⁸ Kenneth K. Sereno and C. David Mortensen, "The Effects of Ego-Involvement Attitudes on Conflict Negotiation in Dyads," Speech Monographs, XXXVI (March 1969), 9.

pretest consisted of the above determination of the subject's involvement.

The experimental treatment was administered five days after the pretest. Selected subjects were paired randomly in dyads consisting of opposing members who were both either highly or slightly involved. Subjects were told that they would have ten minutes of negotiating time to persuade one another to accept what each thought to be the most acceptable stand on the topic. Subjects used the semantic differential as the basis of their negotiation. Posttest measures consisted of two indices of public agreement and a private expression of attitude on the topic.¹²⁰

Sereno and Mortensen concluded that:

The findings . . . attest to the relevance of ego-involvement to conflict negotiation in dyads. Both the frequency of public agreement and the degree of individual or private attitude change was found to be a function of involvement on the topic.

Of significance also, is the added confirmation of the distinction between extremity of attitude position and the intensity of attitudinal commitment. Recall that all subjects endorsed polarized attitude positions. Yet significant differences occurred in the responses---both public and private---between highly and slightly involved individuals. In accordance with predictions, slightly involved subjects reached some degree of perceived group agreement with greater frequency than did those dyads composed solely of opposed and highly involved persons; also, slightly involved persons demonstrated significantly greater amounts of individual attitude change than did highly involved subjects.¹²¹

¹²⁰ Sereno and Mortensen, p. 10.

¹²¹ Ibid., pp. 11-12.

Table II on the following page was constructed to serve as a summary of the fear appeal literature that was reviewed.

Synopsis of Experimental Studies Dealing With the Effects of Ego-Involvement

Year	Investigator	Independent Variable	Dependent Variable	Conclusions
1941	Klein and Schoenfeld	1. Ego-involved task 2. Non ego-involved task	1. Confidence 2. Correct answers	1. In the non ego-involved task situation, both score (number correct) intercorrelations and confidence intercorrelations were low. 2. Under the "stress" or "ego-involved" situation score intercorrelation were significant
1968	Sereno	1. High ego-involvement 2. Low ego-involvement	1. Attitude toward topic, source, and message	1. Low ego-involved subjects changed their attitudes more in the direction advocated than did high ego-involved subjects 2. High ego-involved subjects lowered their evaluation of the source more than did low ego-involved subjects
1969	Sereno	1. High ego-involvement 2. Low ego-involvement	1. Attitude change 2. Public agreement 3. Private agreement	1. Slightly ego-involved dyads reached public agreement more frequently than high ego-involved dyads 2. Slightly ego-involved dyads had greater attitude change than highly ego-involved subjects

Summary

Research on fear appeals has been primarily concerned with what magnitudes of fear are most effective. This research has focused upon fear appeals as essentially only effective as message variables. The results of this research are both inconclusive and conflicting. However, two studies seem to indicate that there is a possible relationship between the effectiveness of fear appeals and the audience variable of personal involvement of the individual subject. Newgill and Miller (1965) and Powell (1965) both suggest such a relationship.

The use of ego-involvement as an independent variable which may influence the effectiveness of other variables in a communication remains essentially an unexplored area. Most ego-involvement research has been conducted in the areas of attitude formation, attitude measurement, and attitude change. Very few ego-involvement experiments were available which directly related to the present study.

Object of the Study

Past research in the area of fear appeals has attempted to discover what factor or factors make fear appeals effective. No clear answer has yet emerged from this research. The majority of the research conducted in the area of fear appeals has concentrated on the manipulation of the magnitudes of fear in order to determine which specific magnitude is most effective. Thus, the key to fear appeal effectiveness has been thought to lie within the area of message variables.

Two studies, Hargill and Miller (1965) and Powell (1965), have indicated that this may not be the case. These two studies suggested that fear appeals would be effective on an audience member, regardless of the magnitude of fear used, if someone or something which the audience member is personally involved in is threatened. Thus, some audience variable may be responsible for making fear appeals effective.

It is the object of the present study to continue the research already completed in the area of fear appeals, and to investigate the possible relationship between the effectiveness of fear appeals and the personal involvement of the audience.

Hypotheses

The hypotheses for the present study were:

(1) Subjects in the ego-involvement and fear appeal group will perform better (answer more questions) than subjects in any of the other groups.

(2) Subjects in the fear appeal group will perform at a lesser rate than the ego-involvement and fear appeal group

(3) Subjects in the ego-involvement group will perform at the same level as the subjects in the fear appeal group

(4) Subjects in the control group will perform at a lower level than any of the other groups.

Definition of Terms

In this experiment ego-involvement was defined as ". . .the arousal, singly or in combination, of the individual's commitments or stands in the context of appropriate situations, be they interpersonal relations or a judgement task in actual life or an experiment. . . .The person is ego-involved when any one of these ties and commitments, singly or in combination, is situationally aroused."¹²² "Ego-involvement refers to relevance, significance, or meaningfulness of the issues or topic to the individual."¹²³

In the present study the experimenter operationalized the definition of ego-involvement so that grades were used as the ego-involvement variable. The experimenter used instructions to manipulate the ego-involvement variable. Sherif points out that the use of instructions to manipulate ego-involvement is both acceptable and useful:

The second way experimenters have varied ego-involvements is through

¹²² Sherif, Sherif and Nebergall, p. 65.

¹²³ Sereno, "Ego-Involvement: A Neglected Variable. . .", p. 70.

instructions. For example, subjects may be told that their performance on certain tasks will be included on their college records. If this is credible, in view of the nature of the tasks, it involves the individual's attitudes as a college student who presumably wants a credible record, if not always an excellent one. As Klein and Schoenfeld (1941) found, subjects thus instructed displayed a "generality of confidence" in performance from task to task, whereas those not situationally ego-involved by instructions shifted their confidence ratings markedly from task to task. The ego-involved subjects were also more anxious and exerted greater effort in performance on the tasks.¹²⁴

The use of the topic of grades as the ego-involvement variable is supported by the findings of an unpublished experiment which was conducted by Carolyn W. Sherif.

In recent unpublished research into the relative importance of issues to university students in the Southwest, the students in a research methods course taught by one of the authors (CWS) conducted unstructured interviews to explore the most frequent topics of conversation, concern, and worry among unmarried undergraduates. None of the topics mentioned spontaneously in the interviews was a controversial social issue. They clustered around interpersonal concerns: relations with the opposite sex, grades, and coursework, future employment, and marital possibilities. . . . The latitudes of acceptance, rejection, and noncommitment determined by methods described in Chapter 2, were found for a sample of comparable students and revealed an astonishingly high frequency of noncommitment on the various positions presented to them on five different issues. There was a trend toward less noncommitment on the question of the importance of school grades for job opportunity. But on the most controversial social topics (e.g., civil rights, foreign policy, right to work referendum then under way in the state) the students responded, on the average, to only three or four of the nine positions presented to them. . . . Thus, regardless of the issue, in this unpublished research on student opinions, those who adopted extreme positions were significantly less noncommittal than those adopting moderate positions. . . . The point could be phrased in reverse fashion: high ego-involvement in a stand results in resistance to change toward a communication on an issue.¹²⁵

In this experiment fear appeal was defined as those contents of a persuasive communication which allude to or describe unfavorable consequences

¹²⁴ Sherif, Sherif, and Nebergall, p. 69.

¹²⁵ Ibid., pp. 183-184.

that are alleged to result from failure to adopt or adhere to the communicator's conclusions.¹²⁶ In the present study fear appeal was operationalized to mean that the subjects must answer a certain number of questions in order to pass the test. The number of questions was set at a level which would be very difficult for the majority of the subjects to complete during the time period. The subjects were then given a second test to take with a time period which was identical to that of the first testing period.

The magnitude of fear appeal was not a factor in this study.

Assumptions

The investigation required making several assumptions related to the design of the experiment and the population which served as the basis for the supply of experimental subjects. The study assumed:

- (1) That the fear appeal variable was the suggestion of inadequate performance on the task.
- (2) That grades were an ego-involvement factor for the subjects used in the present investigation.
- (3) That each sample population was representative of a total population.
- (4) That the 24 minute time period amply allowed the independent variables to operate.
- (5) That the sample population approached the experimental situation as a normal class would.

¹²⁶ Gerald R. Miller, "Anxiety-Arousing Messages," Central States Speech Journal, XIV (1963), 117.

Summary

Research attempts to discover what makes fear appeals effective have yielded both inconclusive and conflicting results. Very few studies have attempted to discover if audience variables, rather than message variables, make fear appeals effective. Two fear appeal studies suggest that personal involvement is one audience factor which makes fear appeals effective.

Research in the area of ego-involvement as an independent variable which may cause other variables to be effective has been sparse. So far the results of this research have been inconclusive.

The object of the present study is to investigate the relationship between fear appeals and ego-involvement as defined.

CHAPTER II

METHOD

Preliminaries

Selection of Subjects

Sixty nine students enrolled in the basic speech course at Eastern Illinois University served as subjects in this investigation. Prior to the experiment the sixty nine subjects were divided randomly into four groups (Appendix A). Two days before the experiment the subjects were told by their respective instructors to report to Coleman Hall auditorium at 7:00 P.M. on July 9, 1969 (Appendix B). Upon their arrival at the Coleman Hall auditorium the subjects were told to which group they were assigned and each group was then sent to one of four preselected classrooms.

Tests

The two tests the subjects were to complete consisted of multiple choice questions taken from Suggestions For The Beginning Course in Speech and Public Speaking by Harvey Cromwell. The first test, test "A", consisted of 79 multiple choice questions on basic speech concepts (Appendix C). The second test, test "B", consisted of 62 multiple choice questions on basic speech concepts (Appendix D). Three questions on each test were repeated as internal consistency checks.

Size of the Groups

The four groups were divided into three experimental groups and one control group. The variables introduced respectively to each of the three experimental groups were: (1) Fear appeal and ego-involvement; (2) Fear appeal and no ego-involvement; (3) Ego-involvement and no fear appeal. The control group was designated as no fear appeal and no ego-involvement. The fear appeal and ego-involvement group had 17 subjects. The fear appeal and no ego-involvement group had 18 subjects. The ego-involvement and no fear appeal group had 18 subjects. The control group consisted of 16 subjects.

Timing and Regulation of the Experiment

Each subject was given 10 minutes to work on test "A" and test "B" respectively. Students from an upper division speech class aided the experimenter in timing each of the four sections. When the experimenter told the subjects in any given section "you may begin," this acted as a cue to the timer assigned to that section to start his stopwatch. The experimenter was given two minutes to give instructions to each group. Thus, the sections were staggered at two minute intervals.

Four students from the same upper division speech class acted as proctors in each of the four groups respectively. They aided the experimenter in handing out and collecting the test booklets.

The Experiment

Design of the Experiment

Sixty nine students enrolled in the basic speech course at Eastern Illinois University served as subjects in the experiment. Prior to the

experiment the subjects were randomly divided into four groups. Two days before the experiment the subjects were told that a representative of the American Speech Association would be at Eastern Illinois University to administer a speech fundamentals test. The respective instructors indicated that at that time they were undecided whether or not to count the subjects score on the American Speech Association's test as an hourly examination grade in their basic speech course. The instructors noted that they would make their decision known to the test administrator and that the subjects would be informed of their decision on the evening of the test. In addition the subjects were told to meet at the Coleman Hall auditorium at 7:00 P.M. on July 9, 1969 to take the test.

The experimenter was unknown to the subjects and posed as a representative of the fictitious American Speech Association. The chairman of the Department of Speech at Eastern Illinois University introduced the experimenter to the subjects. (Appendix E). These factors were intended to make the task credible.

The chairman of the Department of Speech told the subjects that the Speech Department had been asked about a year ago to assist the American Speech Association in administering their "speech profile" test. The subjects were told that since early this year the American Speech Association had been administering the test to high school seniors and college students who were involved in completing the basic speech course at their respective universities. The experimenter was then introduced as a representative of

the American Speech Association and as the speech teacher at the local high school.

The experimenter told the subjects that the tests they were about to take were being given nationally as a part of a standardization program. The subjects were told that it was necessary to divide them into four groups, because four different versions of the same test were to be given at Eastern Illinois University (Appendix F). The experimenter dismissed the subjects so that they could join their respective groups.

One group of 18 subjects went to classroom 111 in Coleman Hall. This group was designated as experimental section 1 FA. This group was to receive the fear appeal treatment but not the ego-involvement treatment. Each of the subjects was given a sealed test "A". The experimenter then instructed the subjects to fill out the front of the test booklet (Appendix G). The information asked for on the front of the test booklet "A" was: name, date, location, and section number. After the subjects had completed filling out the front of the test booklet, they were told that they had approximately 10 minutes to work on the test booklet, and that they were not expected to answer all of the questions. They were also told that the score they made on the test would not affect their grade in basic speech class. They were then instructed to start working on the test.

At the end of 10 minutes the subjects in section 1-FA were told to stop working and to lay their test booklets under their desks. They were then told by the experimenter that although he had no idea how many questions that they had completed, the national average of college and high

school students who have taken this particular test indicates that they should have completed approximately 47% or 37 questions in order to make a passing score on the test. The subjects were then told to print his or her name on the front of test booklet "B" which had been passed out to them. They were then instructed to write their section number under their name. The experimenter repeated the instruction that the subjects would only be allowed 10 minutes to work on test booklet "B" and that they were not expected to answer all of the questions. The subjects were told to start working on test booklet "B".

Another group of subjects went to classroom 112. This group was designated as section 1-EI. This group was to receive the ego-involvement treatment but not the fear appeal treatment. This independent variable was introduced in the instructions which were given for test "A" (Appendix H). In addition to the instructions which were given for test booklet "A" in section 1-FA, the subjects were told that their respective instructors had indicated to the experimenter that they had decided to count the score that the subjects made on the tests as an hourly examination grade in their respective basic speech classes. The subjects were then instructed to begin work on the first test booklet.

After 10 minutes had elapsed, section 1-EI was told to stop work on test booklet "A" and to place it under their respective desks. This section was given the same instructions as section 1-FA, with the exception that they were told nothing about the number of questions needed to pass the test. This group was told only to print their name and section number on

the front of test booklet "B". In addition they were told that they had only 10 minutes to work on test booklet "B" and therefore, were not expected to answer all of the questions. They were told to start work on test booklet "B".

Seventeen subjects were assigned to classroom 113. This group was designated as section 1-EF. This group was to receive both the fear appeal and ego-involvement treatments. The instructions this section received for test booklet "A" were identical to those given section 1-EI (Appendix I).

After section 1-EF had worked on test booklet "A" for 10 minutes they were stopped by the experimenter. This group received the same instructions for test booklet "B" as group 1-FA.

The last group of subjects, 16 in all, were assigned to classroom 116. They were designated as section 1-CG. This section was to act as a control group for the experiment. The instructions this section received for test booklet "A" were identical to those given section 1-FA.

The control group, section 1-CG, was stopped by the experimenter after they had worked on test booklet "A" for 10 minutes. This group received the same instructions for test booklet "B" as section 1-EI.

Schedule

The schedule for the investigation is reported in Table III.

TABLE III

Schedule for the Experiment

Instructions and Introduction of Independent Variables in Sections 1-EI and 1-EF	2 min.
Time to Work on Test Booklet "A"	10 min.
Instructions and Introduction of Independent Variables in Sections 1-FA and 1-EF	2 min.
Time to Work on Test Booklet "B"	10 min.

In order to verify the independent variables, a posttest was constructed and administered to the subjects on July 14, 1959. Regarding the posttest, four semantic differential scales designed to measure fear appeals were graded and summed. The four scales were "unfair-fair," "emotional-unemotional," "calm-excited," and "pleasant-unpleasant."

The ego-involvement scales required subjects to select one of nine statements which came closest to their attitude or opinion. Each of the choices from "A" to "I" was given a numerical value and this value was recorded as ego-involvement positional choice.

The third aspect of the posttest required administering the ego-involvement scales again with directions for the subjects to check all statements with which they could agree. Numerical values were assigned to each

of the statements as when the ego-involvement positional choices were recorded. The data was recorded as the latitude of the subject's choice. If a subject marked statements "A", "B", "C", and "D", they were scored as having a latitude of four. All the posttest battery data reported was recorded in tabular form (Appendix K).

Collection of Data

Two methods were utilized in collecting data in the investigation: (1) the total number of questions answered by each subject on tests "A" and "B" respectively; (2) the posttest battery data. The dependent variable in the investigation was the subject's performance on the tests. This was measured by the total number of completed questions on each of the two tests. The posttest (Appendix L) was used as a validity measure of the independent variables.

Treatment of the Data

Refinement The data from each of the four sections was tabulated. The subjects were grouped according to the experimental treatments which they received. The total number of questions answered on test "A" was recorded for each of the subjects. The total number of questions answered on test "B" was recorded for each of the subjects. The difference between each subject's performance on tests "A" and "B" was also recorded. When the subject completed more questions on test booklet "A" than on test booklet "B" a negative score was recorded. When the subject completed more questions on test booklet "B"

than on test booklet "A" a positive difference was recorded.

Regarding the four semantic differential scales used on the posttest battery and their scoring, a numerical value was given to each of the seven possible choices for any given bipolar concept. These numerical values were summed for each of the four scales used on each of the six topics respectively. The six numerical values, one for each topic, were recorded as the subjects' semantic differential test scores.

The ego-involvement positional choice scales were graded in the following manner: A numerical value was given to each of the nine choices from "A" to "I". For any given topic one numerical value emerged representing the subjects' ego-involvement positional choice for that topic. Three ego-involvement positional topics were used in the posttest battery.

The ego-involvement latitude scores were arrived at in the following manner: A numerical value was given to each of the nine choices from "A" to "I". The subject was instructed to mark all of the statements which he felt he could agree with in terms of his own opinions and attitudes (i.e., If the subject marked "A", "B", and "C" he was scored as having an ego-involvement latitude of three). Three ego-involvement latitude scales were used in the posttest.

Statistical Treatment of the Data

An analysis of variance of a completely randomized design was utilized to analyze the differences among the four treatments.

Summary

Sixty nine students in the basic speech course at Eastern Illinois University were randomly assigned to four experimental groups. The subjects in all four groups completed two multiple choice tests on basic speech concepts. The independent variables were ego-involvement and fear appeal. Before starting work on the first test booklet, test "A", the ego-involvement variable was introduced. Sections 1-EI and 1-EF were told that the scores they made on the tests would count as hourly examination grades in their basic speech classes. Thus, the ego-involvement variable was introduced. The two non ego-involved groups, sections 1-FA and 1-CG, were told that their grade in basic speech class would not be affected by their score on the tests. All of the subjects were given 10 minutes to work on test "A". At the end of the first testing period sections 1-FA and 1-EF were told that in order to pass the test they had to have answered 37 questions on the first test. This was the fear appeal variable, because it had already been determined that it was improbable that many of the subjects would be able to answer 37 questions in the time allowed. The non fear groups were told nothing about the number needed to pass the test. These groups were sections 1-EI and 1-CG.

The dependant variable was the subject's performance on the tests. This was measured by the number of questions answered. A posttest battery was also given to verify the independent variables.

All data was recorded in tabular form.

CHAPTER III

RESULTS

In order to determine the performance level of each of the four groups it was necessary to record in tabular form the total number of questions answered by each subject on test "A" and also on test "B". After this was done a difference score was computed for each subject. If the total number of questions on test "A" was larger than the total number of questions answered on test "B" then a negative difference score was recorded. If the total number of questions answered on test "B" then a positive difference score was recorded. This data was tabulated for each of the four groups separately. Table IV includes the data for the control group.

TABLE IV

CONTROL GROUP-NO FEAR APPEAL AND NO EGO-INVOLVEMENT TREATMENT

Subject	"A"	"B"	Diff	Subject	"A"	"B"	Diff
1.	33	32	-1	9.	32	26	-6
2.	27	21	-6	10.	27	37	+10
3.	27	26	-1	11.	37	28	-9
4.	27	23	-4	12.	37	39	+2
5.	35	35	0	13.	27	29	+2
6.	32	28	-4	14.	33	28	-5
7.	29	25	-4	15.	30	27	-3
8.	44	41	-3	16.	30	24	-6

Table V contains the data for the fear appeal and no ego-involvement group.

TABLE V
FEAR APPEAL AND NO EGO-INVOLVEMENT

Subject	"A"	"B"	Diff	Subject	"A"	"B"	Diff
17.	40	35	-5	26.	35	28	-7
18.	35	32	-3	27.	39	26	-13
19.	31	28	-3	28.	37	36	-1
20.	44	32	-12	29.	36	30	-6
21.	34	44	+10	30.	39	37	-2
22.	35	31	-4	31.	24	27	+3
23.	28	20	-8	32.	48	44	-4
24.	45	44	-1	33.	41	41	0
25.	48	52	+4	34.	35	27	-8

Table VI contains the data for the ego-involvement and no fear appeal group.

TABLE VI
EGO-INVOLVEMENT AND NO FEAR APPEAL

Subject	"A"	"B"	Diff	Subject	"A"	"B"	Diff
35.	41	40	-1	44.	36	34	-2
36.	30	27	-3	45.	30	22	-8
37.	47	43	-4	46.	27	28	+1
38.	26	20	-6	47.	30	27	-3
39.	26	22	-4	48.	31	27	-4
40.	26	23	-3	49.	30	22	-8
41.	30	28	-2	50.	20	21	+1
42.	34	32	-2	51.	33	33	0
43.	29	24	-5	52.	39	32	-7

Table VII contains the data for the fear appeal and ego-involvement group.

TABLE VII
EGO-INVOLVEMENT AND FEAR APPEAL

Subject	"A"	"B"	Diff	Subject	"A"	"B"	Diff
53.	40	31	-9	62.	32	29	-3
54.	28	25	-3	63.	36	32	-4
55.	29	29	0	64.	48	56	+8
56.	47	38	-9	65.	30	29	-1
57.	36	28	-8	66.	45	45	0
58.	30	31	+1	67.	39	24	-15
59.	30	24	-6	68.	31	31	0
60.	48	52	+4	69.	34	32	-2
61.	41	39	-2				

An analysis of variance among the four groups' differences scores was made. Table VIII contains the data from this analysis.

TABLE VIII
ANALYSIS OF VARIANCE BETWEEN GROUPS

Source	SS	df	ms	F	p
Total	1430	68	—	—	—
Between groups	17	3	5.6	0.26	≠ .05 n.s.
Within groups	1413	65	21		

The analysis of variance revealed that the differences among groups were not statistically significant.

The posttest consisted of six semantic differential scales on the topics of "tests," "college education," "grades," "your performance on a test," "working against the clock," and "fear of failure" respectively. The

semantic differential scales were designed to measure the fear appeal variable.

The posttest also consisted of three ego-involvement scales similar to those used by Sherif.¹²⁷ The three scales were on the topics of "a good grade in speech class," "completion of a college education," and "a high grade average" respectively. The subjects were to select the one statement on each scale which was closest to their own attitude or opinion.

The posttest was concluded with the three ego-involvement scales being repeated. The subjects were told to select all of the statements which they felt that they could agree with.

The data obtained from the posttest battery was also submitted to an analysis of variance. The results for each of the three topics are reported in Tables IX, X, and XI respectively.

TABLE IX

GOOD GRADE IN SPEECH CLASS

ANALYSIS OF VARIANCE BETWEEN EGO LATITUDE AND EGO POSITIONAL CHOICE

Source	SS	df	ms	F	p
Total	1271	52	—	—	—
Between groups	68	4	17	0.67	* .05 n.s.
Within groups	1203	48	25	—	—

¹²⁷ Muzaffer Sherif and Carl I. Hovland, Social Judgment: Assimilation and Contrast Effects in Communication and Attitude Change, (New Haven, 1961), pp. 127-145.

TABLE X

COLLEGE EDUCATION

ANALYSIS OF VARIANCE BETWEEN EGO LATITUDE AND EGO POSITIONAL CHOICE

Source	SS	df	ms	F	p
Total	1322	57			
Between groups	109	3	36	1.61	$\neq .05$ n.s.
Within groups	1213	54	22		

TABLE XI

HIGH GRADE AVERAGE

ANALYSIS OF VARIANCE BETWEEN EGO LATITUDE AND EGO POSITIONAL CHOICE

Source	SS	df	ms	F	p
Total	1146	54			
Between groups	72	3	24	1.14	$\neq .05$ n.s.
Within groups	1074	51	21		

The analysis of variance for these three topics was not statistically significant.

SUMMARY

Data from the experiment was recorded in tabular form. An analysis of variance for a completely randomized design was computed on the four groups. The results of this analysis were not statistically significant.

In an attempt to verify the independent variables, a posttest was constructed and administered. The data from the posttest battery was recorded in tabular form. Analysis of variance tests were performed on the posttest battery data. The results of this analysis were not statistically significant.

CHAPTER IV

CONCLUSION

Summary

Researchers and scholars in the fear appeal area have been unable to determine what factor or factors make fear appeals effective. The results of this research have been both conflicting and inconclusive. The majority of this research had considered fear appeals as a message variable whose effectiveness depends upon its magnitude. Two studies, Hewgill and Miller (1965) and Powell (1965), suggest that the magnitude of the fear appeal has no relationship to its effectiveness. Instead, they suggest that the personal involvement of the audience with who or what is threatened is the factor which causes fear appeals to be effective. This investigation was designed to experimentally compare fear appeals and ego-involvement.

Sixty-nine undergraduates enrolled in the basic speech courses at Eastern Illinois University served as subjects in the investigation. Four groups of 16 to 18 members were randomly assigned to four experimental conditions.

The independent variables were fear appeal and ego-involvement. The dependent variable was performance on the task. The task was a two part multiple choice test on speech fundamentals.

Part "A" of the test consisted of 79 questions. On part "A" of the test the ego-involved treatment consisted of informing the subjects in two

of the experimental sections that the score that they made on the test would count as an hourly examination grade in their basic speech class. The two non ego-involved sections were told that their scores would not affect their grade in basic speech class. At the end of the first testing period the subjects were given test "B" and a set of instructions preceded their starting to work on the test. Included in these instructions was the fear appeal variable. The two fear appeal sections were told that although the experimenter had no way of knowing how many questions that they had answered on test "A", the national average indicated that in order to pass the test they would have had to have answered 37 questions. The experimenter had already determined that the majority of the subjects would be unable to answer this number of questions in the time allowed. The no fear appeal sections were told nothing about how they were doing on the test.

The results from the two tests were tabulated and the difference between the subjects performance on each test was calculated. An analysis of variance was completed on this data. The results were not statistically significant.

In order to verify the independent variables, a posttest battery was given. The posttest consisted of six semantic differential scales, three ego-involvement scales indicating the subjects positional choices, and finally, three ego-involvement latitude scales. The results of this data was recorded in tabular form. An analysis of variance were completed on this data. The results of this analysis were not statistically significant.

Theoretical and Practical Implications

The experiment provided information relating to the three hypotheses that were formulated for the purposes of the investigation. A consideration of the findings as they relate to these hypotheses reveals the implications of the investigation.

Hypothesis 1. Subjects in the ego-involvement and fear appeal group will perform better (answer more questions) than subjects in any of the other groups.

Hypothesis 2. Subjects in the fear appeal group will perform at a lesser rate than the ego-involvement and fear appeal group.

Hypothesis 3. Subjects in the ego-involvement group will perform at the same level as the subjects in the fear appeal group.

Hypothesis 4. Subjects in the control group will perform at a lower level than any of the other groups.

The results of the investigation did not support the above hypotheses. When the groups were compared on the basis of numerical scores it was found that the majority of the subjects answered fewer questions on test "B" than on test "A". The analysis of variance revealed no statistically significant differences among the four groups.

A posttest was administered to attempt to determine if the independent variables had been introduced and manipulated. Based on the performance difference score, an analysis of variance was computed on ego-involvement latitude vs ego-involvement positional choice scores for each of the three ego topics which were used in the posttest battery. The results from these

three analyses of variance were not statistically significant.

Prior research (see Chapter I) indicates that some logical patterns should have emerged from this study. However, the results appear nearly random (Tables III-X). Such results can often be caused by:

(1) Experimental groups operating under an "overshadowing" but undetected variable.---It was suspected that perhaps the subjects academic standing or academic ability had an effect on the results of the investigation. The academic standing and ACT scores for each subject were investigated. There appeared to be no relationship between a subjects academic standing and his performance during the investigation. The same was true for each subject's ACT scores.

In addition, a control group was used in the present investigation to determine the operation of the independent variables. Any difference in performance between the experimental treatments and the control group would have indicated the introduction of some variable. In the present investigation the results of the control group were also random.

(2) Mishandling of the experimental treatment control.---A review of the literature indicated that the subject of grades was indeed an ego-involved topic. The review also indicated that the use of instructions to manipulate the ego-involvement variable was an acceptable procedure. Nevertheless, the present investigation was unable to demonstrate that grades were an ego-involved topic with the subjects tested. One of the major implications of this investigation originates from an apparent conclusion that the subjects were not ego-involved in the topic of grades. The implication from this is that the operational definitions of other research

studies should not be utilized without validation. The individual differences of subjects from experimental design to experimental design or from group to group apparently cause the operational definitions of the independent variables from one study to not be applicable to a similar study. Rather, each group of subjects must be treated separately and pretested to determine the operational definitions of the independent variables which are to be used in any given experiment. The research assumption made by the experimenter and other writers that college students are ego-involved with college work, their grade in speech class, and a good grade average was possibly inaccurate.

(3) Experimental design.---There was no a priori reason for suspecting groups to react spuriously because of the random assignment of subjects to each of the four groups. The basic tool of statistical analysis is knowledge of the patterns of sampling variability that result from various populations. This knowledge can be obtained only through the laws of mathematical probability, and these laws apply only to random samples. Thus, only random samples permit objective generalizations from the sample to the whole population.¹²⁸

However, it might have been better to introduce the independent variables after the initial 10 minute testing period had ended. In this manner, the first 10 minutes would have acted as a controlled condition.

(4) The variables, ego-involvement and fear appeal, have no predictable effect on communication.---In the light of prior research this is the most unlikely option. However, after checking all possible design errors

¹²⁸W. Allan Wallis and Harry V. Roberts, The Nature of Statistics, (New York, 1965), p. 142.

in the present investigation, this option seems less unlikely.

(5) Criterion measure was irrelevant to variables being manipulated.

(6) Poor execution of laboratory design.

One other possible explanation for the insignificant results of the present investigation might be that only one variable and not two was introduced. Perhaps fear appeal and ego-involvement are the same variable. In that case the four treatments varied only in the number of fear appeals which were applied to them. While this remains a possibility, it was not tested in the present investigation and therefore, no implications can be drawn from it.

Suggestions for Further Study

Restraint should be exercised in generalizing from the findings of this experimental investigation. Additional research endeavors are needed to fully explore the possible effects of fear appeals and ego-involvement.

As was suggested in the previous section, researchers in the area of fear appeals and ego-involvement should empirically investigate their independent variables before conducting any research investigations. The present study has demonstrated that the operational definitions of independent variables arrived at by typical research of prior studies may be in error.

Future researchers in the area of fear appeals and ego-involvement might investigate the following possibilities:

(1) Expand the dependent variable to include both performance and accuracy. Performance in the present investigation was defined as the total number of questions answered. It is possible for students to also work harder by increasing the accuracy of their answers but not necessarily the total number of questions answered. Accuracy of the subjects answers could not be used in the present investigation because tests "A" and "B" could not be identical tests and therefore could not be compared.

(2) Changing the time of giving the examination might affect the results. The present investigation waited until several weeks of the new quarter had passed before conducting the investigation. The rationale behind this was to give the subjects a chance to become involved in speech class

and to start to set up a grade average in speech class. Also, since the test was over speech fundamentals, it would be more credible with the subjects if they had been exposed to some of these fundamentals before they were asked to take a test over them. Perhaps the investigation should be started on the first day of class. In this manner the subjects have no conception of their grade and the introduction of the ego-involvement variable would be more meaningful to them.

(3) A pretest should be given to determine each subjects ego-involvement latitude and positional choice on whatever topics might be used in an investigation. This would offer a much tighter control of the ego-involvement variable.

APPENDIXES

APPENDIX A

CLASS ROOM ASSIGNMENTS FOR AMERICAN SPEECH ASSOCIATION PROFILE TEST

Room 111

1. Blum, Debra K.
2. Avalos, Philip D.
3. Demauney, Roy E.
4. Carey, David R.
5. Carroll, John R.
6. Bennett, Gregory
7. Gay, Vernon F.
8. Clouser, Thomas D.
9. Derr, Robert M.-- DNA
10. Best, Dolores M.-- DNA
11. Gullo, Donald E.
12. Coffman, Lola J.
13. Dorothy, Stephen R.
14. Craig, Jane
15. Kipp, Kay L.
16. Croy, Michael E.
17. Griffith, Vicki L.
18. Davis, Patricia C.
19. Kratochvil, William
20. Cummins, Nancy M.

Room 113

1. Johnston, Gerald L.
2. Herrington, Lawrence-- DNA
3. Smith, Paul J.
4. Powers, Linda E.
5. Martin, Karla J.
6. Lunneman, Inez E.
7. Stikloss, Anthony J.
8. Roberts, Dennis J.
9. Morales, Joseph-- DNA
10. Miller, Darrel
11. Stombaugh, Brenda K.
12. Saxton, Judith A.
13. Myers, Melinda L.
14. Moncada, Thomas P.
15. Stotts, Rebecca S.
16. Sparlata, Robert E.
17. Orr, Gregory L.
18. Mowery, Dale S.
19. Thomas, Eileen C.

Room 112

1. Haines, Kathleen L.
2. Funk, P. Camille
3. Lafina, Denise
4. Erickson, John E.
5. Hainea, Linda J.
6. Grzechowiak, John K.
7. Lam, Chick Woon
8. Faxio, David J.
9. Herrick, Beth A.
10. Hausmann, Mary S.-- DNA
11. Morgan, Sherri L.
12. Harris, Janet Z.
13. Jacobs, Robert E.
14. Henderson, Kenneth W.
15. Rice, Jimmie D.
16. Henning, Debra J.
17. Levan, Deborah D.
18. Hendricks, Arthur D.-- DNA
19. Schramm, Rhonda J.
20. Loran, Kathryn M.

Room 116

1. Shafer, David L.
2. Ray, Paul J.
3. Sawicki, Richard J.
4. Varner, Marilyn Jo
5. Sheetz, Milton C.
6. Vornehm, Michael J.
7. Steppe, Georgia I.--DNA
8. Wendling, Gary K.
9. Shryock, Charles A.
10. Walden, John C.
11. Taylor, Marsha D.
12. Spade, Timothy D.
13. Walsh, Linda J.
14. Vonlauken, Stanton-- DNA
15. Sprowles, John S.
16. Welsh, Dalena E.
17. Whicker, Gregory A.
18. Williams, Richard J.

APPENDIX B

INSTRUCTORS REMARKS TO SUBJECTS

On _____, Mr. Stephen Steinmetz, the speech teacher at Charleston High School, will be here to administer a speech fundamentals test on behalf of the American Speech Association. Our class will not meet at its regular time. Instead, you are to report to the Coleman Hall Auditorium at _____ tomorrow evening. This will be considered as a regular class meeting and role will be taken. There is a possibility that your score on this test will count as an hourly test grade. I will get a copy of the test to study later and will make up my mind at that time. I will ask Mr. Steinmetz to pass my decision on to you when you take the test.

APPENDIX C

AMERICAN SPEECH ASSOCIATION SPEECH PROFILE
TEST "A"

The following test is divided into two parts. If you complete Part I, then stop. Do not start Part II until you are told to do so.

Select the best answer:

- _____ 1. The best way to develop subject matter for your first speeches is to concentrate on (a) topics which interest your audience (b) topics which are especially timely (c) a wide diversity of subjects (d) topics related to your own special interests and experiences.
- _____ 2. In your first speeches you should (a) memorize your speech word for word (b) memorize the first few words of each sentence (c) memorize the main points of your speech.
- _____ 3. To increase self-confidence in your first speeches, (a) look at a point just over your audience's heads (b) try to control your posture and gestures for an appearance of greater composure (c) think only about making your audience understand and agree with you (d) try to relax completely and lose all nervousness.
- _____ 4. To establish personal contact with your audience you should (a) skim the audience with your eyes as you talk (b) pick out one section of the audience and direct your words there (c) pick out people in various parts of the audience and talk a short time to each one.
- _____ 5. Poor timing of gestures usually is caused by using (a) gestures planned ahead of time (b) conventional gestures (c) spontaneous gestures.
- _____ 6. Descriptive gestures are (a) a type of conventional gesture (b) imitative of what the speaker is describing (c) based on facial expressions.
- _____ 7. The vocal cords, as their chief function, (a) protect the lungs from cold air, smoke, and other irritants (b) are thin membranes through which air is forced to form the original speech tones (c) are tubes through which air is forced to form the original speech tone.

8. The strength of your voice is dependant on the (a) largeness of your lung capacity (b) control of your breathing (c) strength of your vocal cords.

9. The vocal mechanism (a) consists of the motor, vibrator, and modifiers (b) is limited to the vibrating unit (c) is a name for a group of organs whose function of speech is only secondary.

10. A resonator for the voice is the (a) pharynx (b) diaphragm (c) tongue (d) vocal cords.

11. A voice which sounds as if it is resonated in a deep cave is (a) pectoral (b) nasal (c) guttural.

12. Quantity, one of the elements involved in rate of speaking, means (a) length of time spent in silence between words (b) length of time used in actual utterance of sound in a word (c) increasing or decreasing the loudness of a word or phrase to make it stand out.

13. A sentence which is spoken with long quantity is most likely to express (a) gaiety (b) solemnity (c) surprise.

14. Besides quantity, rate also involves the element of (a) pause (b) degree (c) stress.

15. If a sentence is said with a manner of force that is gradual, it is most likely to express (a) decisiveness (b) dignity (c) earnestness.

16. A speaker who punctuates his speech with "and-or-ah" usually lacks the poise which makes skillful use of (a) force (b) key (c) pause.

17. When you pointedly increase or reduce the loudness of a word or phrase to arouse your audience, you are using (a) variety in degree (b) variety in stress (c) variety in key.

18. It is usually recommended that you normally (a) talk in the lower half of your normal pitch range (b) make a constant effort to lower your voice below its normal pitch (c) experiment in various voice ranges to discover the one most effective for you.

19. As the speaker applies increasing degrees of force the voice tends to (a) rise in pitch and should not be controlled for fear of strain (b) rise in pitch and should be controlled (c) remain on a monotonous pitch and should be raised or lowered to add variety to the speaking tone.

20. In general, a downward inflection (or downward step or slide) suggest (a) doubt (b) certainty (c) suspense.

21. Pausing just before the climax of a story (a) always destroys the built-up of the story (b) sometimes help to create suspense (c) shows an amateur's nervousness in delivering the climatic point.

22. The effective use of vocal climax involves (a) arrangement of ideas in order of increasing importance (b) a successive increase or decrease of elements of force, rate, and pitch (c) a combination of increased force and anticlimax.

23. A gradual application of force is accompanied desirably by (a) higher pitch (b) longer quantity (c) shorter quantity.

24. When you emphasize the loudness of one word in a sentence to give it greater clarity and meaning (as "I told you to go") you are using the element of (a) degree (b) steps and slides (c) stress.

25. Steps and slides are primarily useful for (a) carrying thought content (b) expressing emotional content (c) emphasis and contrast.

26. Too much speed in talking will most likely result in (a) lack of distinctness (b) faulty pronunciation (c) lack of stress.

27. Precision in speech is primarily a matter of using (a) degree of force (b) the modifiers (c) proper pronunciation.

28. The distinct formation of speech sounds is most dependent on the position of the (a) jaw (b) tongue (c) mouth.

29. When sounds like "p", "b", "m", and "f" are pronounced indistinctly it is usually due to the sluggishness of the (a) lips (b) jaw (c) tongue.

30. How loudly you must talk in a room depends on (a) the walls and ceiling materials (b) the number of people present (c) the size of the room (d) a combination of a, b, and c, (e) a combination of a and b.

31. Intelligibility in speech is most improved by (a) prolonged quantity (b) greater use of pause (c) lower pitch.
32. The extemporaneous method means (a) speaking on the spur of the moment (b) writing out the speech in full and memorizing it (c) planning and outlining the speech, but not committing the words to memory.
33. In determining the purpose of a speech you should consider particularly (a) the appropriateness of the subject (b) the response desired from the audience (c) the interest and truth of the materials available on the subject.
34. In gathering materials for a speech, you should (a) survey the subject first in magazines, newspapers, etc. (b) begin with your own knowledge of the subject and supplement with additional materials (c) rely on your own knowledge of the subject.
35. The first step recommended for practicing a speech aloud is (a) practice the speech without outline or manuscript (b) follow the outline or manuscript (c) lay aside the outline or manuscript and glance at it when you forget.
36. Determining the specific purpose of a speech means (a) phrasing an exact title for the speech which will specify content (b) determining the exact thing the speaker wants his audience to do, feel, or understand (c) deciding whether the speech is to stimulate, inform, convince, actuate, or entertain.
37. Descriptive gestures are (a) a type of conventional gesture (b) imitative of what the speaker is describing (c) based on facial expressions.
38. The speech to actuate or evoke action (a) uses a technique completely different from other speeches (b) uses some techniques of the speech to convince (c) is different from the speech to convince or stimulate in the degree of reaction sought from the audience.
39. The general end of a speech with the title "The Democratic Form of Government Is Best" would probably be (a) to inform (b) to actuate (c) to convince.

40. Suppose that you can speak for only five minutes in favor of building a new clinic to a neighborhood group hostile to the proposal. Would you most likely try to get the audience to (a) sign a petition in favor of the clinic? (b) postpone hostile action until the matter can be discussed thoroughly? (c) change your listeners' attitude by making them realize that the clinic is desperately needed in this spot?

41. Too much speed in talking will most likely result in (a) lack of distinctness (b) faulty pronunciation (c) lack of stress.

42.

43. Choose three. Students frequently make mistakes in

44. choosing subjects which are too (a) profound (b) timely (c) easy (d) overworked (e) humorous (f) broad (g) unusual (h) controversial.

45. The best way, if possible, to learn what will interest your audience is to (a) ask some of those you know will be in the audience (b) gain information from your own observations (c) consider what would interest you.

46. Of the following topics, the most appropriate for a fifteen-minute talk to stimulate a group of college professors would be (a) "What the American Flag Means to All of Us" (b) "The Current Shortage of College Teachers" (c) "We Prepare Youth for Their Future" (d) "The History of Education in the United States."

47. You are to present a talk to persuade a group of college men that the number of years for universal military training should be increased. The majority of your audience will most probably be (a) interested in the situation but hostile toward the proposed belief (b) favorable but not aroused (c) apathetic to the situation.

48. In the above situation, you would probably (a) have to acquaint your audience with the definition and basic idea of UMT (b) assume some knowledge on the part of your audience and concentrate on a new angle (c) be able to discuss technical aspects of military training.

49. If your audience has a condescending attitude toward you, the best approach would probably be to (a) make it clear that the beliefs you express are only your own opinions (b) use humor, particularly that which is at your own expense (c) refer to your own accomplishments whenever you can (d) let the soundness of your facts and your grasp of them speak for you.
50. Which of the above approaches is recommended for use with an audience that feels hostility toward you as a speaker? (a) (b) (c) or (d).
51. At the beginning of the speech, you usually must (a) arouse your audience from physical and mental inertia (b) satisfy their expectancy and anticipation (c) make them relax their physical and mental tenseness.
52. "Give money to underprivileged children" will most likely appeal to the motive of (a) imitation (b) sympathy (c) companionship.
53. The motive appeal in the above question is based on the primary motive of (a) freedom from external restraint (b) preservation and increase of self-esteem (c) preservation of the human race.
54. Which of the following is not a primary motive? (a) sex attraction (b) preservation of the human race (c) freedom from external restraint (d) preservation of power and authority.
55. Which of the following is not a motive appeal? (a) self preservation (b) sympathy (c) revulsion (d) objectivity (e) independence.
56. In selecting motive appeals for a speech, it is usually wise to (a) use as many strong appeals as can be applied to the subject (b) use only two or three strong appeals and any others incidental (c) examine the interests of your audience and use as many strong motive appeals as apply to their desires and interests.
57. The recommended style of delivery for public speaking is (a) oratorical (b) conversational (c) oracular.

58. When you classify material on the basis of the time to which it refers, you are using the (a) topical method (b) chronological method (c) climactic method (d) causal method.
59. Which of these data are not essential to a note card? (a) exact source of information (b) accurate label of recorded material (c) purpose of your talk (d) classification of material.
60. Forms of support are the (a) basic thought-skeleton of your speech (b) criteria on which your speech is based (c) materials used to amplify, clarify, or prove a statement.
61. The general end of the speech to stimulate is to (a) change the attitude of the audience (b) arouse emotion in the audience (c) prompt the audience to action.
62. Specific instances are (a) statistics (b) condensed forms of factual illustrations (c) narratives describing in detail specific events as they actually occurred.
63. When using statistics it is usually wise to (a) present large statistics in approximate round numbers for better understanding (b) give your audience the exact figure for a greater feeling of reality (c) give the precise figure if it is under one million.
64. The best method of assembling proof to use with an audience that is hostile to your idea is the (a) didactic method (b) emphatic method (c) method of implication.
65. Which of the following is not an attention factor? (a) familiarity (b) loyalty (c) reality (d) activity.
66. The factors of attention include (a) pride (b) humor (c) curiosity (d) revulsion.
67. In combining attention factors with the forms of support (a) one attention factor is always dominant (b) attention factors often overlap and combine in a single appeal (c) the attention factor is a separate bit of material.
68. Factors of attention help the speaker to make his audience react with (a) voluntary attention (b) involuntary attention (c) forced attention.

69. Which of the following is not characteristic of good outline form? (a) subordination (b) brevity (c) indantation (d) consistent symbols.
70. If you were describing a series of parallel reasons why a clinic should be established in a certain neighborhood you would probably use the sequence of (a) special topical (b) cause-effect (c) time.
71. When you use the same sentence structure and a similar type of phraseology in each of a series of main points, you are using (a) senciseness (b) parallelism (c) vividness.
72. Beginning the speech with a reference to the subject or problem and then plunging directly into the speech is a good method when your audience is (a) apathetic (b) hostile (c) vitally interested.
73. The rhetorical question is a device where the speaker (a) asks a question and supplies the answer immediately (b) leaves the question to be answered in the listener's own minds (c) asks a question in the attention step and always answers it in the need step.
74. When a quotation suggests pointedly the attitude or action the speaker wants taken, the speaker uses it (a) in the beginning of the speech (b) at the end of the speech (c) either place.
75. The summary as an ending for the speech is (a) equally useful whether the purpose is to convince or inform (b) used only at the end of the speech to inform (c) used only at the end of the satisfaction step in the speech to inform.
76. Inducement as a speech ending is most useful for speeches (a) to actuate (b) to entertain (c) to stimulate.
77. The chief purpose of most advertisements is (a) to satisfy (b) to inform (c) to actuate (d) to stimulate.
78. One of the methods suggested for developing the action step is (a) ramification (b) inducement (c) initial summary (d) poinying.
79. Word meaning may be derived from the (a) type of imagery developed (b) number of syllables in the word (c) sound of the word.

APPENDIX D

AMERICAN SPEECH ASSOCIATION SPEECH PROFILE PART II
TEST "B"

Select the best answer:

1. The speech to entertain (a) is always developed as a one-point (b) sometimes assumes the structure of the five steps of the motivated sequence (c) always assumes the structure as well as the psychological effect of an attention step.
2. The speech to entertain should not (a) preserve a definite unity of thought (b) be impromptu so it may be adapted to the listeners (c) use peculiar traits of people as subject matter (d) portray the incongruity of situations.
3. Saying something in such a way that the opposite meaning is obviously implied is called (a) unexpected turns (b) irony (c) burlesque.
4. The organization of the speech to entertain may consist of (a) only the attention step (b) the attention and need steps (c) the visualization step (d) the satisfaction and action steps.
5. The speaker whose object is to inform should (a) relieve the weight of his speech occasionally with humor (b) not break the thought direction of his speech by interjecting a distracting humorous element (c) at times use a loose organization for the sake of interest.
6. If you were to present a report to a group of superiors who engaged you to make a special investigation, you would probably develop the need step by (a) just briefly reminding your audience of the need for the report (b) building your need step on the basis of curiosity (c) appealing to your audience's interest by showing how your information will be of special value to them.
7. In the above situation you would probably handle the attention step by (a) omitting it (b) referring to the subject (c) using a startling statement or an unusual illustration.
8. A device especially emphasized in the speech to inform is a (a) clear transitions (b) imagery (c) the yes-response technique.

9. The final summary in the speech to inform (a) can be omitted if the speech is short and the information made clear by good organization and visual aids (b) should repeat the same material as the initial summary phrased differently (c) restates the main points of the speech with any important implications or conclusions.
10. In the speech to inform the action step is (a) always omitted (b) used to introduce graphic material (c) occasionally used.
11. In the speech to stimulate you should (a) never make your speech trite by using a slogan (b) use a slogan whenever possible (c) always begin your speech with a slogan.
12. An important characteristic of the speech to stimulate is (a) strong motivation (b) comparison (c) the this-or-nothing technic.
13. Kinesthetic imagery might picture feelings of (a) nausea (b) dizziness (c) hunger (d) muscle strain.
14. Which of the following is not a type of imagery?
(a) olfactory (b) organic (c) didactic (d) kinesthetic.
15. In the speech to stimulate one of the most important characteristics of content is (a) appeal to dominant motives of the audience (b) impressive language (c) frequent use of humor.
16. The basic motivation for human action is (a) reasoning based on proof (b) appeal to people's dominant motives (c) intellectual conviction.
17. Proof of workability of a proposal is most effective when presented in the form of (a) explanation (b) personal opinion (c) actual examples (d) questions.
18. Criteria in a speech to convince (a) appear only in the need step (b) are set up in the need step and proved in the satisfaction step (c) are set up and proved in the satisfaction step.
19. An assumption which expresses a point of view or purpose is (a) "intentional" (b) a priori (c) logical.

20. In a speech entitled "Fraternities Are a Desirable Part of College Life," you are using (a) a proposition of fact (b) a proposition (c) no particular policy.

21. If you were to support the subject given in the above question by stating that living in interdependence with others teaches you cooperation and, therefore, fraternity life teaches you cooperation, you would be reasoning from (a) example (b) axiom (c) causal relation.

22. In the above question if you wanted to check the strength of your support, which of the following questions would you ask yourself: (a) Is the rule itself true? (b) Are there enough examples for a thorough sampling? (c) Has the cause been mistaken for the result?

23. In the speech to convince, to handle the audience apathetic to the situation, your best method of developing the attention and need steps would be to (a) hit hard at a vital point in the listeners' self-interest (b) secure agreement on a criterion (c) refer to the problem and point out the causes.

24. If you had an audience interested in the situation but hostile to the proposal, which of the above approaches would you use? (a) (b) or (c)?

25. When the speaker anticipates objections from his listeners to the course of action he proposes, he should (a) stop in the course of the speech to ask questions (b) try to incorporate answers to the objections in the satisfaction step of his speech (c) arrange for a question and answer period after the speech.

26. The best technique to use with an audience hostile to belief in the existence of a problem is the (a) this-or-nothing (b) yes-response (c) problem-solution.

27. The best way for a speaker to retain prestige when he is faced with a question he cannot answer is to (a) merely admit his ignorance simply and with dignity (b) refer his questioner to a source of information with the explanation that time does not allow for a full answer (c) admit his ignorance and if possible refer his questioner to a source of information.

28. A speaker is justified in (a) taking an "ironic dig" at a questioner who asks a foolish question (b) using sarcasm if the questioner argues with him because of personal prejudice (c) poking fun if the questioner is bombastic or self-important.
29. If a valid question is raised against your proposal you should not (a) modify your proposal to meet the objection (b) attack the listener's reasoning (c) point out the benefits of your proposal and show how they outweigh the disadvantages.
30. A speaker should never (a) allow the questioning to wander away from the subject of the speech (b) answer a question with a question (c) point out the questioner's fallacy of reasoning.
31. The typical situation for giving a speech of courtesy does not include (a) presenting awards or gifts (b) accepting awards or gifts (c) responding to a welcome or greeting.
32. A device especially emphasized in the speech to inform is (a) clear transitions (b) imagery (c) the yes-response technic.
33. The place in the speech of courtesy to express anticipated pleasure in having guests present, being present as a guest, or using a gift is in the (a) visualization step (b) attention step (c) satisfaction step (d) action step.
34. The speech to accept nomination for an office is developed primarily like a speech of (a) courtesy (b) action (c) tribute.
35. The apparent object of the goodwill speech is to (a) convince (b) actuate (c) inform.
36. The hidden object of the goodwill speech is to (a) inform (b) actuate (c) stimulate or convince.
37. Withholding a name until the end of the nominating speech is for the purpose of (a) surprise ending (b) avoiding premature "demonstrations."

38. According to Quintilian and other great critics throughout the ages, a speaker's most powerful quality is his (a) thorough knowledge of his subject (b) integrity of character (c) strong appeal to people's interests (d) mastery of words.

39. To adapt yourself at first to participating in classroom discussion, you should (a) comment on every topic that arises (b) listen to other participants most of the time until you get the feeling of participation (c) remain silent if the subject of discussion does not interest you (d) act alert even when not speaking.

40. The rhetorical tradition emphasizes (a) delivery (b) form and content (c) attitudes of the audience.

41. The modern study of speech in the United States recommends the (a) psychological approach (b) eclectic approach (c) dynamic self-expression approach.

42. Fill in the column on the right from the letters of the left column.

A. Plato
B. Aristotle
C. Quintilian
D. Cicero
E. Corax

1. _____ wrote the first systematic presentation of the principles of public speech.
2. _____ was a great Roman orator whose speeches still serve as models.
3. _____ studied under Plato and organized existing knowledge about speech into usable form.
4. _____ emphasized in his Dialogues, truth and moral purpose in speech.
5. _____ recognized the importance of psychology in understanding the audience.
6. _____ believed that the great orator was always the good and able man speaking well.
7. _____ emphasized composition and delivery in The Orator and On Oratory.

43. The circular response begins with (a) ideas (b) language (c) the audience.

44. The best technique to use with an audience hostile to belief in the existence of a problem is the (a) this-or-nothing (b) yes-response (c) problem-solution.

45. Speakers with a tendency to mumble can best improve their speech by (a) more energetic manipulation of the modifiers (b) practicing controlled breathing (c) speaking more loudly.

46. The erotund quality in the voice is (a) a thin, high-pitched tone used in mimicry (b) the quality which occurs in average conversation (c) a more ringing, increased tone recommended for public address.

47. The best way to practice vocal variety is to (a) drill separately on each of the elements of force, rate, and pitch (b) read aloud passages of prose or poetry and develop a feeling for rate, pitch and force (c) listen to the vocal variety of a good speaker.

48. You should stretch out your syllables (a) at all times (b) particularly during an exciting narrative (c) when you want to emphasize an important point.

49. Which of the following speech types makes the greatest use of strong emotional appeal? (a) speech to convince (b) speech to entertain (c) speech to stimulate.

50. Most current periodicals furnish (a) a carefully edited, unprejudiced record of facts (b) an index for their subject matter (c) a more accurate record of facts than newspapers.

51. In recording and filing information, the recommended method is to record (a) information of value on cards and file them according to a convenient classification for further re-sorting (b) only direct quotations and statistics on cards, and use a notebook for facts referred to less often (c) any information of value on cards and file always in chronological order.

52. A form of support which is powerful proof is (a) hypothetical illustration (b) comparison (c) statistics.

53. To present proof of an idea, you would least likely use (a) testimony (b) statistics (c) comparison (d) specific instances.

54. To show the widespread nature of a situation you would most probably use (a) explanation (b) analogy (c) specific instances.

55. When a speaker talks about something that is a threat to the health of the members of the audience, the factor of attention (interest) employed is primarily (a) reality (b) novelty (c) the vital.
56. Which of the following is not characteristic of good outline form? (a) complete sentences for all main points and subpoints (b) logical subordination (c) each statement a paraphrase of a paragraph in the speech (d) uniform indenture for corresponding symbols.
57. Subpoints arranged under main points (a) take the place of forms of support (b) must be clarified, proven, or illustrated by at least one of the forms of support (c) add to the substance rather than the structure of the speech.
58. "The Red Cross needs our help. I, for one, pledge my aid." This speech ending is an example of (a) inducement (b) personal intention (c) summary.
59. The full-content outline (a) can be substituted for by writing the speech out in full (b) states all the main points and subpoints in complete sentences (c) usually does not require that the points be written out in full sentences.
60. In the skeleton outline the specific purpose of the speech should appear in the section (a) under the opening statement (b) before the opening statement (c) under the action step where you emphasize your purpose.
61. The outline the speaker should have fixed in his mind when he practices and gives the speech is the (a) full-content outline (b) technical plot outline (c) key-word outline.
62. In preparing an outline, you should first (a) write out the points in phrases and then revise the phrases into full sentences (b) prepare a technical plot (c) write out the points of your speech in full sentences.
63. The manner of speaking in a courtesy speech should be predominately (a) gracious (b) sincere (c) tranquil.
64. Slang is (a) never acceptable in any speech (b) never acceptable in a serious speech (c) acceptable occasionally in all speeches.

65. In giving a speech of instructions, the speaker should
(a) usually develop the speech by parallel order
(b) sometimes interrupt after explaining each step in the process to ask questions of his listeners (c) always go through the speech without interruptions and then ask questions.
66. The detailed information part of a research report usually (a) is developed like a one-point speech (b) has a flexible but specialized form (c) is developed like other speech of instructions.
67. Organic imagery does not picture feelings of (a) dizziness (b) nausea (c) muscle strain (d) hunger.
68. After-dinner speeches are (a) always humorous and light because a serious speech would be too heavy for an after-dinner audience (b) always speeches to entertain although they may incorporate serious elements (c) often serious speeches to inform, convince, or actuate.
69. The best method for delivering a speech on radio is to (a) speak from notes (b) write out your manuscript exactly as you want it and read it (c) speak impromptu whenever possible.
70. The speaker on radio should never seek vocal variety in sudden changes of (a) pitch (b) degree of force (c) rate.
71. The best way to speak on the radio is to speak (a) by lowering the pitch of your voice because the microphone tends to make your voice sound higher-pitched (b) as you normally do in the lower part of your normal voice range (c) in your normal voice range but increase the force of your voice.
72. In relation to the speaker on radio, the speaker on television should (a) talk with exactly the same vocal limitations (b) speak faster and may vary his force more (c) speak somewhat slower and with greater use of the pause.
73. When a speaker on television does not have an actual audience he should (a) still use as many gestures as he would before an actual audience (b) limit his gestures to the subdued ones of ordinary conversation (c) look at the camera directly and continuously.

74. A business meeting using parliamentary procedure is considered (a) a formal type of discussion (b) an open forum (c) in a category by itself.

75. Integrity as a quality of a good man and a good speaker means primarily (a) the sincerity of his purpose (b) the morality of his private life (c) his ability to present true facts (d) a combination of a and b (e) a combination of a and c.

76. The speaker should use his knowledge of emotional processes to (a) arouse a mild degree of emotion in himself and a strong degree in his audience (b) manage his own emotional reactions and stir the feelings of his listeners (c) minimize his own strong emotional feelings.

77. The method of public speaking today (a) discourages the use of conventional gestures as too mechanical (b) recommends planning gestures ahead of time to use at a certain point in the speech (c) recommends practicing conventional gestures but using them only when they come naturally.

78. An uneven, jerky quality in the voice is most often the result of (a) lack of control of breathing (b) tension in the throat (c) inactive modifiers.

79. The diaphragm is (a) a layer of muscles and tendon tissue (b) the abdominal muscles (c) the rib cage.

80. The normal voice quality is a combination of (a) the aspirate and oral qualities (b) the nasal and oral qualities (c) the pectoral and nasal qualities (d) guttural.

81. To develop acceptable pronunciation, you must (a) follow the acceptable standard of pronunciation in the United States (b) adapt your pronunciation to the standards of a good dictionary (c) modify the standards of the dictionary to agree with the usage of educated people in your community.

82. Fear, imitation, and pride (a) are powerful appeals which should be delivered with directness and force to arouse and impress the audience (b) usually must be disguised and carefully supplemented by other appeals which the audience can publicly admit as the cause of action (c) should be used sparingly in a single speech.

APPENDIX E

SPEECH DEPARTMENT CHAIRMAN INTRODUCTION

My name is Dr. Donald Garner, and I am the head of the Speech Department. About a year ago we were contacted by the American Speech Association and asked to assist them in administering the Speech Profile test to you this evening.

Since early this year, the American Speech Association has been administering this test to high school seniors and those college students who are involved in completing the basic speech course at their respective universities.

I am told that eventually this test may be used to determine which students may be exempted from the college basic speech course. Possibly those who were exempted would be allowed to enroll in either a more advanced speech course or to substitute an elective in place of the required speech course.

Here to administer the Speech Profile test is a representative of the American Speech Association and the speech teacher at our local high school, Mr. Stephen Steinmetz.

APPENDIX F

EXPERIMENTER'S INSTRUCTIONS TO ALL THE SUBJECTS

STEPHEN STURMETZ:

Thank you Dr. Garner, I am glad to be with you this evening. I am sure that you have something else to do this evening, so I will be as brief as possible so that we can all get out of here as soon as possible.

The Speech Profile test that you will take this evening is being administered on a nationwide basis this year. There are several versions of this test being used, and as a result of all of this testing, a standardized version or versions will eventually emerge.

You will be given a sheet which contains your name which has been placed in one of four groups. After you find which group you are in, you will see a room number at the top of your group. When you go to your respective classrooms, just have a seat and I will come and give you further instructions and you will take the test at that time.

You may now go to your respective classrooms.

APPENDIX G

INSTRUCTIONS FOR SECTION 1-FA

Fear Appeal and No Ego-Involvement
Test "A"

1. Each of you has just been given the A5A Speech Profile test D-43A.
2. On the top line print your name.
3. Today's date is: July 9, 1969 7/9/69.
4. The location has already been filled in for you.
5. This is section: 1-FA.
6. In just a moment you will start working on booklet "A."
7. I want to point out that you will have approximately ten minutes to work on the booklet, therefore you are not expected to answer all the questions.
8. In addition, the score you make on this test will not affect your grade in 131.
9. You may begin.

Test "B"

1. Time has run out, so please stop working on the test booklet.
2. Pass the test booklet to your right.
3. I have no idea how many questions you completed, but according to the current national average of college and high school students who have taken this test, you should have completed approximately 47% of the questions (that means answer approximately 37 questions) in order to make a passing score.
4. You will have approximately ten minutes to work on this test booklet, therefore you are not expected to answer all of the questions.
5. Print your name on the top line.
6. Also, please print the section number under your name.
7. You may begin.

APPENDIX H

INSTRUCTIONS FOR SECTION 1-EI

**Ego-Involvement and No Fear Appeal
Test "A"**

1. Each of you has just been given the ASA Speech Profile test- D-43A.
2. On the top line print your name.
3. Today's date is: July 7, 1969 7/9/69.
4. The location has already been filled in for you.
5. This is section: 1-EI.
6. In just a moment you will start working on booklet "A."
7. Your respective speech instructors have indicated to me that they would like for me to report your scores on this test to them. They asked me to tell you that the grade you make on this test will count as an hourly test grade in your 131 class.
8. I also want to point out that you will have approximately ten minutes to work on the booklet, therefore you are not expected to answer all of the questions.
9. You may begin.

Test "B"

1. Time has run out, so please stop working on the test booklet.
2. Pass the test booklet to your right.
3. Print your name on the top line.
4. Also, please print the section number under your name.
5. You will have approximately ten minutes to work on this test booklet, therefore you are not expected to answer all of the questions.
6. You may begin.

APPENDIX I

INSTRUCTIONS FOR SECTION 1-EP

**Fear Appeal and Ego-Involvement
Test "A"**

1. Each of you has just been given the ASA Speech Profile test- D-43A.
2. On the top line print your name.
3. Today's date is: July 7, 1969 7/9/69.
4. The location has already been filled in for you.
5. This is section: 1-EP.
6. In just a moment you will start working on booklet "A."
7. Your respective speech instructors have indicated to me that they would like for me to report your scores on this test to them. They asked me to tell you that the grade you make on this test will count as an hourly test grade in your 131 class.
8. I also want to point out that you will have approximately ten minutes to work on the booklet, therefore you are not expected to answer all of the questions.
9. You may begin.

Test "B"

1. Time has run out, so please stop working on the test booklet.
2. Pass the test booklet to your right.
3. I have no idea how many questions you completed, but according to the current national average of college and high school students who have taken this test, you should have completed approximately 47% of the questions (that means answer approximately 37 questions) in order to make a passing score.
4. Print your name on the top line.
5. Also, please print the section number under your name.
6. You will have approximately ten minutes to work on this test booklet, therefore you are not expected to answer all of the questions.
7. You may begin.

APPENDIX J

INSTRUCTIONS FOR SECTION 1-CG

No Fear Appeal and No Ego-Involvement
Test "A"

1. Each of you has just been given the ASA Speech Profile test- D-34A.
2. On the top line print your name.
3. Today's date is: July 9, 1969 7/9/69.
4. The location has already been filled in for you.
5. This is section: 1-CG.
6. In just a moment you will start working on Booklet "A".
7. I want to point out that you will have approximately ten minutes to work on the booklet, therefore you are not expected to answer all the questions.
8. In addition, the score you make on this test will not affect your grade in 131.
9. You may begin.

Test "B"

1. Time has run out, so please stop working on the test booklet.
2. Pass the test booklet to your right.
3. Print your name on the top line.
4. Also, please print the section number under your name.
5. You will have approximately ten minutes to work on this test booklet, therefore you are not expected to answer all of the questions.
6. You may begin.

APPENDIX K
POSTTEST DATA

[illegible]

POSTTEST DATA--Continued

Subject	Semantic Differential Test					Ego Positional Choice			Ego Latitude			
	Tests	College Education	Grades	Performance on a Test	Working Against the Clock	Fear of Failure	Good Grade in Speech Class	College Education	High Grade Average	Good Grade in Speech Class	College Education	High Grade Average
37.	17	16	17	23	6	9	2	1	1	7	3	3
38.	21	24	17	21	10	10	3	4	3	5	4	4
39.	6	9	4	5	4	14	2	2	2	8	6	2
40.	19	19	20	17	18	16	2	1	2	3	3	2
41.	10	13	16	13	5	6	9	2	2	3	4	4
42.	12	18	13	20	9	10	1	1	1	4	3	3
43.	14	17	11	13	8	6	2	1	2	3	3	3
44.	13	11	12	11	5	10	9	1	3	1	1	1
45.	10	13	10	8	4	4	2	4	2	2	7	3
46.	20	16	17	16	7	10	2	2	2	8	2	3
47.	17	17	16	15	8	11	9	4	3	8	4	9
48.	18	17	17	17	16	14	1	1	1	4	3	3
49.	14	15	13	14	4	10	1	1	2	6	3	6
50.	16	16	16	18	14	13	---	---	---	4	3	3
51.	17	12	14	17	12	15	3	1	2	2	4	3
52.												
53.	9	15	11	7	4	7	9	3	2	8	3	3
54.	22	22	20	27	13	18	4	3	2	3	3	3
55.	15	16	12	13	12	8	3	1	2	3	3	3
56.	21	24	18	18	10	16	8	5	4	5	5	5
57.	9	14	9	5	7	7	2	2	2	2	1	1
58.	14	15	7	10	8	7	5	2	6	3	3	2
59.	19	15	15	11	9	8	9	2	4	5	4	3
60.	10	16	13	14	12	12	3	3	3	1	1	1
61.	17	17	16	17	4	4	4	1	1	7	3	3
62.	17	18	11	18	9	10	4	1	3	3	4	2
63.	10	21	11	16	10	7	2	2	5	3	4	7
64.	14	13	12	16	10	---	3	1	3	3	3	4
65.	10	20	11	7	4	4	2	3	3	3	3	2
66.	11	11	19	13	7	9	2	3	4	8	3	3
67.	20	20	16	15	12	11	1	4	3	4	4	4
68.	17	12	14	17	6	7	3	1	1	2	3	3
69.	15	18	13	18	12	12	1	1	2	3	3	2

APPENDIX L

POSTTEST BATTERY

Instructions:

Today we would like to ask your cooperation in helping us to determine current trends in opinions and the meaning of certain things to you. Your responses in this booklet will not, in any way, affect your grade in this class, nor will you be asked to explain any of your responses. Please make your judgments on the basis of what these concepts mean to you. On the following pages you will find several concepts and beneath each concept a set of scales. You are to judge the concept on each of these scales in order. Here is how to use the scales:

If you feel the concept (MOTHER) above each set of scales is extremely related to one end of the scale, you should place your mark as follows:

MOTHER

Strong X : : : : : Weak or
Strong : : : : : X Weak

If you feel that the concept is quite closely related to one or the other end of the scale you should place your mark as follows:

Smart : : : : : X : : : : Dumb or
Smart : X : : : : : : : Dumb

If the concept seems only slightly related to one side then you should place your mark as follows:

Valid : : : X : : : : Invalid or
Valid : : : : : X : : : Invalid

The direction toward which you check of course, depends upon which of the two ends of the scale seems most characteristic of the thing you are judging.

If you consider the concept of judgement to be neutral on the scale, both sides of the scale equally associated with the concept, or if the scale is completely irrelevant, unrelated to the concept, then you should place your mark in the middle space:

Blue _____ : _____ : _____ : X : _____ : _____ : _____ Red

IMPORTANT: (1) Place your mark in the middle of the space, not on the boundaries:

 this not this
 _____ : X : _____ : X : _____ :
 _____ : X : _____ : X : _____ :

(2) Select a response for every concept---do not omit any scale.

(3) Do not put more than one mark on each scale.

As you make your judgements, work as rapidly as possible. Do not try to remember how you marked particular items or scales in prior judgements. Make each concept a separate and independent judgement. Do not worry or puzzle over individual scales. It is your first impression in which we are interested; however, do not be careless, we want true impressions.

TESTS

Unfair	_____	:	_____	:	_____	:	_____	:	_____	:	Fair
Active	_____	:	_____	:	_____	:	_____	:	_____	:	Passive
Dirty	_____	:	_____	:	_____	:	_____	:	_____	:	Clean
Emotional	_____	:	_____	:	_____	:	_____	:	_____	:	Unemotional
Tasty	_____	:	_____	:	_____	:	_____	:	_____	:	Distasteful
Calm	_____	:	_____	:	_____	:	_____	:	_____	:	Excited
Pleasant	_____	:	_____	:	_____	:	_____	:	_____	:	Unpleasant
Little	_____	:	_____	:	_____	:	_____	:	_____	:	Big
Worthless	_____	:	_____	:	_____	:	_____	:	_____	:	Valuable
Reputable	_____	:	_____	:	_____	:	_____	:	_____	:	Disreputable

COLLEGE EDUCATION

Unfair	_____	:	_____	:	_____	:	_____	:	_____	:	Fair
Active	_____	:	_____	:	_____	:	_____	:	_____	:	Passive
Dirty	_____	:	_____	:	_____	:	_____	:	_____	:	Clean
Emotional	_____	:	_____	:	_____	:	_____	:	_____	:	Unemotional
Tasty	_____	:	_____	:	_____	:	_____	:	_____	:	Distasteful
Calm	_____	:	_____	:	_____	:	_____	:	_____	:	Excited
Pleasant	_____	:	_____	:	_____	:	_____	:	_____	:	Unpleasant
Little	_____	:	_____	:	_____	:	_____	:	_____	:	Big
Worthless	_____	:	_____	:	_____	:	_____	:	_____	:	Valuable
Reputable	_____	:	_____	:	_____	:	_____	:	_____	:	Disreputable

GRADES

Unfair _____ Fair
 Active _____ Passive
 Dirty _____ Clean
 Emotional _____ Unemotional
 Tasty _____ Distasteful
 Calm _____ Excited
 Pleasant _____ Unpleasant
 Little _____ Big
 Worthless _____ Valuable
 Reputable _____ Disreputable

Your Performance on a Test

Unfair _____ Fair
 Active _____ Passive
 Dirty _____ Clean
 Emotional _____ Unemotional
 Tasty _____ Distasteful
 Calm _____ Excited
 Pleasant _____ Unpleasant
 Little _____ Big
 Worthless _____ Valuable
 Reputable _____ Disreputable

WORKING AGAINST THE CLOCK

Unfair	Fair
Active	Passive
Dirty	Clean
Emotional	Unemotional
Tasty	Distasteful
Calm	Excited
Pleasant	Unpleasant
Little	Big
Worthless	Valuable
Reputable	Disreputable

Fear of Failure

Unfair	:	:	:	:	:	:	Fair
Active	:	:	:	:	:	:	Passive
Dirty	:	:	:	:	:	:	Clean
Emotional	:	:	:	:	:	:	Unemotional
Tasty	:	:	:	:	:	:	Distasteful
Calm	:	:	:	:	:	:	Excited
Pleasant	:	:	:	:	:	:	Unpleasant
Little	:	:	:	:	:	:	Big
Worthless	:	:	:	:	:	:	Valuable
Reputable	:	:	:	:	:	:	Disreputable

On the following pages you will find a series of nine statements about a given subject. Circle the one statement which comes closest to your attitude or opinion on that particular topic.

- A. The achievement of a good grade in _____ class is absolutely essential for my best interests.
- B. On the whole my best interests will be served by achieving a good grade in _____ class.
- C. It seems that my best interests would be better served if I achieved a good grade in _____ class.
- D. Although it is hard to decide, it is probable that my best interests may be better served if I achieve a good grade in _____ class.
- E. From my point of view, it is hard to decide whether or not a good grade in _____ class is important.
- F. Although it is hard to decide, it is probable that my best interests may not be served if I achieve a good grade in _____ class.
- G. It seems that my best interests would not be better served if I achieved a good grade in _____ class.
- H. On the whole my best interests would not be served by achieving a good grade in _____ class.
- I. The achievement of a good grade in _____ class is not absolutely essential for my best interests.

- A. The completion of a college education is absolutely essential for my best interests.
- B. On the whole my best interests will be served by completing a college education.
- C. It seems that my best interests would be better served if I completed a college education.
- D. Although it is hard to decide, it is probable that my best interests may be better served if I complete a college education.
- E. From my point of view, it is hard to decide whether or not a college education is important.
- F. Although it is hard to decide, it is probable that my best interests may be better served if I do not complete a college education.
- G. It seems that my best interests would be better served if I did not complete a college education.
- H. On the whole my best interests will be served by not completing a college education.
- I. The completion of a college education is absolutely not essential for my best interests.

- A. The achievement of a high grade average in college is absolutely essential for my best interests.
- B. On the whole my best interests will be served by achieving a high grade average in college.
- C. It seems that my best interests would be better served if I achieved a high grade average in college.
- D. Although it is hard to decide, it is probable that my best interests may be better served if I achieve a high grade average in college.
- E. From my point of view, it is hard to decide whether or not a high grade average is important.
- F. Although it is hard to decide, it is probable that my best interests may not be better served if I achieve a high grade average in college.
- G. It seems that my best interests would not be better served if I achieved a high grade average in college.
- H. On the whole my best interests would not be served by achieving a high grade average in college.
- I. The achievement of a high grade average in college is absolutely not essential for my best interests.

On the following pages you will find a series of nine statements about a given subject. Circle all of the statements which are not objectionable to your attitude on that particular topic. Or, to put it another way, circle all of the statements that you can agree with.

- A. The achievement of a good grade in _____ class is absolutely essential for my best interests.
- B. On the whole my best interests will be served by achieving a good grade in _____ class.
- C. It seems that my best interests would be better served if I achieved a good grade in _____ class.
- D. Although it is hard to decide, it is probable that my best interests may be better served if I achieve a good grade in _____ class.
- E. From my point of view, it is hard to decide whether or not a good grade in _____ class is important.
- F. Although it is hard to decide, it is probable that my best interests may not be served if I achieve a good grade in _____ class.
- G. It seems that my best interests would not be better served if I achieved a good grade in _____ class.
- H. On the whole my best interests would not be served by achieving a good grade in _____ class.
- I. The achievement of a good grade in _____ class is not absolutely essential for my best interests.

- A. The completion of a college education is absolutely essential for my best interests.
- B. On the whole my best interests will be served by completing a college education.
- C. It seems that my best interests would be better served if I completed a college education.
- D. Although it is hard to decide, it is probable that my best interests may be served better if I complete a college education.
- E. From my point of view, it is hard to decide whether or not a college education is important.
- F. Although it is hard to decide, it is probable that my best interests may be better served if I do not complete a college education.
- G. It seems that my best interests would be better served if I did not complete a college education.
- H. On the whole my best interests will be served by not completing a college education.
- I. The completion of a college education is absolutely not essential for my best interests.

- A. The achievement of a high grade average in college is absolutely essential for my best interests.
- B. On the whole my best interests will be served by achieving a high grade average in college.
- C. It seems that my best interests would be better served if I achieved a high grade average in college.
- D. Although it is hard to decide, it is probable that my best interests may be better served if I achieve a high grade in college.
- E. From my point of view, it is hard to decide whether or not a high grade average is important.
- F. Although it is hard to decide, it is probable that my best interests may not be better served if I achieve a high grade average in college.
- G. It seems that my best interests would not be better served if I achieved a high grade average in college.
- H. On the whole my best interests would not be served by achieving a high grade average in college.
- I. The achievement of a high grade average in college is absolutely not essential for my best interests.

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ABSTRACT

THE EFFECTS OF EGO-INVOLVEMENT AND FEAR APPEALS
UPON TASK PERFORMANCE

by

STEPHEN STEINMETZ

B. S. in Ed., Eastern Illinois University, 1967

ABSTRACT OF A THESIS

Submitted in partial fulfillment of the requirements
for the degree of Master of Arts at the Graduate School of
Eastern Illinois University

CHARLESTON, ILLINOIS
1969

ABSTRACT

Researchers and scholars in the fear appeal area have been unable to determine what factor or factors make fear appeals effective. Two studies, Hewgill and Miller (1965) and Powell (1965), suggest that the personal involvement of the audience with who or what is threatened is the factor which causes fear appeals to be effective. If ego-involvement is the personal involvement factor indicated by these studies, then it would appear to be the key to fear appeal effectiveness. Therefore, the present investigation was designed to experimentally compare the effects of ego-involvement and fear appeals upon task performance.

Sixty nine undergraduates enrolled in the basic speech course at Eastern Illinois University served as subjects. They were divided randomly into four groups, each of which took a two part test on basic speech fundamentals. The dependent variable was each subject's performance (the number of questions answered during the ten minute time period) on the test. The independent variables, fear appeal and ego-involvement, were introduced through the instructions for parts "a" and "A" of the test respectively.

Part "A" of the test consisted of 79 questions. On part "A" of the test the ego-involvement variable consisted of informing the subjects in two of the experimental sections that the score that they made on the test would count as an hourly examination grade in their basic speech class. The two non ego-involved sections were told that their scores would not affect their grades in basic speech class. The subjects in all sections were given 10 minutes to work on test "A".

At the end of the first testing period the subjects were given test

"A". Included in the instructions for test "B" was the fear appeal variable. The two fear appeal sections were told that in order to pass test "A", the national average indicated that they would have had to answer 37 questions. The experimenter had already determined that the majority of the subjects would be unable to answer this number of questions in the time allowed. The no fear appeal sections were told nothing about how they were doing on the tests.

The results from the two tests were tabulated and the difference between each subject's performance on each test was calculated. An analysis of variance was completed on this data. The results were not statistically significant.

In order to verify the independent variables, a posttest battery was given. The posttest battery consisted of six semantic differential scales, three ego-involvement positional choice scales, and finally, three ego-attitude scales. The results of this data was recorded in tabular form. An analysis of variance were completed on this data. The results of this analysis were not statistically significant.

The results indicated the following: (1) the subject of grades did not act as an ego-involved topic with the subjects tested; (2) performing up to the national average did not act as a fear appeal with the subjects tested; and (3) after checking all possible design errors, the unlikely option that ego-involvement and fear appeal have no predictable effect on communication seems less unlikely.