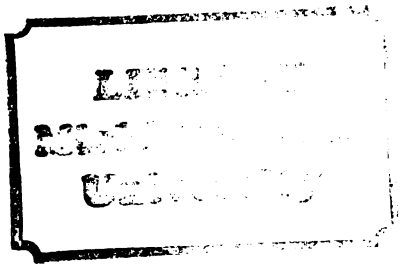
THE EFFECTS OF TASK AND SOURCE CREDIBILITY ON EVIDENCE USAGE

Thesis for the Degree of M. A.
MICHIGAN STATE UNIVERSITY
SANDRA L. FILION
1972

THESIS



ABSTRACT

THE EFFECTS OF TASK AND SOURCE CREDIBILITY ON EVIDENCE USAGE

By

Sandra L. Filion

This study sought to assess the effects of high and low source credibility and of certain tasks on a descriptive set of evidence categories.

Undergraduate students at Michigan State University completed a pretest questionnaire to: 1) assess their initial attitudes on two issues considered to be salient and ego-involving--drugs and busing, 2) gain source credibility ratings for nine individuals. Two high credible and two low credible sources were chosen for the experiment.

Experimental subjects read six messages of three types, truth, desirability and definition (three pro and three con) under one of the two propositions. One of four source conditions was included in each questionnaire: 1) no source, 2) role source, 3) high credible known source, and 4) low credible known source. In each source condition subjects completed one of three tasks: 1) Informative Task, to rank order the six messages according to degree of helpfulness in understanding the proposition, 2) Belief Task, to rank order the six messages according to degree of helpfulness in taking a stand on the proposition, and 3) Categorization Task, to categorize the six messages into three categories, truth, desirability, and definition. In the

no source condition subjects were asked to choose six sources from the list of nine and match them to the message each source most probably stated.

Seven hypotheses were tested in this investigation: 1) Given the Informative Task, a greater than chance frequency of subjects will rank order the messages in the following descending order of importance: a) truth, b) desirability, and c) definition. 2) Given the Belief Task, a greater than chance frequency of subjects will rank order the messages in the following descending order of importance: a) desirability, b) truth, and c) definition. 3) Given the Categorization Task, a greater than chance frequency of subjects will rank order the messages in the following manner: a) the two truth messages in the truth category, b) the two desirability messages in the desirability category, and c) the two definition messages in the definition category. 4) In the next three hypotheses it was predicted that a greater proportion of the subjects in the no source condition than in any other source condition would perform each respective task as expected. 5) Finally, given the matching task, subjects will have a greater tendency to match high credible sources than low credible sources to messages supporting their initial beliefs.

In order to test hypotheses I, II, and III, an expected frequency distribution of possible message orderings was generated. A criterion ranking was chosen. Of the 78 possible combinations, 13 would include one or less errors (a correct ranking). One would expect the proportion of correct rankings to equal 13/78's within a population of subjects by chance. The proportion of correct rankings was compared against

the expected population proportion. For all three tasks, the results confirmed the hypotheses.

For hypotheses IV, V, and VI, a $\hat{z}$ test for proportions was computed between the proportion of subjects correctly ranking the messages in each of the three conditions involving sources. The results failed to confirm the hypotheses. Attribution of source does not seem to effect the frequency of subjects ranking messages in the predicted orders.

For hypothesis VII the percentage of people matching each of the sources with each message was calculated. The results failed to confirm the hypothesis. Further investigation is needed exploring the direct link between high, neutral, and low credible sources and high, neutral, and low evaluated propositions. Then, we might examine the amount of variance carried by the evidence and by the source.

THE EFFECTS OF TASK AND SOURCE CREDIBILITY ON EVIDENCE USAGE

By

Sandra L. Filion

A THESIS

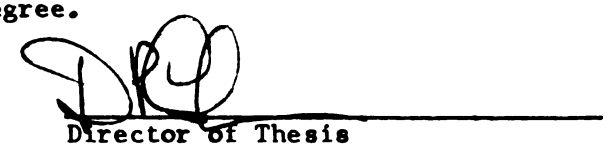
Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF ARTS

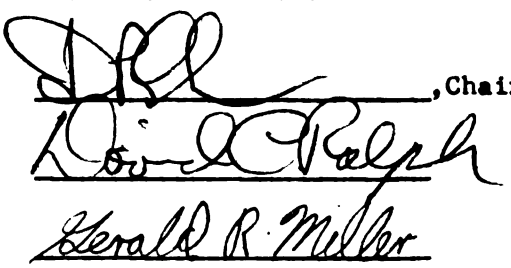
Department of Communication

1972

Accepted by the faculty of the Department of Communication, College of Communication Arts, Michigan State University, in partial fulfillment of the requirements for the Master of Arts degree.



Director of Thesis

Guidance Committee:  , Chairman

ACKNOWLEDGEMENTS

The author wishes to express appreciation to Prof. Donald P. Cushman for his assistance in all phases of this study. His concern and guidance has made graduate study a challenge well met.

Dr. Gerald R. Miller and Dr. David C. Ralph as members of my guidance committee provided the theoretic and methodological balance necessary for a complete approach to the study of human communication.

Dr. C. Edward Wotring deserves special recognition for his invaluable advice in the formulation of the methodology employed in the study.

The author wishes to acknowledge Dena Brunsting for the professional service of typing and final preparation of the manuscript.

A general note of appreciation is extended to the support of family, friends and community of scholars necessary to the completion of such a task.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF APPENDICES

CHAPTER I

INTRODUCTION

Evidence has been defined traditionally in the following manner:

> Evidence may be defined as facts and opinions used as the basis of reasoning. Facts are cases, statistics, and physical objects--phenomena that are observed, described, classified, reported and presented. Opinions are points of view--interpretations and evaluations of facts--held by persons other than the person doing the reasoning. (Hance, Ralph, and Wiksell, 1969)

Many studies in the area of evidence usage have approached the problem on a prescriptive basis. Evidence, defined in the above manner, is evaluated against the formal standard of adequate rational proof. Several researchers have broadened the base of such analyses by descriptively measuring evidence usage. This study will, it is hoped, be another step in that direction.

Purposes of the Study

The purposes of this study are three: 1) to determine the effect of high and low source credibility upon a descriptive set of evidence categories; 2) to determine the effect certain tasks have upon a descriptive set of evidence categories; and 3) to determine the effect of both source credibility and task upon a descriptive set of evidence categories.

Divisions of the Thesis

The divisions of the thesis will be as follows: 1) The remainder of this chapter will concern itself with a) an examination of the problem which gave rise to this study, b) a theoretic and practical rationale for a solution to this problem, and c) a statement of the hypotheses involved in identifying a solution. 2) Chapter II will outline the methodology employed in our inquiry. 3) Chapter III will present the results of our inquiry. 4) Chapter IV will draw some conclusions regarding our inquiry and make suggestions for further research.

Problems Which Gave Rise to our Inquiry

Rhetorical Theory suggests that evidence should be important in persuasion. To build a rational proof, speakers need evidence to establish premises and to lay down foundations for statements from which inferences can be made. In this context, theories of evidence are largely prescriptive, in that statements about evidence are cast in terms of the validity of arguments. Traditionally, theories of rhetoric hold that the proper use of evidence is central to establishing belief in the validity or probable truth of a proposition. In order to empirically establish this relationship numerous studies have been conducted. However, these studies into the effects of evidence present a confusing array of results. First, several studies investigated the effect of evidence-plus-assertion and assertion-only speeches on attitude change. Cathcart (1955), Bostrom and Tucker (1969) and Kline (1969) found that a speech containing evidence and assertion is more effective in changing attitudes than a speech containing only generalization and assertions. On the other hand, Costley (1958) and Wagner (1958) found no significant

difference in attitude change between the same two types of speeches. Second, several studies investigated the effect of evidence-plus-assertion-plus-qualified source and assertion-only speeches on attitude change. Cathcart (1955) and Bostrom and Tucker (1969) found that speeches containing evidence attributed to qualified sources were significantly more effective in changing attitudes than speeches containing only unattributed assertions. Ostermeier (1967) and Whitehead (1971), however, found no significant differences in attitude change between the same two types of speeches. McCroskey (1967) and McCroskey (1970) reported that evidence-plus-assertion-plus-qualified source speeches were significantly more effective in changing attitudes than assertion-only speeches when the speaker was originally perceived as low or moderately credible, but were not significantly more effective when the speaker was perceived as highly credible. One researcher, Bettinghaus (1953), discovered that speeches containing evidence-plus-assertion-plus-qualified source produced significantly more attitude change than speeches containing only evidence-plus-assertion, but his findings have never been replicated. Cathcart (1955), Gilkinson, Paulson and Sikkink (1954), Sikkink (1956) and Bostrom and Tucker (1969) all found no significant differences in attitude change between the two types of speeches. Further, Bostrom and Tucker (1969) reported that a speech containing evidence-plus-assertion-plus-source was significantly <u>less</u> effective in changing attitudes than speeches containing evidence-plus-assertion-plus-source and qualifications (i.e., the "qualified source" treatments noted above) or evidence-plus-assertion alone. This confirmed a similar, but non-significant, trend in the 1955 Cathcart study. Third, several studies investigated the effects of speeches

containing high and low quality evidence on attitude change. Warren (1971) found that speeches containing testimony from highly credible sources produced significantly more attitude change than speeches in which the same testimony was attributed to sources of low credibility. Dresser (1963) and Gardner (1966) found no significant differences in attitude change between messages containing high and low quality evidence. These latter results are consistent with the findings of a study by Harte (1971) in which he discovered that "...audiences are not notably successful at applying the appropriate tests of evidence to material offered as proof of an assertion." Fourth, Wagner (1958) and Ostermeier (1967) manipulated the amount of evidence in experimental messages but found no significant differences in resultant attitude change. Finally, several studies investigated the effects of evidence on variables other than immediate attitude change. McCroskey (1967) reported that in a number of studies a source who was initially perceived as low to moderate in credibility was rated significantly higher in credibility if he included evidence in his speech than if he did not. This finding has been at least partially supported by the studies of Ostermeier (1967) and Whitehead (1971). McCroskey also reports that the inclusion of evidence in a persuasive message resulted in significantly greater delayed attitude change, regardless of the initial credibility of the source. A final discovery by McCroskey was that evidence served as an effective inhibitor to immediate counterpersuasion attempts. These conflicting and negative results demand a re-examination of the relationship of evidence and belief. An analysis of the previously cited research suggest four reasons for the conflicting results: 1) a prescriptive rather than a descriptive approach, 2) inadequate

treatment of task, 3) inadequate treatment of source, and 4) inadequate control of other intervening variables.

One reason for the conflicting results of many evidence studies is the prescriptive approach mentioned in the introduction. Evidence is often evaluated as "satisfactory" or "unsatisfactory" according to tests of logical adequacy. An example of such a prescriptive study is Cathcart (1955). This is an experimental study of the relative effectiveness of four methods of presenting evidence. Evidence is never actually defined but is evaluated against prescriptive standards:

> 1) evidence is the basis from which logical argument is developed, 2) usually, the broader this basis, i.e., the more evidence presented, the more likely it is that proof will be generated, 3) evidence which has been evaluated by the so-called "tests of evidence" is more likely to be valid, and 4) evidence which has been carefully documented is generally more acceptable than undocumented evidence.

This "evidence" is manipulated only in amount, documentation, and qualifications of source. The study results showed that evidence had an effect on changing attitudes, but the relationship was unclear. What factors operate in the relationship between evidence and attitude change cannot be isolated if evidence is arbitrarily defined and held constant in type and usage.

Hance, Ralph, and Wiksell (1969) provide a step forward toward a descriptive analysis of evidence. In the rhetorical tradition they suggest that evidence be evaluated by tests of <u>logical adequacy</u> which are:

> A. Is the evidence clear? To be of value, evidence must be free from ambiguity and from the danger of being misinterpreted.
>
> B. Is the evidence consistent internally? Evidence will be worthless if it has contradictions within itself.

C. Is the evidence consistent with other known evidence? If it is, the speaker can find other evidence to strengthen his point; if not, the new evidence must be stronger than the known evidence.

D. Is the evidence relevant to the matter at hand? Sometimes we can cite evidence that may seem to prove our point but is actually concerned with a different subject.

E. Is the source of the evidence competent? Does the person who presents the testimony possess the physical faculties and mental capacity to make him a competent source of facts and opinions?

F. Is the source of the evidence free from prejudice? Is this person sufficiently objective or disinterested to make him a source we can regard as fair and unbiased?

G. Is the source of the evidence reliable? Is he free from habits of superficial observation, irresponsible assertion, and inconsistent behavior? (p. 99)

However, they also suggest that such tests are not sufficient. How the evidence is received by audiences must also be considered by applying tests of <u>psychological adequacy</u>:

A. Is the evidence in harmony with the beliefs of the listeners? This test does not imply that the speaker should restrict his evidence to what will please his audience, or confirm what may be erroneous beliefs; rather it suggests that the speaker should expect some resistance to evidence that does not coincide with the attitudes, values, and personal beliefs of the audience, and he should take this resistance into consideration when he selects and presents his evidence.

B. Is the source of the evidence a person whom the listeners are willing to accept? While the source may measure up in competence, freedom from prejudice, and reliability, some resistance may be encountered if he does not measure up in social position, party affiliation, profession, and the like. (p. 99)

These tests of psychological adequacy bring us closer to a descriptive approach to evidence. However, evidence is still judged to be "satisfactory" or "unsatisfactory" by the speaker himself.

Miller (1966) provides the best example of a descriptive approach to evidence. Evidence is defined as "those data that are intended to induce a sense of belief in the proposition which the data purportedly support." (p. 25). As this definition shows evidence is conceptualized as a diverse range of materials characterized most precisely by the function they perform. This emphasized the manner in which evidence does affect people rather than the manner in which it ought to affect them.

To this point Miller's approach is acceptable. Evidence must induce a sense of belief in a proposition to be satisfactory in its function. The evidence-assertion link, in other words, should be strong. However, the successfulness of such communication can be more precisely measured by a consideration of task superimposed on proposition and evidence.

The importance of task in influencing behavior has been explored and established extensively. Collins and Guetzkow's model (1964) talks of both interpersonal and task obstacles as determinants of behavior. Thibaut and Kelly (1959) define task as a "problem, assignment, or stimulus complex to which the individual or group responds by performing various overt and covert operations which lead to various outcomes." Shaw's current summary (1971) also isolate the task environment as one of the several environments determinative of behavior. Thus, task has been defined as an important factor in explaining variance in behavior. Two studies which have measured the effects of varying task are Morris (1966) and Hackman (1968). In Morris' study the question investigated was whether tasks perceived as different by members of groups would lead to different interaction patterns and different levels of

perf

pres

Thou

resu

spe

be

fol

man

cul

pro

the

the

He

for

of

goo

re

of

an

va

ad

performance. 3 tasks types, 3 levels of difficulty, and 4 orders of presentation were varied. The 3 tasks were:

1) problem solving tasks involving the implementation of solutions.
2) production tasks involving the generation of highly original solutions.
3) discussion tasks requiring consensus on some socially relevant issue.

Though there were no overall significant differences in activity as a result of varying task type, significant differences were found for specific types of interaction. The conclusion was that tasks may not be considered equivalent, (Cappella, 1971). Hackman (1968) did a follow-up to Morris' study. In three of the seven measures of performance, task type explained more than 40% of the variance. Task difficulty, however, explained less than 8%.

R.M. Gagne (1966) also analyzes the external environment in problem-solving situations. Gagne's analysis isolates the stimuli, the verbal directions, and the instructions as the key dimensions of the external situation. Hackman (1969) continued Gagne's line of study. He defined physical stimuli as physical elements mediated into symbolic form. Verbal direction serves to focus attention on important elements of the situation but not the operations. Instructions provide: 1) the goal, 2) the relevant concepts or rules, 3) the conceptions of the relevant dimensions, and 4) a guide to thinking by reducing the number of alternatives. From these studies it is shown that varying the type and the structural nature of tasks is very important in explaining variance in human behavior. However, task has not been considered adequately in its effects on evidence categorization and usage.

The relationship between source credibility and evidence usage has been shown to be unclear in previously cited studies (p. 3). Some of the most recent writing on the subject done by McCroskey (1969) argues that the effects of source interacting with evidence resulted in previous conflicting research findings in evidence usage. A major theoretic problem in evidence usage is to determine the relationship between evidence and source credibility. Whether source primarily effects evidence, or evidence primarily effects source credibility, or, indeed, if the relationship is interdependent has not been clearly established. Therefore source must be carefully manipulated or controlled in any study of evidence usage.

Several other factors need to be carefully considered in evidence research. McCroskey (1967) indicates that previous exposure to evidence by the receiver may reduce the impact of the evidence on the receiver. Familiarity with evidence should, therefore, be controlled. Also, in several of the evidence studies assertions from the evidence treatments were repeated in no evidence treatments with authority references removed. This resulted in differences in messages length and a redundancy effect. Troldahl, Costello and Robeck (1969) found that redundant messages produce more attitude change than non-redundant messages. Since redundancy results in differential effects it must be controlled.

Theoretic and Practical Solutions

It is necessary to descriptively categorize and evaluate evidence according to the actual patterns employed by subjects. Once these patterns of usage are isolated, evaluation of evidence usage can be done prescriptively, but against a realistic standard. McGuire

(1960), exploring the persuasive effect of dissonance producing messages, accounted for 90% of the variance in attitude change by measuring just two variables: 1) the probability that a set of propositions were true, and 2) the desirability of the consequences of a set of propositions. Infante (1970) and Clark and Hynes (1970) conducted research in which desirability was found to be an important type of evidence. Thus, at least two categories of evidence can be distinguished.

In order to determine whether either evidence category is of importance, a no evidence alternative must be offered. No evidence treatments have been used as controls in research previously, but they have been imprecisely defined. The no evidence treatments usually differed from factual messages only in the deletion of authority references.

A means of descriptively isolating patterns normally used by individuals in evidence usage is to have subjects rank a number of messages of different evidence types according to their utility in helping subjects perform a specific task. In this way evidence usage can be descriptively determined, given certain tasks. Other key factors, such as source, can be manipulated to determine their interrelationship with task in evidence usage. By observation of the results of such an interaction, a more descriptive theory which accounts for key factors effecting evidence usage can be built.

Conceptual and operational problems with distinguishing among evidence categories can be solved by categorizing evidence types and by concretely defining and operationalizing a no evidence treatment. It can then be determined whether subjects can distinguish among these types of messages and if subjects use these types differently for different kinds of tasks.

It was pointed out that several key intervening factors need to be controlled or manipulated simultaneously. These factors can be easily controlled or manipulated through instructions, message wording, message topic, and attribution of various sources to the messages.

Rationale

As previously stated, the purposes of this study are to determine the effect of high and low source credibility upon a descriptive set of evidence categories, to determine the effect certain tasks have upon a descriptive set of evidence categories, and to determine the effect of both source credibility and task upon a descriptive set of evidence categories.

Miller's previously cited definition of evidence which refers to a diverse range of materials (data) which may be considered evidence depending upon the function they perform (inducing belief in a proposition) suggests that evidence be broadly categorized. Three evidence categories are used in this study: truth, desirability, and no evidence. Truth evidence contains empirically varifiable data. Desirability evidence poses either positive or negative consequences resulting from the adoption of the proposition. The no evidence category is defined in this study as a message containing only definitions of terms within the proposition. The "categories" of truth and desirability suggested by McGuire's work refer to criteria for evaluation applied by the receiver of the message. Previous work has shown that subjects are able to differentiate evidence in at least these two ways. This study will determine whether these two categories are used differently under different task and source conditions. Subjects will be asked to use messages containing the evidence types to perform three tasks:

1) Categorization Task, differentiation and categorization of truth, desirability, and definition messages, 2) Belief Task, rank ordering of messages which the subjects find most helpful in taking a stand on the proposition, and 3) Informative Task, rank ordering of messages which the subjects find most helpful in understanding a proposition.

Rationale for Hypotheses

Previous research would suggest that truth evidence should be more highly ranked than desirability evidence in the understanding or informative task. Dresser (1963) found that "sound" or truth evidence does not significantly effect persuasion, but it is a significant factor in effecting understanding. On this basis the following hypothesis is offered:

> H_1: Given the informative task of ranking messages in order of importance in understanding a proposition, a greater than chance frequency of subjects will rank order the messages in the following descending order of importance: 1) truth, 2) desirability, and 3) definition.

Desirability messages should be more highly rated than truth evidence in the belief task. Clark and Hynes (1970) and McGuire (1960) report that positive attitudes are fostered by positing desirable and likely consequences. Infante (1970) conducted a study in which attitudes toward a propositional change in policy can be predicted from a knowledge of the desirability and likelihood ratings assigned to the consequences of the proposed action. Given this reasoning, the following hypothesis is suggested:

> H_2: Given the belief task of ranking messages in order of importance in taking a stand on a proposition, a greater than chance frequency of subjects will rank order the messages in the following descending order of importance: 1) desirability, 2) truth, and 3) definition.

Though truth and desirability have been determined to be important evidence categories, there is no direct evidence relating to subjects' ability to effectively categorize truth, desirability, and definition messages. However, Kline (1968) reported that subjects were able to effectively categorize evidence when provided with a category scheme, such as: 1) specific evidence, 2) non-specific evidence, and 3) no evidence. This would suggest the following hypothesis:

> H_3: Given the task of categorizing messages into three evidence types, a greater than chance frequency of subjects will categorize the messages in the following manner: 1) the two truth messages in the truth category, 2) the two desirability messages in the desirability category, and 3) the two definition messages in the definition category.

The second stated purpose of this study was to examine the effect of the manipulation of source on evidence categorization and usage, given the above mentioned tasks. Four source conditions are used: 1) No source, 2) Role source, 3) High credible source, and 4) Low credible source. In the no source condition subjects read messages in which no sources are mentioned. In the role source condition subjects read messages attributed to unknown persons in well-known role positions. In the high credible source condition, subjects read messages attributed to sources perceived as highly credible by subjects. Finally, in the low credible source condition subjects read messages attributed to sources perceived as low credible by subjects.

A distinction is made between high or low credible sources and role sources because research has indicated a differential effect between known and unknown sources. Kline (1970) isolated different types of encoding behavior which shows that differential effects occur in the presence of source credibility treatments and manifest source

treatments. Manifest source refers to the simple existence of a source without definite positive or negative evaluation. Greenberg and Miller (1966) provide another step in this line of analysis in a reported study in which the absence of personal experience with the source results in a somewhat positive evaluation of the source by subjects. These studies would indicate that a personally unknown source in a favorable role position would be evaluated somewhat positively.

As has been established earlier, the relationship between source credibility and evidence is unclear. Several researchers, including Gilkinson, Paulson, and Sikkink (1954) and Sikkink (1956) have investigated the effect sources have on evidence with few significant results. James McCroskey (1970) has done extensive research into how evidence effects source. One of the more intriguing findings reported by McCroskey is that a receiver mentally refutes a source on the basis of his past beliefs. This suggests the following hypotheses:

H_4: Given the informative task of ranking messages in order of importance in understanding a proposition, a greater proportion of subjects in the no source condition than in any other source condition will rank order the messages in the following descending order of importance: 1) truth, 2) desirability, and 3) definition.

H_5: Given the belief task of ranking messages in order of importance in taking a stand on a proposition, a greater proportion of subjects in the no source condition than in any other source condition will rank order the messages in the following descending order of importance: 1) desirability, 2) truth, and 3) definition.

H_6: Given the task of categorizing messages into three evidence types, a greater proportion of subjects in the no source condition than in any other source condition will categorize the messages in this manner: 1) the two truth messages in the truth category, 2) the two desirability messages in the desirability category, and 3) the two definition messages in the definition category.

The third purpose of the study is to determine the relationship between known high and low credible sources and evidence usage. This will be explored by having subjects in the no source condition match the pretested known sources with the messages they have read. Balance theory and McCroskey's work would suggest that high credible sources would be matched a higher percentage of the time with messages agreeing with the subjects' beliefs than with messages opposing those beliefs. McGuire's work on resistance to attitude change would also support this position. Subjects will bolster their initial attitudes by attributing messages supporting these attitudes to high credible sources. On this basis the following hypothesis is offered:

H_7: Given the task of matching sources to messages, subjects will have a greater tendency to match high credible sources than low credible sources to messages supporting their initial beliefs.

CHAPTER II

METHODS AND PROCEDURES

Overview

On the basis of pretest results, high and low credible sources were chosen. Subjects completed one of a set of randomly order questionnaires. The questionnaires consisted of a general instruction page, six randomly ordered messages (three pro and three con) on one of the two propositions. Each questionnaire contained messages in one of four source conditions: 1) no source plus matching task, 2) role source, 3) high credible known source, or 4) low credible known source. After reading the messages, subjects were given written instructions to perform one of the three tasks: 1) Informative Task, 2) Belief Task, or 3) Categorization Task. The tasks consisted of ranking the six messages.

Pretest

Students in undergraduate courses were administered a pretest questionnaire, ostensibly to solicit student opinion on the two topics of the propositions, busing and drugs.

These issues were believed to be salient and somewhat ego-involving for undergraduate students. Each proposition was followed by a ten-point truth scale ranging from 0-100% true. Subjects were asked to evaluate each proposition on this truth scale. They were then asked to evaluate the desirability of the proposition on a four-point scale from Very Desirable to Very Undesirable. Finally, subjects were asked to evaluate the favorability of each proposition by checking a

seven-interval, semantic differential scale from Very Favorable to Very Unfavorable. On the basis of this scale negative attitudes were established in the population from which the sample was drawn on both propositions. The sample rated the proposition advocating busing 2.8431 and a proposition advocating the searching of dormitory rooms for drugs 2.2941 on a scale of 1 to 7. The lower the mean, the less favorable the proposition. Clark and Hynes (1970), McGuire (1960) and Infante (1970) indicate a concern for the possible topic bound nature of their obtained results, limiting their generalizability. For this reason, two propositions were used to control for topic.

In order to locate high and low credible sources, subjects were asked to evaluate nine individuals on six, seven-interval, semantic differential scales bounded by the adjectives Safe-Unsafe, Untrained-Trained, Frank-Reserved, Closedminded-Openminded, Experienced-Inexperienced, Introverted-Extroverted (Berlo, Lemert and Mertz, 1966). Individuals were scored by summing across the attitude scales on a one low, seven high basis. Thus, with six scales per individual, the possible range was six to forty-two. The nine individuals pretested were Edward Kennedy, George McGovern, Richard Daley, Ronald Reagan, Richard Nixon, Ms. Irene McCabe, Julian Bond, George Wallace, and B. F. Skinner. On the basis of this procedure two high credible sources, George McGovern and Edward Kennedy, were chosen, and two low credible sources, Ronald Reagan and Richard Daley, were chosen.

The Sample

Data were collected from 225 undergraduate students during July, 1972. All questionnaires were usable. Both males and females

were included in the sample. Subjects were sampled from the summer school undergraduate classes at Michigan State University.

Messages

Three basic message types were used in this study.

a. Truth

b. Desirability

c. No Evidence (Definition)

Two of each type were used--one supporting the proposition, one attacking the proposition.

Thus each subject received six basic messages, two truth messages (pro and con), two desirability messages (pro and con), and two no evidence messages (pro and con). Half the subjects received six messages concerning the busing proposition and half received six messages concerning the drug proposition.

Familiarity with the evidence was controlled by creating all evidence used in the messages. Thus, all subjects received equally new and thus unfamiliar evidence. Given that the no-evidence messages contained definitions of terms rather than a restatement of evidence used in other messages, there was no redundancy within the messages, thus controlling this key factor.

Independent Variables and Operationalizations

Source Manipulation

1. No Source Condition. One-fourth of the overall sample received the six basic messages without sources attributed to the messages.

2. Role Source Condition. Another fourth of the subjects received the six basic messages attributed to unknown sources with known roles, e.g., professor, doctor, research director.

3. High Credible Known Source Condition. Another quarter of the subjects received the six basic messages attributed to the two high credible sources. For each subject in this condition, the three pro messages were attributed to one of these two sources, and the three con messages were attributed to the other credible source. This was done for both propositions.

4. Low Credible Known Source Condition. The two sources judged by the pre-test sample to be lowest on the previously cited dimensions, Ronald Reagan and Richard Daley, were used in this condition. Messages were attributed to these two sources in the same manner as was done with the high credible sources. The remaining quarter of the overall sample received the basic messages attributed to these low credible known sources.

Task Manipulation

Within each of the source conditions, separate groups of subjects performed three tasks.

1. Informative Task. Approximately one-third of the subjects within each of the source conditions were asked to rank all six messages on the criterion of how helpful each was to the subject in gaining an understanding of the proposition.

2. Belief Task. Another third of the subjects in each source condition were asked to rank all six messages on the criterion of how helpful each was to the subject in taking a stand on the proposition.

3. Message Categorization Task. The remaining third of the subjects in each source condition were asked to categorize all six messages into three categories of evidence: 1) Truth, 2) Desirability, and 3) Definition.

Dependent Variables and Operationalizations

Three measures of task performance were employed, one for each of the task manipulations.

1) Informative Task Performance. The rank orderings of messages by the subjects performing the informative task were compared against a criterion rank order earlier predicted in the hypotheses, and the number of errors in each subject's rank ordering was determined. If a subject's ranking contained one or zero errors, he was categorized as being correct. Subjects who had more than one error were categorized as being incorrect.

2) Belief Task Performance. As in the measure of informative task performance, subjects' rank orderings were compared against a criterion rank order predicted in the hypotheses, and subjects were categorized as being correct or incorrect. Again, zero or one error were considered correct.

3) Message Categorization Task Performance. Subjects' categorizations of the six messages were compared against a criterion categorization based on the type of evidence used in the construction of each message. As before, zero or one error was considered correct, and subjects were categorized as being correct or incorrect on this basis.

Matching Task

In order to explore source credibility as it effects subjects' attribution of sources to types of messages, a matching task was included. All subjects within the no source condition were asked to

choose six sources from the list nine pretested and match them to the message each source most probably stated. For each message the percentage of the subjects in the no source condition matching each source to that message was determined.

Procedures

Instrument Construction. A cover sheet on the front of each booklet presented general instructions. The six messages followed and were randomized for each booklet. Next a page of instructions specific to the required task was presented, followed by that task (Informative, Belief, or Message Categorization). For the subjects in the no source condition, the matching task was presented next. The final page for all subjects asked a series of demographic questions (age, class in school, sex, grade point average, and previous course work in persuasion or argumentation).

Randomization of Treatments to Subjects. The booklets were placed in random order, to assure that when they were distributed to a class, all source conditions and all tasks were represented. Classes were chosen to prevent any bias caused by a particular time of day or day of week.

Procedures for Data Collection. The experimenter went to classrooms and distributed the booklets. A short introduction was given, and the instruction page was read aloud. Then the subjects completed the booklets. Near the end of the task, the experimenter asked the subjects to recheck their booklets to make sure the task was done as instructed. Booklets were then collected and a short debriefing was given. The entire procedure took approximately twenty minutes.

Table 1. Design. The design is summarized below, including dependent measures for each treatment condition and number of subjects in each cell:

	No Source Condition	Role Source Condition	Known High Credible Source Condition	Known Low Credible Source Condition
Informative Task	Inf. Rankings and Matching (N=20)	Inf. Rankings (N=20)	Inf. Rankings (N=20)	Inf. Rankings (N=18)
Belief Task	Belief Rankings and Matching (N=19)	Belief Rankings (N=20)	Belief Rankings (N=16)	Belief Rankings (N=20)
Categorization Task	Categorizations and Matching (N=20)	Categorizations (N=15)	Categorizations (N=20)	Categorizations (N=17)

CHAPTER III

RESULTS

Effects of Task on Message Rankings

Informative Task

It was predicted by H_1 that subjects would rank messages in the informative task in the order of truth, desirability, and definition with a greater than chance frequency. In order to test this hypothesis an expected frequency distributed was generated by determining all possible orderings of six messages: two truth messages, two desirability messages, and two definition messages. It was found that there are 78 orderings of three message types, two of each type. The six messages were labeled by the following letters:

A - Truth pro message

B - Truth con message

C - Desirability pro message

D - Desirability con message

E - Definition pro message

F - Definition con message

In each hypothesis a criterion ranking was predicted. As described in Chapter II the criterion ranking or one error (two out of place messages) would be considered a correct ranking. An example of this procedure would be as follows: in the Informative Task a completely correct ordering of the messages according to the hypothesis

would be: 1) A, B or B, A (truth messages), 2) C, D or D, C (desirability messages), and 3) E, F or F, E (definition messages). Also considered correct would be one error which would necessitate two misplaced letters. An example of one error would be C, A, D, B, E, F. Letters B and C are misplaced. From the expected frequency distribution there are only thirteen of the 78 possible combinations which include one or less errors. Thus, by chance alone, one would expect the proposition of correct rankings to equal 13/78's within a population of subjects ranking the six messages.

To test H_1 the proportion of subjects ranking the messages correctly was compared against the expected population proportion. A $\hat{z}$ test for proportions was computed to determine if the sample correctly ranked messages with a higher frequency than expected by chance. Out of the total of 20 subjects in the no source condition performing the task, 9 ranked the messages correctly. This proportion (0.45) significantly exceeded the expected proportion of 0.167 ($\hat{z}$ = 3.41; $p<.001$). Therefore, given the informative task, subjects ranked the messages in the order predicted (truth, desirability, and definition) beyond chance expectations.

Table 2. Sample, correct rankings, proportions, $\hat{z}$ value, and level of significance for H_1.

Informative Task (H_1)

	S's	Actual Correct Rankings	Expected by Chance	p (Sample)	P (Expected)	$\hat{z}$	p
No Source Condition	20	9	13/78	.450	.167	3.41	<.001

Belief Task

To test H_2 the same procedure as used to test H_1 was implemented. From the expected frequency distribution the predicted ranking of messages (desirability, truth, definition) would occur 13/78's of the time within a population of subjects ranking the six messages. Again one error, i.e., two messages out of place, was considered a correct ranking. The proportion of subjects completing the belief task who ranked the messages correctly was 0.368. In absolute numbers, out of 19 subjects in the no source condition performing the task, 7 correctly ordered the messages. This significantly exceeded the proportion expected by chance, 0.167 ($\underline{z}$ = 2.42; $p < .01$). Therefore, given the belief task, subjects ranked the messages in the order predicted (desirability, truth, definition) beyond chance expectations.

Table 3. Sample, correct rankings, proportions, $\underline{z}$ value, and level of significance for H_2.

Belief Task (H_2)

	S's	Actual Correct Rankings	Expected by Chance	p (Sample)	P (Expected)	$\underline{z}$	$\underline{p}$
No Source Condition	19	7	13/78	0.368	0.167	2.42	<.01

Categorization Task

From the expected frequency distribution used to test H_1 and H_2, it was determined that by chance, 13/78's of the subjects would correctly categorize the six messages with one or less errors. It was found that the proportion of subjects in the categorization task who correctly categorized the messages was .70, i.e., 14 out of 20 subjects ordered the six messages correctly in the no source condition. This greatly exceeded the proportion expected by chance, 0.167 ($\underline{z}$ = 6.4; $p < .001$).

Therefore, subjects drawn from an undergraduate population seem to have little difficulty properly placing the source-free messages into their respective evidence types.

Table 4. Sample, correct rankings, proportions, $\hat{z}$ value, and level of significance for H_3.

Categorization Task (H_3)

	S's	Actual Correct Rankings	Expected by Chance	p (Sample)	P (Expected)	$\hat{z}$	p
No Source Condition	20	14	13/78	.70	0.167	6.4	<.001

Effects of Source Manipulation on Message Ranking

Hypotheses IV, V, and VI predicted that a higher proportion of subjects in the no source condition than in conditions involving source attribution to messages would correctly rank the messages. For each task (informative, belief, categorization) a $\hat{z}$ test for proportions was computed between the proportion of subjects correctly ranking the messages in the no source condition and the proportion of subjects correctly ranking the messages in each of the three conditions involving sources (role source, high credible source, and low credible source).

Informative Task

H_4 predicted that for an informative task subjects ranking messages with no sources would perform better than subjects ranking messages attributed to role sources, high credible sources, or low credible sources. A $\hat{z}$ test for proportions computed between the no source condition and each of the source conditions yielded no significant differences. Thus, for the informative task, whether or not various types of sources are attributed to messages the frequency of

subjects ranking messages in the predicted order (truth, desirability, definition) does not seem to be effected.

Table 5. Sample, correct rankings, proportions, $\bar{z}$ values, and levels of significance for H_4.

Informative Task (H_4)

	S's	Correct Rankings	Expected by Chance	p (No Source)	P (Sample)	$\bar{z}$	p
Role Source	20	7	13/78	.450	.350	0.645	n.s.
High Credible Source	20	9	13/78	.450	.450	0.000	n.s.
Low Credible Source	18	8	13/78	.450	.440	0.0621	n.s.

Belief Task

It was predicted by H_5 that the attribution of sources (role, high credible, or low credible) to messages would reduce the frequency of subjects ranking the messages in the predicted order (desirability, truth, definition). However, comparing the proportion of subjects ranking the messages as predicted in each of the source conditions against that of subjects in the no source condition no significant differences were found. Thus, as with H_4 attribution of sources of various types to messages does not seem to effect task performance.

Table 6. Sample, correct rankings, proportions, $\bar{z}$ values, and levels of significance for H_5.

Belief Task (H_5)

	S's	Correct Rankings	Expected by Chance	p (No Source)	P (Sample)	$\bar{z}$	p
Role Source	20	9	13/78	.368	.045	-0.520	n.s.
High Credible Source	16	4	13/78	.368	.250	0.748	n.s.
Low Credible Source	20	8	13/78	.368	.400	-0.206	n.s.

Categorization Task

It was predicted by H_6 that the attribution of sources (role, high credible, or low credible) to messages would reduce the frequency of subjects ranking the messages in the predicted order (truth, desirability, definition). For only one of the source conditions was this hypothesis supported. The proportion of subjects correctly categorizing the messages attributed to role sources was 0.333. This was significantly smaller than the proportion of subjects (0.70) correctly categorizing the no source messages ($\bar{z} = 2.159$; $p < .01$). The other two source conditions did not effect the performance of this task.

Table 7. Sample, correct rankings, proportions, $\bar{z}$ values, and levels of significance for H_6.

Categorization Task (H_6)

	S's	Correct Rankings	Expected by Chance	p (No Source)	P (Sample)	$\bar{z}$	p
Role Source	15	5	13/78	.700	.333	2.159	<.01
High Credible Source	20	16	13/78	.700	.800	-0.732	n.s.
Low Credible Source	17	10	13/78	.700	.588	0.7084	n.s.

Matching of Source to Messages

H_7 predicted that given the task of matching sources to messages, subjects will have a greater tendency to match high credible sources than low credible sources to messages supporting their initial beliefs. To determine if this hypothesis was supported, the percentage of subjects matching each of the nine pretested sources with each message was calculated. Inspecting the percentage of people matching the two high credible sources and the two low credible sources with each message, it appears that the hypothesis was not supported. The percentages of subjects matching these sources with each message are listed on the following page.

Table 8. Percentages of subjects matching high and low credible sources with each message type.

	Message Type					
	Truth Pro	Truth Con	Desirability Pro	Desirability Con	Definition Pro	Definition Con
High Credible	36%	19%	43%	32%	19%	15%
Low Credible	16%	28%	8%	4%	23%	31%
Other	48%	53%	49%	64%	58%	54%

As can be seen from these percentages, the predicted tendency for subjects to match high credible sources with messages supporting their beliefs (the con messages) and low credible sources with the opposing side of the issue (the pro messages) is not occurring. For the truth messages the tendency is reversed. 36% of the subjects matched one of the two high credible sources with the pro message while 16% matched a low credible source with the pro message. 28% of the subjects matched low credible sources with the truth con messages while 19% of the subjects matched high credible sources to these same messages. For both desirability messages, pro and con, there was a greater tendency to match high credible sources than low credible sources. For the definition messages there was a greater tendency to match low credible sources than high credible sources. Thus, the hypothesis is clearly not supported for any of the three message types.

CHAPTER IV

CONCLUSIONS

This research examined the effects of task and source on message usage. Six messages of three basic types were constructed: 1) two truth messages (pro and con), 2) two desirability messages (pro and con), and 3) two definition messages (pro and con). To control effects of topic two issues were used, busing and searching dormitory rooms for drugs. Both issues were pretested to determine undergraduate attitudes toward each. Both familiarity with evidence and redundancy were also controlled.

Effects of Task on Evidence Usage

It was predicted that for each task undergraduate students would do better than chance at ranking the messages in order of helpfulness in performing the task as compared against a criterion ranking of the messages for each task. For all three tasks subjects did much better than expected by chance. This would suggest that undergraduates are able to differentiate among evidence types in the performance of specific tasks. For the informative task there was a greater than chance tendency for subjects to find truth messages, either pro or con on a proposition, most helpful in understanding the proposition, desirability messages next most helpful and definition messages third most helpful. Thus, when attempting to understand a proposition, messages containing truth evidence gain importance. For the belief task, a greater than chance frequency of

undergraduate subjects ranked desirability messages as more helpful than truth messages when taking a stand on a proposition. Thus, given the task of taking a stand on a proposition, desirability evidence seems to gain importance over truth evidence. Finally, undergraduates seemed quite capable of distinguishing among truth, desirability, and definition evidence types. 70% of the subjects correctly categorized the six messages. Therefore, these undergraduates seem, not only able to differentiate types of evidence, but also able to use them differently depending on the type of task.

Effects of Source Attribution on Evidence Usage

It was predicted that given any task subjects would not perform as well when messages were attributed to sources than when messages were not attributed to sources. Thus, sources were expected to confuse subjects in their ability to distinguish among evidence types. Consequently, subjects would rely less on evidence and would make judgments in accordance with their initial beliefs on the proposition. This prediction was not supported. In all but one case, subjects ranking messages with sources of any type used in this study did not differ in proportion of correct rankings from subjects ranking messages not attributed to sources. Only in the categorization task was there a significant difference from the respective no source condition. Subjects categorizing messages attributed to role sources did significantly less well than subjects categorizing messages attributed to no sources. Why subjects did so poorly in this condition is not clear. Possibly for some reason a biased group of subjects may have received these particular messages in conjunction with the categorization task. At any rate,

given all the other comparisons, it appears that undergraduate subjects are quite capable of distinguishing among and using different evidence types as well with or without sources.

Matching Task

In the main, this task was included in the study for exploratory purposes. However, an intuitive prediction was offered. It was hypothesized that subjects would show a tendency to match high credible sources with the messages supporting their initial attitudes on the proposition, and conversely, low credible sources with messages opposed to their position. This was definitely not supported. Other factors seemed to be operating. Since the matching task was placed last, simple exposure to three messages contrary to their initial position on the proposition may have altered that initial position. Possibly subjects may have matched high credible sources with those messages perceived to be most well stated. However, the most reasonable explanation is the following: most evidence studies have dealt with mental propositions. Thus, an artificial situation is constructed which has limited generalizability of results. The two propositions used in this study are: "University administrators must be given the right to search student dormitory rooms for drugs," and "Cross-district busing is a necessary tool in achieving racial integration in our nation's schools." Most subjects held strong opinions on these topics. Subjects also held strong opinions about the high credible sources (George McGovern and Edward Kennedy) and the low credible sources (Richard Daley and Ronald Reagan). When matching sources to messages, subjects may have separated their evaluation of the arguments from their evaluation of source. For

example, a subject might have found Richard Daley a low credible source in general but may have agreed with his stand on busing. Therefore, he was able to set aside his negative evaluation of Daley in light of the issue presented. Further investigation is needed exploring the direct link between high, neutral and low credible sources and high, neutral, and low evaluated propositions. Then, we might examine the amount of variance carried by the evidence and by the source.

Research Extensions

This study provides a descriptive basis for an estimation of the ability of an undergraduate population to differentiate among evidence types and to use them differently given certain tasks. It also contradicts some past research into the relationship between evidence and source credibility by showing that subjects have a tendency to disregard the contaminating effects of source in differentiating among evidence types in the performance of a task. This descriptive analysis is only a beginning, however. The lack of any pattern of responses in the matching task suggests that the relationship among source credibility, evidence, and task needs further explication. A necessary step in descriptive research would be to construct tasks and ask subjects to generate arguments and evidence in the performance of those tasks. The generated arguments and evidence would be judged to determine if patterns of recognizable evidence categories were used. Different task situations, such as various role position, learning, and competitive versus cooperative situations, should be manipulated. People of differing demographic categories should be used as subjects in order to determine over various groupings in the population how people actually employ evidence and its related elements in communication situations.

LIST OF REFERENCES

LIST OF REFERENCES

Berlo, David K., James B. Lemert, and Robert J. Mertz, "Dimensions for Evaluating the Acceptability of Message Sources," Research Monograph, Department of Communication, Michigan State University, 1966.

Bettinghaus, Erwin P., The Relative Effect of the Use of Testimony in a Persuasive Speech Upon the Attitudes of Listeners. Unpublished master's thesis, Bradley University, 1953.

Bostrom, Robert N. and Raymond K. Tucker, "Evidence, Personality, and Attitude Change," Speech Monographs, XXXVI, 1969, pp. 22-27.

Cappella, Joseph N., "Approaches to the Task Environment," Unpublished paper, Department of Communication, Michigan State University, 1971.

Cathcart, Robert S., "An Experimental Study of the Relative Effectiveness of Four Methods of Presenting Evidence," Speech Monographs, XXII, 1955, pp. 227-233.

Clark, Ruth Ann and Geraldine Hynes, "The Relationship of Judgments of Desirability and Likelihood," Speech Monographs, XXXVII, 1970, pp. 199-206.

Collins, B. and H. Guetzkow, A Social Psychology of Group Processes for Decision Making, New York: John Wiley and Sons, 1964.

Costley, D. L., An Experimental Study of the Effectiveness of Quantitative Evidence in Speeches of Advocacy, Unpublished thesis, the University of Oklahoma, 1958.

Dresser, William, "Effectiveness of Satisfactory and Unsatisfactory Evidence in a Speech of Advocacy," Speech Monographs, 1963, pp. 302-306.

Gagne, R. M., "Human Problem Solving: Internal and External Events," In: B. Klunmutz, Problem Solving: Research Method and Theory, New York: John Wiley and Sons, 1966.

Gardner, J., An Experimental Study of the Use of Selected Forms of Evidence in Effecting Attitude Change, Unpublished thesis, University of Nebraska, 1966.

Gilkinson, Howard, Stanley Paulson and Donald Sikkink, "Effects of Order and Authority in an Argumentative Speech," Quarterly Journal of Speech, XI, 1954, pp. 183-192.

Hackman, J. R., "Towards an Understanding of the Role of Tasks in Behavioral Research," Acta Psychologica, 1969, 31, pp. 97-128.

_____, "Effects of Task Characteristics on Group Products," Journal of Experimental and Social Psychology, Englewood Cliffs, New Jersey: Prentice Hall, 1971.

Hance, Kenneth G., David C. Ralph, and Milton J. Wiksell, Principles of Speaking, Wadsworth Publishing Co., Inc., Belmont, California, 1969.

Infante, Dominic A., "Predicting Attitude from Desirability and Likelihood Ratings of Rhetorical Propositions," Speech Monographs, 1971, pp. 321-326.

Kline, John A., "Interaction of Evidence and Reader's Intelligence on the Effects of Short Messages," Quarterly Journal of Speech, LV, 1969, pp. 407-413.

_____, "A Q-analysis of Encoding Behavior in the Selection of Evidence," Speech Monographs, 1970, pp. 190-197.

McCroskey, J., Studies of the Effect of Evidence in Persuasive Communication, Speech Communication Laboratory Report, 1967, p. 54.

_____, "A Summary of Experimental Research on the Effects of Evidence in Persuasive Communication," Quarterly Journal of Speech, LV, 1969, pp. 169-176.

_____, "The Effects of Evidence as an Inhibitor of Counter-Persuasion," Speech Monographs, XXXVII, 1970, pp. 188-194.

McGuire, W., "Cognitive Consistency and Attitude Change," Journal of Abnormal Social Psychology, 1960, pp. 345-353.

_____, "Direct and Indirect Persuasive Effects of Dissonance Producing Messages," Journal of Abnormal Social Psychology, 1960, p. 356.

Miller, Gerald R., "Evidence and Argument," Perspectives on Argumentation, Scott Foresman Co., 1966.

_____ and Bradley S. Greenberg, "The Effect of Low-Credible Sources on Message Acceptance," Speech Monographs, June, 1966.

Morris, C. G., "Task Effects on Group Interaction," Journal of Personality and Social Psychology, 1966, 4, pp. 545-554.

Ostermeier, Terry H., Effects of Type and Frequency of Reference Upon Perceived Source Credibility and Attitude Change, Doctoral Thesis, Michigan State University, 1966.

Shaw, M. E., Group Dynamics: The Psychology of Small Groups, New York: McGraw Hill, 1971.

Sikkink, Donald, "An Experimental Study of the Effects on the Listener of Anti-Climax Order and Authority in an Argumentative Speech," Southern Speech Journal, XXII, Winter 1956, pp. 73-78.

Thibaut, J. W. and H. H. Kelly, The Social Psychology of Groups, New York: John Wiley and Sons, 1959.

Troldahl, V. C., D. Costello, and G. Robeck, Strategies for Developing Messages that Must Compete with Antagonistic Messages, Research Report, Department of Communication, Michigan State University, 1969.

Wagner, G. A., An Experimental Study of the Relative Effectiveness of Varying Amounts of Evidence in Persuasive Communication, Unpublished thesis, Mississippi Southern University, 1958.

Warren, Irving D., "The Effect of Credibility in Sources of Testimony on Audience Attitudes Toward Speaker and Message," Speech Monographs, 1969, pp. 456-458.

Whitehead, Jack S., Jr., "Effects of Authority-Based Assertion on Attitude and Credibility," Speech Monographs, 1971, pp. 311-315.

APPENDICES

APPENDIX I

Proportions, $\bar{z}$ values, and Level of Significance

APPENDIX I

Proportions, $\bar{z}$ values, and Level of Significance

Hyp.	Source Condition	Task	Proportions		$\bar{z}$	p
			p(Sample)	P(Expected)		
1	No Source	Informative	.450	.167	3.41	$<.001$
2	No Source	Belief	.368	.167	2.42	$<.01$
3	No Source	Categorization	.700	.167	6.40	$<.001$
			p(No Source)	P(Sample)		
4	Role Source	Informative	.450	.350	0.645	n.s.
4	High Credible Source	Informative	.450	.450	0.000	n.s.
4	Low Credible Source	Informative	.450	.440	0.0621	n.s.
5	Role Source	Belief	.368	.045	-0.520	n.s.
5	High Credible Source	Belief	.368	.250	0.748	n.s.
5	Low Credible Source	Belief	.368	.400	-0.206	n.s.
6	Role Source	Categorization	.700	.333	2.159	$<.01$
6	High Credible Source	Categorization	.700	.800	-0.732	n.s.
6	Low Credible Source	Categorization	.700	.588	0.7084	n.s.

APPENDIX II

Instrument

Opinion Profile

Instructions:

The purpose of this profile is to obtain your opinions regarding what messages you find most helpful in performing a task. In the following pages you will find a proposition and several messages, followed by a series of questions. For example, here is a proposition similar to the one you will see:

Sample Proposition: Detergents are polluting our nation's rivers.

Messages: **Six messages will then comment on the proposition. Three messages will support the proposition, three messages will attack the proposition.**

Questions: **After you have read the messages you will be asked about what messages you found most helpful in performing a task. Further instructions will be given then.**

A.

Proposition - Cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

The reason some people believe this proposition is that minority students have been found to significantly improve in academic performance in a racially and economically mixed environment. A study of 200 minority students who were bused into predominantly white middle class schools showed a significant rise in academic achievement as opposed to a control group who were not bused, and who showed no such improvement in a similar length of time. A nationwide survey of 1,200 school children in the junior high age bracket revealed that 68.5% of the students made significantly higher scores on I.Q. tests after two years in a racially and economically mixed school environment. Thus, cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

A.

Proposition - Cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

The reason some people believe this proposition is that minority students have been found to significantly improve in academic performance in a racially and economically mixed environment. A study of 200 minority students who were bused into predominantly white middle class schools showed a significant rise in academic achievement as opposed to a control group who were not bused, and who showed no such improvement in a similar length of time. A nationwide survey of 1,200 school children in the junior high age bracket revealed that 68.5% of the students made significantly higher scores on I.Q. tests after two years in a racially and economically mixed school environment. Thus, cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

B.

Proposition - Cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

However, some people believe that busing to another school district is not the cause of improved academic performance. A study of three predominately black school districts in Illinois revealed that with increased funds providing more highly skilled teachers and more adequate teaching facilities, students improved their academic performance significantly. A nationwide survey found that none of the 800 students studied were any more successful academically in a predominately white suburb school than they had in their own neighborhood school. Thus, cross-district busing to achieve racial integration in our nation's schools is not necessary.

C.

Proposition - Cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

The reason some people believe this proposition is that one consequence of cross-district busing is that daily interpersonal contact between minority and white students results in more awareness of each other and a greater likelihood of building cooperative social systems. In-depth interviews with forty black and white students in racially mixed schools revealed that they had more pleasant interpersonal friendships with students of another race than a similar group of students in schools of predominately one race. If students are exposed at early ages to a racially mixed atmosphere, they are less likely to develop negative stereotypes of different ethnic groups. Thus, cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

D.

Proposition - Cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

Some people, however, believe that cross-district busing to achieve racial integration in our nation's schools is undesirable because it is a violation of individual rights. The busing of school children out of their own school districts is a violation of individual rights. If the parents pay property taxes to support a particular school system, it is a violation of their rights to have their children bused into another, possibly more inadequate, district. Resentments caused by forced cross-district busing in violation of individual rights will result in increased racial tension in our schools. Thus, cross-district busing to achieve racial integration in our nation's schools is unnecessary.

E.

Proposition - Cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

The reason that some people believe this proposition is that cross-district busing involves the movement of children from one school district to another in order to achieve an equitable racial balance within schools. Racial integration is the process by which all public institutions must be racially balanced if possible. Thus, cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

F.

Proposition - Cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

Some people, however, believe that cross-district busing is not a necessary tool in achieving racial integration in our nation's schools because school is the institution in which children are both educated and socialized into society. Busing is the means of transporting students from outlying areas of a district to and from school. Thus, cross-district busing to achieve racial integration in our nation's schools in unnecessary.

A.

Proposition - University administrators must be given the right to search student dormitory rooms for drugs.

The reason some people believe this proposition is that many students have been found to store drugs in their dormitory rooms. In-depth interviews with twenty-two students who were treated for drug addiction revealed that student rooms were among the most frequently used places for storing drugs. A nationwide survey produced similar results. This survey of 1,200 college drug users revealed that 68.5% of the students listed student rooms as one of the most commonly used places for storing drugs. Thus, university administrators must be given the right to search student dormitory rooms.

B.

Proposition - University administrators must be given the right to search student dormitory rooms for drugs.

However, some people believe that university administrators must not be given the right to search student rooms because most students do not store drugs in their rooms. A study of three Illinois colleges revealed that none of the students interviewed had used their rooms to store drugs. A nationwide study found that none of the 800 students he interviewed had stored drugs in their dormitory rooms. Thus, university administrators must not be given the right to search student lockers.

[illegible]

B.

Proposition - University administrators must be given the right to search student dormitory rooms for drugs.

However, some people believe that university administrators must not be given the right to search student rooms because most students do not store drugs in their rooms. A study of three Illinois colleges revealed that none of the students interviewed had used their rooms to store drugs. A nationwide study found that none of the 800 students he interviewed had stored drugs in their dormitory rooms. Thus, university administrators must not be given the right to search student lockers.

C.

Proposition - University administrators must be given the right to search student dormitory rooms for drugs.

The reason some people believe this proposition is that one consequence of the early identification and counseling of drug users is that they are less likely to become serious drug abusers. In-depth interviews with twenty-two students who had been treated for drug addiction revealed that student dormitory rooms were the most frequently used place for, storing drugs. If students can be identified in the early stages of drug usage, educational and psychological counseling can frequently prevent drug addiction. Thus, university administrators must be given the right to search student dormitory rooms.

D.

Proposition - University administrators must be given the right to search student dormitory rooms for drugs.

Some people, however, believe that university administrators must not be given the right to search dormitory rooms because this would be a violation of individual rights. The right to search a student's dormitory room would violate the student's constitutional right of freedom from unlawful search and seizure. Students might come to fear, rather than respect, the authority of the administration if it were allowed to search student dormitory rooms. Thus, university administrators must not be given the right to search student dormitory rooms.

E.

Proposition - University administrators must be given the right to search student dormitory rooms for drugs.

The reason that some people believe this is that narcotics are drugs. Narcotics are legally defined as addictive drugs. Addictive drugs may appear in many forms--pills, liquids, powders, etc. Student dormitory rooms are temporary domiciles in which students keep books, clothes and other personal belongings. Thus, university administrators must be given the right to search student dormitory rooms.

F.

Proposition - University administrators must be given the right to search student dormitory rooms for drugs.

Some people, however, believe that university administrators must not be given the right to search student dormitory rooms because administrators are systems analysts. University administrators are normally defined as the president, provost, registrar and deans of the various colleges. An educator functioning as a systems analyst must have expertise in the social, psychological and maintenance system of universities. Thus, university administrators must not be given the right to search student dormitory rooms.

A.

Proposition - Cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

The reason some people believe this proposition is that minority students have been found to significantly improve in academic performance in a racially and economically mixed environment. According to Dr. Joseph Elder, Professor of Education at the University of Wisconsin, a study of 200 minority students who were bused into predominately white middle class schools showed a significant rise in academic achievement as opposed to a control group who were not bused, and who showed no such improvement in a similar length of time. Peter Leonard, associate director of the National Education Association (N.E.A.), conducted a nationwide survey which produced similar results. His survey of 1,200 school children in the junior high age bracket revealed that 68.5% of the students made significantly higher scores on I.Q. tests after two years in a racially and economically mixed school environment. Thus, cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

B.

Proposition - Cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

However, some people believe that busing to another school district is not the cause of improved academic performance. According to Dr. Joseph Woelfel, Professor of Education at the University of Illinois, a study of three predominately black school districts in Illinois revealed that with increased funds providing more highly skilled teachers and more adequate teaching facilities students improved their academic performance significantly. James Small, research assistant for the American Association of Educators found in a nationwide survey that none of the 800 students he studied were any more successful academically in a predominately white suburb school than they had in their own neighborhood school. Thus, cross-district busing to achieve racial integration in our nation's schools is not necessary.

C.

Proposition - Cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

The reason some people believe this proposition is that one consequence of cross-district busing is that daily interpersonal contact between minority and white students results in more awareness of each other and a greater likelihood of building cooperative social systems. According to Dr. Stephen Ward, Professor of Social Psychology at the University of Washington, in-depth interviews with forty black and white students in racially mixed schools revealed that they had more pleasant interpersonal friendships with students of another race than a similar group of students in schools of predominately one race. Donald Franklin, research associate for the Institute for Educational Research, stated that if students are exposed at early ages to a racially mixed atmosphere, they are less likely to develop negative stereotypes of different ethnic groups. Thus, cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

D.

Proposition - Cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

Some people, however, believe that cross-district busing to achieve racial integration in our nation's schools is undesirable because it is a violation of individual rights. According to Dr. William Cartwright, Professor of Law at Columbia University, the busing of school children out of their own school districts is a violation of individual rights. If the parents pay property taxes to support a particular school system, it is a violation of their rights to have their children bused into another, possibly more inadequate, district. James Frederick, Professor of Sociology at American University, argues that resentments caused by forced cross-district busing in violation of individual rights will result in increased racial tension in our schools. Thus, cross-district busing to achieve racial integration in our nation's schools in unnecessary.

E.

Proposition - Cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

The reason that some people believe this proposition is that, according to Edward Wilson, research director of the Justice Department, cross-district busing involves the movement of children from one school district to another in order to achieve an equitable racial balance within schools. According to James Greene, Professor of Sociology at the University of Illinois, racial integration is the process by which all public institutions must be racially balanced if possible. Thus, cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

[illegible] - [illegible] ... [illegible] ... achieving racial
[illegible] ... [illegible] ... [illegible].

[illegible] ... [illegible] ... [illegible] ... [illegible] ... [illegible] ...

F.

Proposition - Cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

Some people, however, believe that cross-district busing is not a necessary tool in achieving racial integration in our nation's schools because school is, according to Dr. Richard Bartlett, Professor of Education at the University of Southern California, the institution in which children are both educated and socialized into society. Martin Pierce, regional director of the National Education Association (N.E.A.), states that busing is the means of transporting students from outlying areas of a district to and from school. Thus, cross-district busing to achieve racial integration in our nation's schools is unnecessary.

A.

Proposition - University administrators must be given the right to search student dormitory rooms for drugs.

The reason some people believe this proposition is that many students have been found to store drugs in their dormitory rooms. According to Dr. Joseph Elder, Professor of Sociology at the University of Wisconsin, in-depth interviews with twenty-two students who were treated for drug addiction revealed that student rooms were among the most frequently used places for storing drugs. Peter Leonard, associate director of the National Education Association (N.E.A.), conducted a nationwide survey which produced similar results. His survey of 1,200 college drug users revealed that 68.5% of the students listed student rooms as one of the most commonly used places for storing drugs. Thus, university administrators must be given the right to search student dormitory rooms.

[redacted]

B.

Proposition - University administrators must be given the right to search student dormitory rooms for drugs.

However, some people believe that university administrators must not be given the right to search student rooms because most students do not store drugs in their rooms. According to Dr. Joseph Woelfel, Professor of Sociology at the University of Illinois, a study of three Illinois colleges revealed that none of the students interviewed had used their rooms to store drugs. James Small, research assistant for the American Association of University Professors, found in a nationwide study that none of the 800 students he interviewed had stored drugs in their dormitory rooms. Thus, university administrators must not be given the right to search student lockers.

C.

Proposition - University administrators must be given the right to search student dormitory rooms for drugs.

Edward Kennedy recently argued that one consequence of the early identification and counseling of drug users is that they are less likely to become serious drug abusers. In-depth interviews with twenty-two students who had been treated for drug addiction revealed that student dormitory rooms were the most frequently used place for, storing drugs. If students can be identified in the early stages of drug usage, educational and psychological counseling can frequently prevent drug addiction. Thus, university administrators must be given the right to search student dormitory rooms.

D.

Proposition - University administrators must be given the right to search student dormitory rooms for drugs.

Some people, however, believe that university administrators must not be given the right to search dormitory rooms because this would be a violation of individual rights. According to Dr. William Cartwright, Professor of Law at Columbia University, the right to search a student's dormitory room would violate the student's constitutional right of freedom from unlawful search and seizure. James Frederick, Professor of Sociology at American University, argues that students might come to fear, rather than respect, the authority of the administration if it were allowed to search student dormitory rooms. Thus, university administrators must not be given the right to search student dormitory rooms.

$$\frac{1}{\quad} \qquad \frac{\quad}{\quad} = 1$$

E.

Proposition - University administrators must be given the right to search student dormitory rooms for drugs.

The reason that some people believe this is that narcotics are drugs. According to Edward Wilson, research director of the Justice Department, narcotics are legally defined as addictive drugs. Addictive drugs may appear in many forms--pills, liquids, powders, etc. According to Dr. James Greene, Professor of Sociology at the University of Illinois, student dormitory rooms are temporary domiciles in which students keep books, clothes and other personal belongings. Thus, university administrators must be given the right to search student dormitory rooms.

F.

Proposition - University administrators must be given the right to search student dormitory rooms for drugs.

Some people, however, believe that university administrators must not be given the right to search student dormitory rooms because administrators are systems analysts. According to Dr. Richard Bartlett, Professor of Education at the University of Southern California, university administrators are normally defined as the president, provost, registrar and deans of the various colleges. Martin Pierce, regional director of the National Education Association (N.E.A.), argues that an educator functioning as a systems analyst must bave expertise in the social, psychological, and maintenance system of universities. Thus, university administrators must not be given the right to search student dormitory room

Proposition - University administrators must [illegible] the right to search student dormitory rooms for drugs.

George McGovern believes that [illegible] administrators must not be given the right to search student dormitory rooms because administrators are systems analysts. University administrators are normally defined as the president, provost, registrar and deans of the various colleges. [illegible] educator functioning as a systems analyst must have [illegible] in the social, psychological and [illegible]. Thus, university administrators [illegible] the right to search student dormitory rooms.

A.

Proposition - Cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

Richard Daley stated in a recent speech: "Minority students have been found to significantly improve in academic performance in a racially and economically mixed environment. A study of 200 minority students who were bused into predominately white middle class schoools showed a significant rise in academic achievement as opposed to a control group who were not bused, and who showed no such improvement in a similar length of time. A nationwide survey produced similar results. This survey of 1,200 school children in the junior high age bracket revelaed that 68.5% of the students made significantly higher scores on I.Q. tests after two years in a racially and economically mixed school environment. Thus, cross-district busing is a necessary tool in achieving racial integration in our nation's schools."

B.

Proposition - Cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

According to Ronald Reagan: "Busing to another school district is not the cause of improved academic performance. A study of three predominately black schools districts in Illinois revealed that with increased funds providing more highly skilled teachers and more adequate teaching facilities, students improved their academic performance significantly. A nationwide survey found that none of the 800 students studied were any more successful academically in a predominately white suburb school than they had in their own neighborhood school. Thus, cross-district busing to achieve racial integration in our nation's schools in not necessary."

C.

Proposition - Cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

Edward Kennedy recently argued that one consequence of cross-distric busing is that daily interpersonal contact between minority and white students results in more awareness of each other and a greater likelihood of building cooperative social systems. In-depth interviews with forty black and white students in racially mixed schools revealed that they had more pleasant interpersonal friendships with students of another race than a similar group of students in schools of predominately one race. If students are exposed at early ages to a racially mixed atmosphere, they are less likely to develop negative stereotypes of different ethnic groups. Thus, cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

D.

Proposition - Cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

Ronald Reagan contends that cross-district busing to achieve racial integration in our nation's schools is undesirable because it is a violation of individual rights. The busing of school children out of their own school districts is a violation of individual rights. If the parents pay property taxes to support a particular school system, it is a violation of their rights to have their children bused into another, possibly more inadequate, district. Resentments caused by forced cross-district busing in violation of individual rights will result in increased racial tension in our schools. Thus, cross-district busing to achieve racial integration in our nation's schools is unnecessary.

E.

Proposition - Cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

Edward Kennedy believes that cross-district busing involves the movement of children from one school district to another in order to achieve an equitable racial balance within schools. Racial integration is the process by which all public institutions must be racially balanced if possible. Thus, cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

F.

Proposition - Cross-district busing is a necessary tool in achieving racial integration in our nation's schools.

Ronald Reagan believes that cross-district busing is not a necessary tool in achieving racial integration in our nation's schools because school is the institution in which children are both educated and socialized into society. Busing is the means of transporting students from outlying areas of a district to and from school. Thus, cross-district busing to achieve racial integration in our nation's schools is unnecessary.

A.

Proposition - University administrators must be given the right to search student dormitory rooms for drugs.

Richard Daley stated in a recent speech: "Many students have been found to store drugs in their dormitory rooms. In-depth interviews with twenty-two students who were treated for drug addiction revealed that student rooms were among the most frequently used places for storing drugs. A nationwide survey produced similar results. This survey of 1,200 college drug users revealed that 68.5% of the students listed student rooms as one of the most commonly used places for storing drugs. Thus, university administrators must be given the right to search student dormitory rooms."

B.

Proposition - University administrators must be given the right to search student dormitory rooms for drugs.

According to Ronald Reagan: "University administrators must not be given the right to search student rooms because most students do not store drugs in their rooms. A study of three Illinois colleges revealed that none of the students interviewed had used their rooms to store drugs. A nationwide study found that none of the 800 students he interviewed had stored drugs in their dormitory rooms. Thus, university administrators must not be given the right to search student lockers."

C.

Proposition - University administrators must be given the right to search student dormitory rooms for drugs.

Richard Daley recently argued that one consequence of the early identification and counseling of drug users is that they are less likely to become serious drug abusers. In-depth interviews with twenty-two students who had been treated for drug addiction revealed that student dormitory rooms were the most frequently used place for storing drugs. If students can be identified in the early stages of drug usage, educational and psychological counseling can frequently prevent drug addiction. Thus, university administrators must be given the right to search student dormitory rooms.

D.

Proposition - University administrators must be given the right to search student dormitory rooms for drugs.

Ronald Reagan contends that university administrators must not be given the right to search dormitory rooms because this would be a violation of individual rights. The right to search a student's dormitory room would violate the student's constitutional right of freedom from unlawful search and seizure. Students might come to fear, rather than respect, the authority of the administration if it were allowed to search student dormitory rooms. Thus, university administrators must not be given the right to search student dormitory rooms.

E.

Proposition - University administrators must be given the right to search student dormitory rooms for drugs.

Richard Daley believes that narcotics are drugs. Narcotics are legally defined as addictive drugs. Addictive drugs may appear in many forms--pills, liquids, powders, etc. Student dormitory rooms are temporary domiciles in which students keep books, clothes and other personal belongings. Thus, university administrators must be given the right to search student dormitory rooms.

$$\frac{\pi}{2} - \int_{-\infty}^{\infty}$$

F.

Proposition - University administrators must be given the right to search student dormitory rooms for drugs.

Ronald Reagan believes that university administrators must not be given the right to search student dormitory rooms because administrators are systems analysts. University administrators are normally defined as the president, provost, registrar and deans of the various colleges. An educator functioning as a systems analyst must have expertise in the social, psychological and maintenance system of universities. Thus, university administrators must not be given the right to search student dormitory rooms.

Instructions:

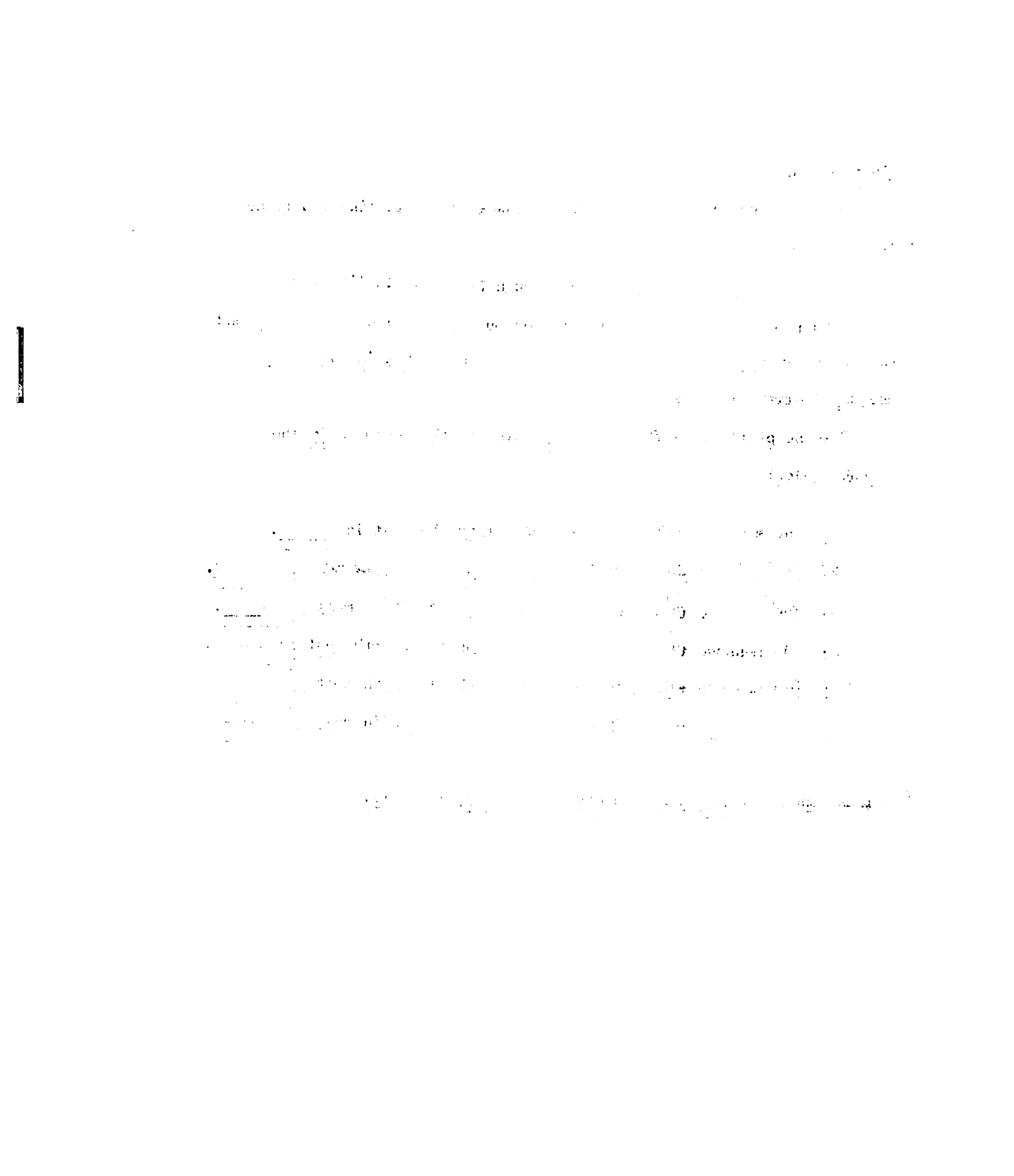
Now that you have read all six messages, we would like you to do another task.

By each message is a letter A through F. We would like you to rank order the messages according to how much they helped you understand the proposition. You must rank all the messages; that is, you cannot use any letter more than once.

Please place the letters corresponding to the messages in the blanks below:

1. The message that helped me understand the most is _____.
2. The message that helped me understand the second most is _____.
3. The message that helped me understand the third most is _____.
4. The message that helped me understand the fourth most is _____.
5. The message that helped me understand the fifth most is _____.
6. The message that helped me understand the sixth most is _____.

Please check to make sure you have used all the letters.



Instructions:

Now that you have read all six messages, we would like you to do another task.

By each message is a letter, A through F. We would like you to rank order the messages according to how much they helped you take a stand on the proposition. You must rank all the messages; that is, you cannot use any letter more than once.

Please place the letters corresponding to the messages in the blanks below:

1. The message that helped me take a stand the most is _____.
2. The message that helped me take a stand the second most is _____.
3. The message that helped me take a stand the third most is _____.
4. The message that helped me take a stand the fourth most is _____.
5. The message that helped me take a stand the fifth most is _____.
6. The message that helped me take a stand the sixth most is _____.

Please check to make sure you have used all the letters.

Instructions:

Now that you have read all six messages, we would like you to do another task.

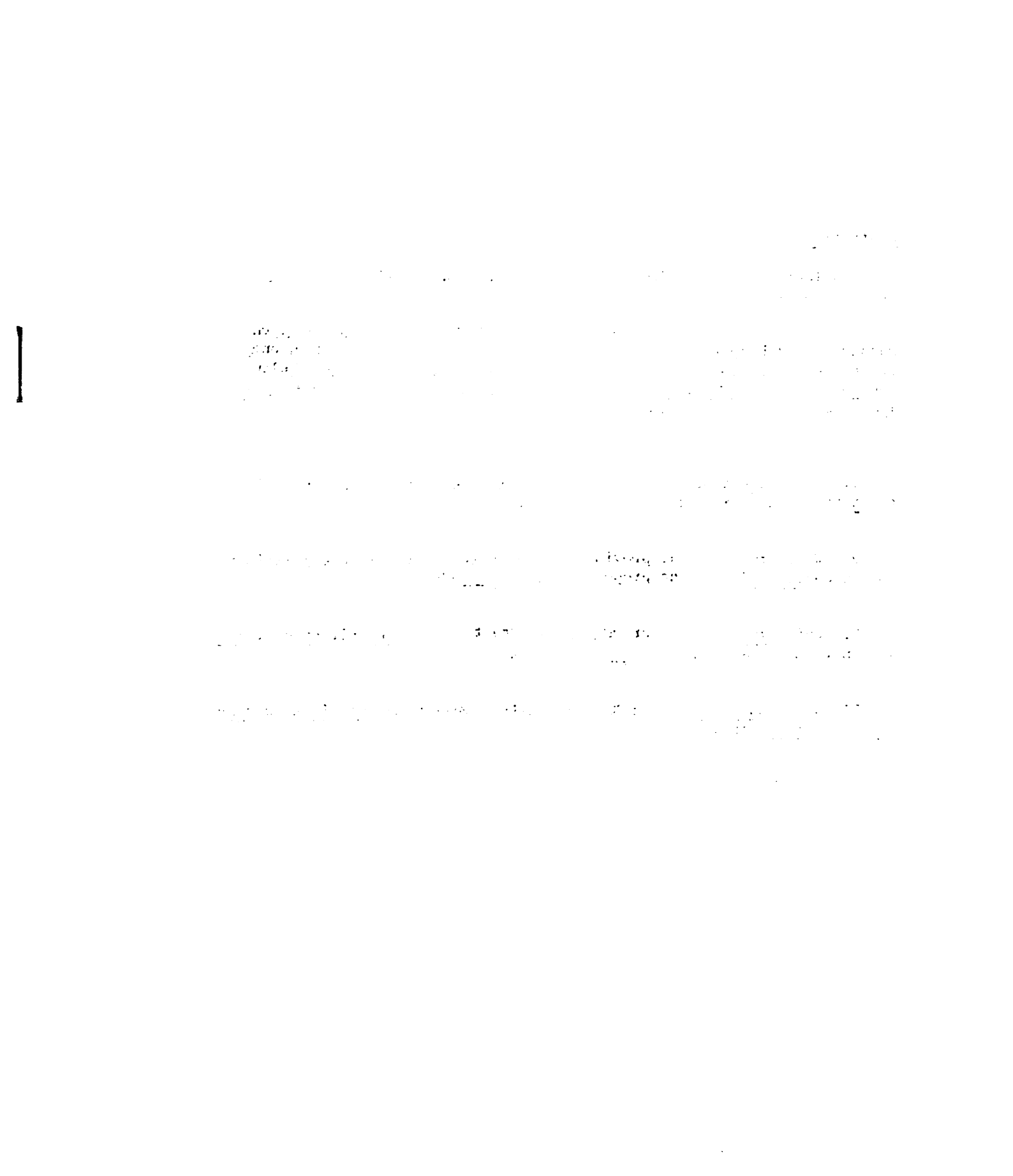
By each message is a letter, A through F. We would like you to choose messages that helped you in certain situations, and indicate which ones you chose by placing the letters of those messages in the blanks below. You cannot use a letter more than once, so be sure you choose different messages for each question.

1. Which two messages provided you with the most evidence pertaining to the truth of the proposition? _____ and _____.

2. Which two messages provided you with the most evidence pertaining to the desirability of the proposition? _____ and _____.

3. Which two messages provided you with the most definition of terms within the proposition? _____ and _____.

Please be sure you have not used a letter more than once in answering the above questions.



Instructions:

Now that you have read all six messages, we would like you to do another task.

By each message is a letter, A through F. For each message we would like you to decide which person, from the nine listed below, is the one most likely to have written each message. Place the number of that person in the blank following each question.

You cannot use any person more than once.

1. Ted Kennedy
2. Richard Nixon
3. B. F. Skinner
4. Richard Daley
5. Julian Bond
6. Ronald Reagan
7. Irene McCabe
8. George Wallace
9. George McGovern

1. Which person do you feel was most likely to have written message A. _____

2. Which person do you feel was most likely to have written message B. _____

3. Which person do you feel was most likely to have written message C. _____

4. Which person do you feel was most likely to have written message D. _____

5. Which person do you feel was most likely to have written message E. _____

6. Which person do you feel was most likely to have written message F. _____

Please check to make sure you have not used a person more than once.

Finally we would like to ask some questions about you.

1. What is your age? _____ years.

2. Are you (1) male (2) female ?

3. What is your college class?

   (1) freshman (2) sophomore (3) junior (4) senior

4. What is your cumulative grade point average (GPA)?

   ( ) 3.51 - 4.00

   ( ) 3.01 - 3.50

   ( ) 2.51 - 3.00

   ( ) 2.01 - 2.50

   ( ) 2.00 or less

5. Have you ever taken a course in persuasion or logic?

   ( ) Yes ( ) No

   If yes, what course(s)? _____