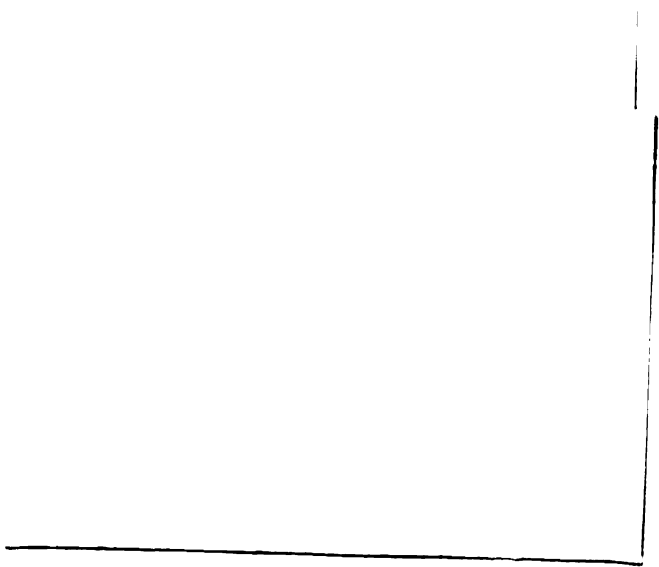


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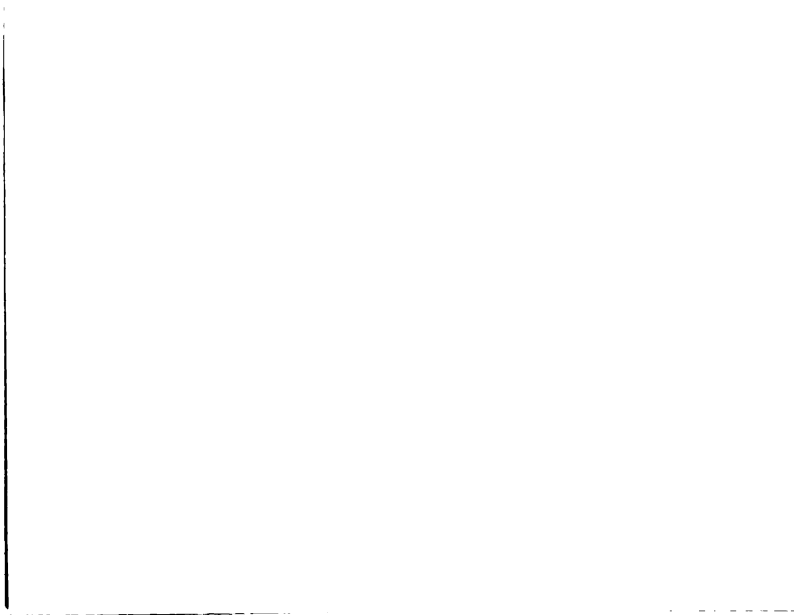


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OPEN- AND CLOSEDMINDEDNESS
AND THE
ABILITY TO DIFFERENTIATE BETWEEN
SOURCE AND MESSAGE

By

Fredric A. Powell

AN ABSTRACT OF A THESIS

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

MASTER OF ARTS

Department of General Communication Arts

1961

APPROVED: _____

ABSTRACT

OPEN- AND CLOSEDMINDFULNESS AND THE ABILITY TO DIFFERENTIATE BETWEEN SOURCE AND MESSAGE

by Fredric A. Powell

The purpose of this study was to test empirically the validity of the fundamental distinction between open and closed belief-disbelief systems posited by Rokeach in his discussion of dogmatism. He suggested that open and closed individuals are basically differentiated in their relative ability to distinguish between and evaluate independently information about the world and the information source.

Placing the study in a communication context, it was hypothesized that the more open an individual's belief system, the greater should be his ability to differentiate between the substantive content of a message and information about the message source and to evaluate each upon its intrinsic merits.

Two independent variables were introduced: (a) the degree of dogmatism--open- or closedmindedness--of the individual, and (b) the reference point employed by the individual in evaluating the source and message. The former variable was operationalized as the individual's dogmatism score on the Rokeach Dogmatism Scale. The latter depended upon whether the individual employed the source as a reference point for evaluating the message

or used the message as a reference point for subsequently evaluating the source.

The dependent variable was the individual's ability to differentiate between and evaluate independently the source and the message. This was operationalized as the \underline{D}^2 score derived from the individual's judgments of the source and message utilizing a series of Semantic Differential (SD) scales.

Seventy-six respondents judged six source-message pairs on the basis of the SD scales. The sample was equally divided between open and closed individuals and each of these groups was further equally divided between those employing the source as a reference point and those using the message as a reference point for subsequently judging the message and the source, respectively.

The statistical analysis of the data involved testing for differences between the variances of the mean \underline{D}^2 values of the open and closed groups under the two reference point conditions. The results of the analysis provided empirical evidence that open and closed individuals differed in their comparative ability to differentiate between sources and messages and to evaluate them independently upon their intrinsic merits. Openminded individuals were found to be more able to do this than were closed individuals. This difference was found to exist regardless of the reference point used in evaluating the sources and messages and regardless of the substantive content of the messages.

On the basis of these results, it was concluded that open- and closedminded individuals do differ in their relative capacity to differentiate between and evaluate independently information and source of information, thus providing empirical support of the validity of what Rokeach considered the fundamental distinction between open and closed belief-disbelief systems, or between openminded and closedminded individuals.

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CONTENTS

INTRODUCTION.....	1
CHAPTER I.....	5
CHAPTER II.....	21
CHAPTER III.....	37
CHAPTER IV.....	44
REFERENCED BIBLIOGRAPHY.....	55
APPENDICES	
A. Pretest of Concepts and Semantic Differen- tial Scales.....	61
B. Sample Questionnaire.....	67

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PREFACE

The process of communication always involves at least three elements--a source, a message, and a receiver. Communication research is continually directed at gaining a more comprehensive and insightful understanding of the source, message, and receiver variables which may contribute to more efficient and effective communication.

When one undertakes to study the communication process and/or its elements, a number of approaches are available. One might study the process en toto, as a process. Again, it is possible to concentrate on only one or more of its isolated elements. In this case, however, it is impossible to study a single isolated element, despite primary concern with that one element. Each of the elements in the process of communication is interdependent with the other elements in the process and cannot be completely isolated from them, even for purposes of study.

This study is primarily concerned with the receiver as an element of the communication process and, more specifically, with the personality predisposition of dogmatism as an attribute of the receiver which affects the efficiency and effectiveness of any communication.

This study, of necessity, also had to consider the source and the message as elements of the process of communication. The empirical approach to the study required the holding constant of the source and the message so

that the effect of the receivers' dogmatism upon their acceptance and evaluation of both the source and the message might be observed.

Specifically, it was hypothesized that high dogmatic and low dogmatic individuals differ in their relative ability to differentiate between and evaluate the substantive content of a message and the source of the message. If significant differences in this ability are observed between high and low dogmatic individuals, it may be concluded that the personality characteristic of dogmatism is a useful variable in predicting the use a receiver will make of judgments about the source and the message before responding to communicative stimuli.

LIST OF TABLES

Table		Page
1.	Distribution of Respondents' dogmatism Scores.....	22
2	Open and Closed Respondents According to Sex, Age, Income, Education, Party Preference, and Socio-Economic Status.....	27
3	Republican and Democratic Respondents According to Sex, Age, Income, Education, and Socio-Economic Status.....	23
4.	Mean D^2 scores of the Four Groups on the Six Source-Message Pairs.....	38
5	Analysis of Variance.....	42

INTRODUCTION

The purpose of this study was to test empiracally the fundamental distinction posited by Rokeach between open and closed belief-disbelief systems, or as the title of his recent book (60) suggests, between open and closed minds. He suggests that open and closed belief-disbelief systems are basically differentiated in "the capacity to distinguish information from source of information and to evaluate each on its own merits" (60, p. 396).

In The Open and Closed Mind and in a number of journal articles (22, 51, 52, 53, 54, 55, 57, 58, 59, 61, 62, 63), Rokeach and his associates proposed several characteristics which differentiate open and closed belief-disbelief systems. They proposed that open and closed systems differ in the extent of isolation and differentiation of beliefs and disbeliefs, in the specific content of beliefs and disbeliefs, and in the structuring or organization of beliefs and disbeliefs. Rokeach and his associates reported a number of studies testing the validity of these differences in which they found that open and closed belief-disbelief systems do, in fact, differ in the extent to which they exhibit these characteristics.

However, no attempt seems to have been made to date to test the validity of what Rokeach considered to be the fundamental distinction between open and closed systems. The differences in degree of isolation, in content, and

in organization were seen as variables contributing to the fundamental distinction--the ability to differentiate between information and source of information and to evaluate each on its intrinsic merits. The purpose of this study was to empirically test the validity of this distinction. The intent was to determine whether or not open- and closed minded individuals do, in fact, differ in their comparative ability to differentiate and evaluate source and information.

This fundamental distinction was tested in a more or less everyday communication situation. Respondents were given the task of differentiating between and evaluating information contained in political statements and information about the sources of the statements.

Significance

The significance of this study was seen as fourfold. First, the study should provide empirical evidence supporting or failing to support the validity of the basic distinction between open- and closedminded individuals, as posited by Rokeach.

Second, should the evidence obtained support that distinction, it may prove useful in explaining some of the variability present in the studies of cognitive balance reported by Heider (25), Newcomb (44), Osgood and Tannenbaum (48), Festinger (13), and others. The principles of congruity-incongruity or consonance--dissonance set forth in these theories of cognitive balance and attitude change may hold true to varying degrees in

the cases of openminded and closedminded individuals.

Third, the study may have significance in the area of source credibility. It may provide some partial explanation of the results of those source credibility studies in which the source's influence, either favorable or unfavorable, was not as predicted. These studies are typified by the research efforts of Ewing (11), Hovland and Weiss (29), Kelman and Hovland (38), and others.

Finally, it may be that the distinction suggested by Rokeach has relevance to the study of reference group influence and usage as represented by the work of Asch (2, 3, 4) and Sherif (66), among others. Individuals exhibiting open and closed belief-disbelief systems may differ in the extent to and the manner in which they make use of reference groups when they must reconcile new information with existing cognitions or knowledge, and when evaluating and acting upon new information.

The possible implications of the differential ability of open and closed individuals to distinguish between and evaluate independently information and source of information for the study of cognitive behavior, source credibility, and reference group influence will be discussed in greater detail in Chapter IV.

Organization

The study is reported and discussed in four parts. Chapter I summarizes the theoretic background of the study, including a discussion of the early studies of the relationship of personality to persuasability and a brief

summary of Rokeach's conceptualization of the basic distinction between open and closed belief-disbelief systems. Chapter I also includes the theoretic hypothesis and a rationale for the study.

The design of the study, a description of the sample, a discussion of the questionnaire, and the methods employed in the study are presented in Chapter II.

Chapter III presents the results of the statistical analysis of the data and the conclusions derived from the analysis.

The final chapter, Chapter IV, includes a summary of the study, a discussion of the results, and some suggested areas for further study. The latter section discusses in particular the implications of open- and closedminded individual's differential ability to distinguish between information and source of information for the study of cognitive balance, source credibility, and reference group influences.

CHAPTER I

Chapter I presents a discussion of the theoretic background of this study, the hypothesis that was tested, and a rationale for the study. In outlining the theoretic background, some of the early research efforts in the areas of personality and persuasibility and of rigidity or dogmatism are discussed, as well as Rokeach's notion of the basic difference between open and closed belief-disbelief systems.

Theoretic Background

It is generally recognized that the effects of a communication are, among other influences, dependent upon the personality characteristics of the communicatee. By taking account of such personality predispositions, together with reference group influences and other pressures upon the communicatee, it is possible to predict the manner in which an individual or a group of individuals will respond to a communication.

Hovland, Janis, and Kelley (26, p. 174) differentiate two general classes of personality characteristics which affect an individual's responsiveness to any communication, and to persuasive communications in particular. The first general class is the individual's readiness to accept or reject a particular point of view with regard to a specific topic.

This set of factors has been recognized as a major determinant of an individual's susceptibility to opinion

change. Much research effort has been devoted to studying the personality factors associated with acceptance or rejection of various beliefs and attitudes within one topic area or another. This topic-bound type of personality predisposition was subdivided by Janis and Hovland (35, pp. 6-13) into content-bound (including appeal-bound, argument-bound, and style-bound) factors, communicator-bound factors, media-bound factors, and situation-bound factors.

The studies of authoritarian personalities by Adorno, Frenkel-Brunswik, Levinson, and Sanford (1) provided the major impetus toward understanding the nature of belief and attitude changes about specific issues, such as racial prejudice. The findings of Bettelheim and Janowitz (6, p. 6) bear directly upon the nature of topic-bound predispositions. They found, in a study of the effects of anti-Semitic propaganda, that such propaganda was most readily approved by individuals who either had already acquired an intolerance toward the Jewish people, or who were tolerant of them, but whose personalities were insecure and hostile. Smith, Bruner, and White (67, p. 7), Hartley (24), and Sarnoff (65) reported other studies of personality correlates contributing to readiness to accept or reject favorable or unfavorable communications about specific ethnic, national, and political groups.

Other studies of topic-bound predispositions have dealt with relatively general factors not limited to the modification of attitudes and beliefs toward only one

type of social group. Weiss and Fine (70, 71) investigated the personality factors which make for high readiness to accept or reject a communication advocating strict punitive measures toward social deviates. They found that individuals with high aggression drives and strong extra-punitive tendencies were more prone to accept communications advocating strong punitive attitudes toward those who violate the norms of society.

Janis and Hovland (35, pp. 9-13) cite a number of additional studies demonstrating the nature of content-bound, communicator-bound, media-bound, and situation-bound personality correlates which were found to influence and individual's readiness to accept or reject a communication advocating a given point of view on a particular topic.

The findings of these and other studies are useful in predicting the manner in which different individuals may respond to communications dealing with specific issues. However, their usefulness is limited when attempting to predict an individual's response to many types of communications, cutting across diverse subject matters and covering a wide spectrum of specific beliefs and attitudes.

The second class of personality factors set forth by Hovland, Janis, and Kelley are those which influence an individual's general susceptibility to various types of persuasive communications and social influence. This class of predispositions was assumed to be relatively

independent (topic-free) of the subject matter of the communication. As compared to topic-bound personality factors, they are more general in scope in that they are relatively independent, not only of the subject matter of the communication, but also of the communicator, the channel or medium through which conveyed, and the communication situation. Although never completely independent of these influences, they are, nevertheless, not dependent upon the conclusion of or the position advocated in the communication.

A number of empirical studies have been conducted in an effort to isolate those topic-free predispositions which generally influence the acceptance or rejection of communications. A large number of these investigations were concerned with individuals' differences in responsiveness to persuasive communications (12; 26, pp. 177-79; 30, 31, 32). The results of these studies indicated that there may be a general personality factor of susceptibility to communications--a factor leading to high or low resistance to a wide variety of communications on many diverse and unrelated topics.

Janis and Field (33) reported a study of the consistency of these individual differences in susceptibility to various types of communications. The results of their study indicated that there may be a general configuration of a relatively few personality variables which contribute to communication susceptibility.

Many personality characteristics have been posited as influencing an individual's general susceptibility to

communications, Janis and Field (34), in another study, found that the personality characteristics of feelings of social inferiority, richness of fantasy, interpersonal aggressiveness, and neurotic defensiveness were positively correlated with susceptibility to persuasive communications.

Linton and Graham (40) identified a series of variables related to change of opinion in response to communications and describe a fundamental pattern of personality correlates which predispose an individual to accept or to reject persuasive communications. Among these variables was that of authoritarianism. Although they found no significant differences between opinion-changers and nonchangers in their overall authoritarianism, they did find significant differences according to the dimensions along which authoritarianism was organized. Changers and nonchangers differed in authoritarian submission and aggression, anti-intracception, power and toughness, destructiveness and cynicism, and in projectivity. Opinion-changers exhibited a greater degree of all of these variables, with the exceptions of cynicism and projectivity, than did nonchangers.

Other personality characteristics which Linton and Graham (40, pp. 86-101) found to be related to susceptibility to communications were degree of respect for parental authority, attitudes toward social deviates, admiration of power, feelings of inadequacy and inferiority, assertiveness, and desire for independence.

Cohen (10) found that the degree of an individual's self-esteem and estimate of his personal adequacy were

positively correlated with his susceptibility to persuasive communications.

Janis and Hovland (35, pp. 167-281) and Hovland, Janis, and Kelley (26, pp. 174-214) cite a large number of additional studies of a wide variety of topic-free personality correlates which have been found to affect the acceptance or rejection of persuasive communications.

One of the personality factors noted above which has been found to be closely related to communication susceptibility is that of the communicatee's degree of authoritarianism. The measures of authoritarianism used by Linton and Graham in their study were derived from those developed by Adorno, et al, and reported in The Authoritarian Personality (1, pp. 57-290).

The research efforts of Adorno and his associates were conducted in the areas of authoritarianism and intolerance as functions of dogmatic or rigid thought behavior. An individual's susceptibility to an ideology, belief, or idea was seen as a function of the degree to which he exhibits the personality forces of authoritarianism and intolerance. These personality forces were seen, furthermore, as influencing his readiness for response to sociological influences or pressures, including communicative influences.

In their conceptualization, an individual's system of objective and rational thought was a function of the fixity or flexibility of his personality. In order to understand and predict his response to sociological

influences, it was necessary to determine the kind of personality organization--the degree of cognitive rigidity--that exists within him. An individual's response to influences, whether the response is one of acceptance of or resistance to change, was seen as a function of the ego--that part of the personality structure which appreciates reality, integrates the parts of reality, and operates with subconscious awareness (1, pp. 1-11).

Thus Adorno and his associates conceived of the personality characteristic of cognitive rigidity, overtly manifested in authoritarianism and intolerance, as a determinant of an individual's resistance to or acceptance of sociological (and communicative) influences.

Dissatisfied with the earlier efforts to define and describe rigidity or resistance to change, Rokeach and his associates conceived of open and closed belief-disbelief systems in an effort to overcome what seemed to be some major inadequacies in the prior conceptualizations of the nature of rigidity or dogmatism.

Rokeach's major objection to the earlier efforts in this area was that they failed to produce a satisfactory generalized description of the nature of rigidity or dogmatism--resistance to change. He felt that the previous efforts were still too content- or topic-bound; that is, that these earlier conceptualizations of the nature of resistance to change remained, despite their attempts to overcome this inadequacy, applicable only to specific situations and areas of cognitive activity. They failed

to provide a description of resistance to change which pervaded all areas of belief and cognitive functioning.

Initially, Rokeach made a distinction between rigid and dogmatic cognitive behavior. Although both notions referred to resistance to change, Rokeach saw them as differing in the scope of their influence. The former, rigidity, referred, in his formulation, only to the resistance to change of single, specific beliefs whereas dogmatism referred to the resistance to change of entire systems of belief (63, p. 88). Thus the referent of rigid thinking was a single concept, set, idea, habit, expectancy, etc.; the referent of dogmatic thinking, on the other hand, was the total cognitive configuration of ideas and beliefs held by the individual. Rigidity involved the overcoming of single sets of beliefs in solving or learning specific problems and tasks; dogmatism, the overcoming of a total system of ideas and beliefs.

As Rokeach conceived of dogmatism, it was a much more comprehensive phenomenon than was rigidity, embracing the total cognitive organization of the individual, rather than a single, isolated belief or idea.

Second, and closely related to his first objection, Rokeach took exception to the previous studies of dogmatism or rigidity which treated authoritarianism and intolerance or ethnocentrism as independent domains of dogmatic thought (1, 21, 41). In his conceptualization, these phenomena are not independent; both are manifestations of higher levels of dogmatism.

He also objected to the nature of the authoritarianism and intolerance focused upon in the earlier studies. In his view, these studies overemphasized the rightist forms of authoritarianism and intolerance, concentrating only on the conservative forms of political and ethnic thought such as Fascism and anti-Semitism. The earlier studies ignored left authoritarianism and intolerance--the liberal or radical forms of political and ideological thought as exemplified by the Communist doctrine.

Seeing a need for the conceptualization of general authoritarianism and intolerance, both left and right, Rokeach, in formulating his notion of dogmatism, sought to describe the nature of general authoritarianism and intolerance, rather than limit his description to the rightist forms of those phenomena.

In Rokeach's formulation, dogmatism is a "cognitive state which mediates objective reality within the person" (57, p. 194). His construct of dogmatism revolves around the convergence of three closely interrelated sets of variables: cognitive systems, intolerance and authoritarianism. Dogmatism, in essence, involves the relationship of cognitive functioning and social attitudes.

In recent years, Rokeach and others (1, pp. 57-290; 41, pp. 401-11) have investigated this relationship, largely in the area of ethnic intolerance and its underlying authoritarianism (50, 51, 52, 53, 56). In these studies, it was found that individuals high in ethnic prejudice and/or authoritarianism were more rigid and concrete in

their cognitive functioning, more narrow in their grasp of an idea or belief, had a greater tendency to premature closure of perceptual processes and distortions of memory, and a greater intolerance of ambiguity.

Prior to the writing of The Open and Closed Mind, the major research effort to explain the relationship between beliefs and cognition was that of Frenkel-Brunswik (16, 17, 18, 19). In her explanation, a close correspondence existed between the cognitive spheres of behavior and the emotional or social spheres. An individual's cognitive activity was seen as a function of his past social and emotional experiences.

Rokeach's construct of open and closed belief-disbelief systems was largely derived from the work of Frenkel-Brunswik. It was a theory tying together the organization of social and emotional attitudes with that of cognition, as was the theory of Frenkel-Brunswik. However, his theory embraced the nature of general authoritarianism and intolerance, whereas that of Frenkel-Brunswik concerned itself solely with right authoritarianism and intolerance. In Rokeach's view, beliefs and cognition were structurally inseparable, and as such, were interrelated in his conceptualization of dogmatism.

According to Rokeach's construct, the structure of belief-disbelief systems varies along a continuum from open (low dogmatism) to closed (high dogmatism). This continuum was a joint function of (a) the degree of interdependence among the parts within the belief system,

within the disbelief system, and between the belief and the disbelief systems; (b) the degree of interdependence between the central, intermediate, and peripheral regions of the system; and (c) the organization of the system along a time perspective dimension (51).

Contentwise, the belief-disbelief system may be described in terms of the formal content of centrally located beliefs and disbeliefs.

In The Open and Closed Mind, Rokeach reported a number of studies testing the validity of his theory of open and closed belief-disbelief systems in terms of the cognitive processes (60, pp. 169-234). These studies required subjects to accomplish a variety of problem-solving tasks, many of them patterned after the Denny Doodlebug Problem devised by M. R. Denny in 1945. In general, the problem and its many variations required the formation of new beliefs and the alteration of existing systems. Rokeach hypothesized that "the more closed a person's belief system, as measured by the Dogmatism Scale, the more resistance he will put up to forming new belief systems" (60, p. 161).

The validation studies provided evidence in support of Rokeach's construct of general dogmatic thought as opposed to rigidity i.e., the hypotheses that relatively closed individuals were more resistant to changes in beliefs, had more difficulty in integrating new information and beliefs into their existing belief-disbelief system, had more difficulty in remembering new information

and beliefs, were more dependent upon authority, and exhibited greater isolation of peripheral beliefs. These and other studies conducted by Rokeach and his associates all served to support the validity of his conceptualizations of the nature of belief-disbelief systems and the differential characteristics of open and closed systems.

In this study, it was attempted to test and validate a portion of Rokeach's theory which has not, to date, been empirically tested; namely, the fundamental differentiation he makes in the nature of open and closed minds--the ability to distinguish between and evaluate independently the substantive content of a message and the source of that message.

In Rokeach's terms

"The more open one's belief system, the more should evaluating and acting upon information proceed independently on its own merits,

"Conversely, the more closed the belief system, the more difficult should it be to distinguish between information received about the world and information received about the source.

"The two aspects of communication are indistinguishable to the closed system, but distinguishable to the open system" (60, pp. 58-59).

Theoretic Hypothesis

The theoretic hypothesis underlying this study was: The more open an individual's belief-disbelief system, the greater should be his ability to differentiate between

the substantive content of a message and information about the message source; and the more should evaluation and action upon the content, and evaluation and acceptance of the source, proceed independently upon the respective merits of each.

Conversely, the more closed an individual's belief-disbelief system, the less should be his ability to differentiate between informational content of a message and information about the source with evaluation and action on each proceeding upon their aggregate and interacting merits.

The theoretic hypothesis was operationalized in the following manner: Given individuals indicating their personal evaluative judgments of the substantive content of a series of statements and of the statement sources, utilizing a series of Semantic Differential scales (47);

The average distance (\underline{D}) between concept points representing for the individual the connotative meaning of the substantive content of a statement and of the source within that individual's semantic space, as determined by his evaluative judgments of each and reflected by his responses to a series of Semantic Differential scales, will be greater for openminded individuals than for closedminded individuals; the extent of open- or closedmindedness being measured by the individual's score on the Rokeach Dogmatism Scale, (i.e. $D_{\text{O}}^2 > D_{\text{C}}^2$).

Rationale

In Rokeach's conceptualization, all information received by an individual must be processed or coded in such

a way that it may either be rejected or fitted into the individual's belief-disbelief system. He conceives of this processing-coding activity as the process of thinking and suggests that it is within the context of beliefs and disbeliefs that thinking or cognitive activity takes place (60, pp. 47-49).

Although not certain of how this process proceeds, he suggested that new information is first screened for compatibility with existing primitive or basic beliefs. If not rejected through the process of cognitive narrowing, the new information is transmitted from the central region to the intermediate region of the belief-disbelief system. If not rejected as incompatible with the individual's beliefs about the nature of authority, the information is subsequently communicated to the peripheral region where it becomes represented as a nonprimitive belief or disbelief.

The extent and manner in which new information is fitted into the belief-disbelief system depends upon the degree to which the system is open or closed. In Rokeach's conceptualization;

"At the closed extreme, it is the new information that must be tampered with--by throwing it out, altering it, or containing it within isolated bounds. In this way, the belief-disbelief system is left intact. At the open extreme, it is the other way around: New information is assimilated as is and, in the hard process of reconciling it with other beliefs, communicates with other peripheral

as well as intermediate beliefs, thereby producing 'genuine' (as contrasted with 'party-line') changes in the whole belief-disbelief system" (60, p. 50).

Rokeach suggested that the basic characteristic defining the extent to which an individual's belief-disbelief system is open or closed is "the extent to which the person can receive, evaluate, and act on relevant information received from the outside on its own intrinsic merits, unencumbered by irrelevant factors in the situation from within the person or from the outside" (60, p. 57).

Placing this fundamental distinction in a communication context, it is the extent to which an individual can distinguish between information contained in a message and information about the source of the message and evaluate each upon its own merits.

This study was conceived in an attempt to provide empirical evidence of the validity of that distinction. The study was undertaken in an effort to ascertain whether or not open and closed individuals do, in fact, differ in their relative ability to differentiate between information and source.

The various source prestige and credibility studies, and, to some degree, the cognitive balance studies are interested only in the effect of a source upon the communicatee's judgment and acceptance of ideas, beliefs, concepts, etc. In this study, an attempt was made to achieve greater generalizability of the results by treating sources and messages as reference points against which the respon-

dents were to judge new stimuli--sources and statements.

In line with the theoretic hypothesis of this study, the influence of open- or closedmindedness should operate to approximately the same extent and in approximately the same manner regardless of whether the reference point used in evaluating the sources and statements is the message or the source.

It was seen that, should the fundamental distinction between open and closed systems be supported by this study (as well as by other similar validation studies), this distinction may be useful in explaining and predicting various effects of communication. It was thought that these effects, and the phenomena producing them--source credibility, persuasive appeals, reference group influences, methods and order of presentation, etc.--may occur in different manners and to different degrees in the cases of open-and closedminded individuals.

CHAPTER II

This chapter describes the design of the study, the questionnaire, and the sample; and discusses interviewing procedures and controls.

Design of the Study

This study was designed to compare the relative capability of open- and closed-minded individuals to differentiate between a series of statements and their sources and to evaluate each on its own merits, independently of the other.

There were two independent variables in the study. The first variable was the individuals' degree of dogmatism--open- or closed-mindedness. This variable was operationalized, indexed, and manipulated through measurement of that personality factor on the Rokeach Dogmatism Scale. The respondents were differentiated, on the basis of their dogmatism scores, only as being open- or closed-minded. The magnitude or intensity of their open- or closed-mindedness was not taken into account.

The dogmatism scores of the respondents comprising the sample ranged from 120 to 197. The mean dogmatism score was 158.36 (slightly open-minded) and the standard deviation of the scores was 19.19. In line with Rokeach's scoring procedures (60, p. 63), a score of 160 was taken as the cutting point between open and closed respondents; open-minded respondents having scores of 159 or less.

Table 1 shows the distribution of the respondents'

dogmatism scores.

TABLE 1
Distribution of Respondents'
Dogmatism Scores

(N equals 76)

Score	f	Score	f
120 - 124	2	160 - 164	5
125 - 129	3	165 - 169	6
130 - 134	4	170 - 174	8
135 - 139	5	175 - 179	8
140 - 144	6	180 - 184	6
145 - 149	7	185 - 189	4
150 - 154	5	190 - 194	-
155 - 159	6	195 - 199	1

The second independent variable was that of the reference point to be used by the respondents in judging the statements and the sources. The reference point was operationalized and manipulated as either Source Primacy or Message Primacy. That is, the respondents in one-half of the cases used the source as a reference point (judged the sources first) for subsequently evaluating the statements of the source and in the other one-half of the cases, they used the statements as the reference point (judged the statements first) for evaluating the statement sources.

Under the theoretic hypothesis, the reference point used by the respondents was not of primary concern; however, it was manipulated in an attempt to evaluate the generalizability of the first independent variable's effect upon the dependent variable under both Source Primacy and

the Message Primacy conditions. The assumption that the reference point variable would not contaminate the influence of the dogmatism variable upon the dependent variable was tested by manipulation of the reference point variable.

The dependent variable was the relative ability of open and closed respondents to differentiate and evaluate independently the statements and the statement sources. This variable was operationalized and measured in terms of the respondents' judgments of the sources and their respective statements on the Semantic Differential scales provided to them for making their judgments.

Respondents were asked to indicate on 14 Semantic Differential scales their feelings toward the two major political party Presidential candidates in the 1960 election: Vice President Nixon and Senator Kennedy. Utilizing the same 14 adjective pairs of polarized connotative meaning, the respondents were also asked to judge three statements made by the two candidates in the course of the election campaign.

The average source-statement difference in judgment was obtained for each respondent. This average distance or difference between source judgments and statement judgments was then squared, and this value was taken as the measure of each respondent's ability to differentiate the sources from the content of their statements and to evaluate them independently. In line with the theoretic hypothesis, it was expected that the distance squared (D^2) scores would be greater for the openminded respondents

than for the closedminded respondents.

Thus, the index of the dependent variable was \underline{D}^2 as derived in the equation;

$$D^2 = d^2,$$

where \underline{d}^2 was the distance between the respondents' judgment of the source and the statement on each of the 14 scales used to judge them. The \underline{D}^2 scores are additive and may be averaged over the open- and closedminded respondents and reference point conditions (47, pp. 75-124).

A pretest was conducted (Appendix A) to determine the statements to be included in the questionnaire and the Semantic Differential scales to be provided the respondents for judging the statements and the sources in the study proper. Ten statements, five by each of the two candidates, were selected from newspapers and news magazines. The subject matter of these statements included defense, domestic affairs, foreign affairs, and integration. The statements of the two sources were matched, as nearly as possible, with regard to subject matter and purpose. In the pretest, the statements were not attributed to their sources. The respondents in the pretest were asked to judge the resulting 12 concepts on the basis of 30 Semantic Differential adjective pairs.

They were also asked to respond to five items selected from the Rokeach Dogmatism Scale, and a statement of their political party preference was obtained.

The respondents' Semantic Differential responses were submitted to correlation- and item-analysis with the

following results:

1. The list of 30 adjective pairs was reduced to 14 pairs. These 14 Semantic Differential Scales were selected for their polarization of the respondents' judgments, their ability to differentiate the responses of Republican and Democratic respondents, the ability to differentiate between the statements of the two sources, and the average distance between source and statement judgments on each of the scales.

2. The series of ten statements was reduced to six, three matching statements by the two candidates. The statements were selected for their greater average distance from their sources on the Semantic Differential scales and for the consistency of the responses made to them by open- and closedminded respondents. The three remaining pairs of statements dealt with foreign affairs, domestic affairs, and integration.

The Sample

The population from which the sample of respondents for the study was taken was composed of open- and closed-minded individuals. For the purposes of this study, the respondents were drawn from the general population of the City of Lansing and the surrounding township.

The respondents were selected by means of a modified quota sampling procedure. That is, it was predetermined that one-half of the respondents should be openminded; the other one-half, closedminded. For this reason, it was not possible to establish an upper limit on the sample

size. Interviewing continued until the sample was (a) 50 or more respondents in size and (b) equally divided between open- and closedminded individuals.

In addition, it was decided that the sample, as nearly as possible, should be equally distributed in terms of age, sex, political party preference, and high, middle, or low socio-economic status. Socio-economic status was indexed on the basis of annual household income and the educational level attained by the respondent.

The criteria of political party preference and socio-economic status were manipulated by interviewing respondents residing in areas in and around the City of Lansing which evidenced these critical characteristics. (The offices of the Lansing City Clerk and Treasurer and the offices of the Lansing Township Clerk and Treasurer provided assistance in selecting areas which exhibited the critical voting behavior and socio-economic status characteristics.)

Thus, the sample was not representative of the general population of the City of Lansing and the immediate area. However, the general population is not the population to which it was desired to generalize the results of this study; rather, the results were to be generalized to the population of open- and closedminded individuals. It was felt that the sample was representative of this population inasmuch as the distribution of open and closed respondents closely approximated the distribution of dogmatism scores observed by Rokeach in several specific

populations (60, pp. 101-63).

In terms of the respondents actually contacted and interviewed, the sample is described in Tables 2 and 3. Thirty-eight openminded respondents were interviewed, as were a like number of closed respondents. The other major breakdown, that of party preference, yielded 40 Republicans and 36 Democrats.

Although not of primary interest in this study, the data collected afforded an opportunity to examine, on the basis of this small sample, the relationship of dogmatism to the demographic variables of sex, age, income, education socio-economic status, and political party preference. Chi-square tests were employed to determine whether or not the distribution of open and closed respondents within each of the demographic classifications differed from that which might be expected by chance. Only in the case of party preference did the distribution differ significantly from chance ($p < .01$). The direction of the difference suggested that Republicans tended to be more openminded; Democrats, more closedminded. This relationship was found in a relatively small sample and must, therefore, be tested in a larger research effort specifically designed to investigate the relationship of dogmatism and party preference before any statement may be made to the effect that Republicans are more or less open- or closedminded than Democrats.

TABLE 2

Open and Closed Respondents
According to
Sex, Age, Income, Education,
Party Preference, and Socio-Economic Status

Item	Open	Closed	Total
<u>Sex</u>			
Male	16	20	36
Female	22	18	40
<u>Age</u>			
Less than 20	4	2	6
20 - 24	1	3	4
25 - 29	4	3	7
30 - 34	6	2	8
35 - 39	4	6	10
40 - 44	3	8	11
45 - 49	2	7	9
50 - 54	5	2	7
55 - 59	3	3	6
60 - 64	2	1	3
65 and over	4	1	5
<u>Annual Income</u> (\$1,000)			
Less than 3.0	2	3	5
3.0 - 4.9	7	12	19
5.0 - 6.9	2	3	5
7.0 - 8.9	6	4	10
9.0 - 10.9	4	5	9
11.0 - 12.9	6	6	12
13.0 - 14.9	6	3	9
15.0 and over	5	2	7
<u>Education</u> (Years)			
Less than 8	2	3	5
8	2	6	8
9	2	2	4
10	-	4	4
11	-	1	1
12	14	12	26
13	-	-	-
14	-	1	1
15	-	-	-
16	16	9	25
More than 16	2	-	2

TABLE 2 - continued

Item	Open	Closed	Total
<u>Party Preference</u>			
Republican	27	13	40
Democratic	11	25	36
<u>S-E Status</u>			
High	17	11	28
Middle	12	12	24
Low	9	15	24

The distribution of open and closed respondents did not differ significantly from chance in the cases of the age ($p > .99$), sex ($p > .50$), income ($p > .30$), education ($p > .20$), and socio-economic status ($p > .30$) variables. Although no significant differences from chance were observed, the direction of the differences, however small, suggested that openmindedness may be associated with higher education and socio-economic status, and that women may be more openminded than men. There was no suggestion of any association of age or income with dogmatism. Again, specific study of the relationship of these variables and that of dogmatism is needed before any conclusions may be drawn.

Chi-square tests were also used to determine whether or not the distribution of Republican and Democratic respondents within the sex, age, income, education, and socio-economic status classifications differed from chance. In addition to the significant difference noted in the case of open- versus closedmindedness, the only other major and significant difference from chance was observed in the

TABLE 3

Republican and Democratic Respondents
According to
Sex, Age, Income, Education,
and Socio-Economic Status

Item	Republican	Democratic	Total
<u>Sex</u>			
Male	18	18	36
Female	22	18	40
<u>Age</u>			
Less than 20	1	5	6
20 - 24	2	2	4
25 - 29	4	3	7
30 - 34	5	3	8
35 - 39	7	3	10
40 - 44	6	5	11
45 - 49	6	3	9
50 - 54	3	4	7
55 - 59	3	3	6
60 - 64	1	2	3
65 and over	2	3	5
<u>Annual Income</u> (\$1,000)			
Less than 3.0	2	3	5
3.0 - 4.9	6	13	19
5.0 - 6.9	3	2	5
7.0 - 8.9	4	6	10
9.0 - 10.9	7	2	9
11.0 - 12.9	7	5	12
13.0 - 14.9	6	3	9
15.0 and over	5	2	7
<u>Education</u> (Years)			
Less than 8	1	4	5
8	2	6	8
9	3	1	4
10	1	3	4
11	1	-	1
12	14	12	26
13	-	-	-
14	-	1	1
15	-	-	-
16	16	9	25
More than 16	2	-	2

TABLE 3 - continued

Item	Republican	Democratic	Total
<u>S-E Status</u>			
High	13	10	23
Middle	14	10	24
Low	8	16	24

case of the income variable ($p < .05$). The direction of this difference suggested that individuals with higher incomes may be partial to the Republican party; those with lower incomes may tend to be Democrats. This is in agreement with the findings of the numerous investigations of the relationship of income and political party preference or affiliation.

The distribution of Republican and Democratic respondents did not differ significantly from chance in the cases of the sex ($p > .80$), age ($p > .80$), education ($p > .20$), or socio-economic status ($p > .10$) variables. The direction of the differences in the cases of education and socio-economic status would suggest, however, that there may be some relationship between these variables and that of party preference. Individuals of higher education and socio-economic status were found, from the direction of the differences in this small sample, to be Republicans, whereas those of lower education and socio-economic status tended to be Democrats. There was no suggestion of any association of the age and sex variables with that of party preference. Again, this is in line with the findings of studies of the relationship of these variables

with political party affiliation.^a

The Questionnaire

Four versions of the questionnaire were prepared. Each version contained the names of the two major political party Presidential candidates and three statements made by each of them. The candidate's names and the statements were placed at the head of pages containing the 14 Semantic Differential scales to be used in judging them.

The four versions of the questionnaire were constructed as follows in an effort to minimize order and reference point effects:

One-half of the questionnaires asked the respondents to judge the sources first and then to judge the statements, attributing the statements to their respective authors (Source Primacy condition). In the other one-half of the questionnaires, the respondents were asked to first judge the statements, without attribution, and then to judge the sources, apprising the respondents as to which of the preceding statements had been made by that source (Message Primacy condition). It was felt that by so alternating the source-statement order, the strength of any influence of judgments of the source upon subsequent judgments of the statements, and vice-versa,

^aYates' correction, involving subtraction in the numerator of an absolute value $/.5/$, was used in computing the chi-square values. All of the chi-square values were tested with one degree of freedom with the exception of those values involving the education and socio-economic status variables.

might be determined and controlled.

In addition, in one-half of the Source Primacy condition questionnaires, the Republican Party candidate and his statements were presented first for evaluation; in the other one-half, the Democratic candidate and his statements were presented first. The Message Primacy condition questionnaires were similarly divided, thus producing four versions of the questionnaire.

The questionnaire also included the abbreviated (40-item, Form B) Rokeach Dogmatism Scale. (Ten items of the nature of those in the Dogmatism Scale were added in the first draft of the questionnaire. These items were intended to measure the respondents' ability to differentiate information from source of information. However, it was found that the items did not tap this ability and they were therefore excluded from the final draft of the questionnaire.)

The questionnaires also included questions about the respondents' age, sex, annual household income, educational level attained, political party preference or affiliation, and Presidential candidate choice. This last question was used in conjunction with the question of party preference in order to obtain a more objective measure of the respondents' political leanings at the time of the 1960 Presidential election campaign.

Appendix B presents a sample of the questionnaire.

Interviewing Procedure

A team of interviewers was employed to conduct the interviews in the homes of the respondents. Their

responsibility was to explain the nature and purpose of the study (the study was presented to the respondents as a "survey of political and social attitudes"), explain the respondent's task to him, and to answer any pertinent questions prior to the interviewee's beginning to respond to the questionnaire items.

Once the interviewees had begun to respond to the items, the interviewers were instructed not to interpret or explain any of the items.

When the respondents completed the questionnaire, the interviewers checked them to ensure that the respondents had not inadvertently or willfully omitted any item, answered any questions that the respondents may have asked at that time, and thanked the respondent for his or her cooperation.

Controls

Three control measures have been previously mentioned in passing. In the preparation of the questionnaires, the source-statement order of presentation was alternated or rotated so that the influence of judgments of either upon subsequent judgments of the other might be controlled and taken into consideration when evaluating the effect of the independent variable upon the dependent variable.

The order of presentation of the two candidates and their statements was similarly rotated for the same purpose. In addition, since the study was not interested in the effect of judging one statement prior to judging another, the six statements were presented in random orders so as

to minimize or average any effect judgments of one statement might have had upon judgments of subsequent statements.

A second control involved the matching, as nearly as possible, of the statements of the two candidates with regard to substantive content. By matching the statements, it was hoped that any differential effects due to the subject matter of the statements might be controlled so as not to confound the relationship of the independent and dependent variables.

Rather strenuous controls over the activity of the interviewers were essential to prevent any possible biasing of the respondents' answers by the interviewers. The controls exercised over the interviewers were discussed in the preceding section on Interviewing Procedure.

The manner in which the respondents were selected constituted some control over the nature of the sample. Some degree of balancing was achieved by means of quota sampling. Within each quota group, randomization of respondent selection was sought by utilizing a table of random numbers to determine which households within the voting behavior and socio-economic status areas would be selected for the interviews.

Controls over the interview situation were necessary to ensure that the respondents' answers were not biased by other individuals or distracting influences within the household. For this reason, the interviews were conducted, if at all possible, away from the nucleus of

activity in the home and in private, preferably.

It was necessary to also control the activities of the coders to ensure their reliability. Each questionnaire was scored by two coders other than the investigator, and in all cases of coder disagreement the problems were readily resolved.

The control techniques of elimination, equalization, randomization, and balancing were not seen as appropriate for application to the independent and dependent variables. Both the independent variable of open- or closedmindedness and the responses upon which the dependent variable was grounded are functions of a great number of extraneous variables; that is, they are functions of the attitudes and beliefs of the respondents. Insofar as attitudes and beliefs are determined, at least in part, by the individual's past experiences, socio-economic environment, and knowledge, such extraneous and possibly confounding variables which might be associated with the independent variable--sex, age, education, social contacts, income, etc.--cannot properly be controlled as they are determinants, in whole or in part, of the independent variable of open- or closedmindedness.

CHAPTER III

The statistical analysis of the data obtained in the interviews and the conclusions derived from the analysis are reported in this chapter.

Empirical Evidence

Empirical evidence supporting or failing to support the theoretic hypothesis was obtained by testing the following statistical hypothesis:

The mean \underline{D}^2 scores of openminded respondents do not differ from the mean \underline{D}^2 scores of the closedminded respondents, (i.e., $D_o^2 = D_c^2$).

Mean \underline{D}^2 scores were computed for each of the four test groups (openminded, Source Primacy condition; openminded, Message Primacy condition; closedminded, Source Primacy condition; and closed minded, Message Primacy condition) on each of the six source-message pairs. These scores, upon which the analysis was based, are reported in Table 4.

The .05 (two-tailed) level of significance was selected for testing the statistical hypothesis.

Analysis

The statistical analysis of the data consisted of testing for differences between the Mean \underline{D}^2 scores of the four groups. The techniques described by Greenhouse and Geisser (23) for the analysis of profile data were employed.

A simple inspection of the data indicated that the

TABLE 4
 Mean D^2 Scores of the Four Groups
 on the Six Source-Message Pairs

Group	Dogmatism/ Reference	I	II	III	Source-Message Pairs ^a IV	V	VI	Group Means
A	Open/ Source	43.0000	34.1579	34.8421	40.4737	30.9474	34.7895	36.3684
B	Open/ Message	43.5789	39.0000	46.8947	34.5789	36.2632	41.3158	40.2719
C	Closed/ Source	14.2632	13.6842	19.5263	10.2632	10.4737	17.1053	14.2193
D	Closed/ Message	15.7895	18.7368	24.2105	14.4737	16.9474	20.8421	18.5000
Source-Message Pair Means		29.1579	26.3947	31.3684	24.9474	23.6578	28.5132	27.3399

^aThe source-message pairs were identified as follows:

I Nixon:	Nixon domestic affairs statement.	IV Kennedy:	Kennedy domestic affairs statement.
II Nixon:	Nixon foreign affairs statement.	V Kennedy:	Kennedy foreign affairs statement.
III Nixon:	Nixon integration statement.	VI Kennedy:	Kennedy integration statement.

assumption of homogeneity of variance could not be met. Bartlett's test of homogeneity was applied, nevertheless, and the resultant B value of 172.633 ($p = .001$) was obtained, indicating heterogeneity of the data. (It should be noted that the Bartlett test of homogeneity is not appropriate for data of this sort. It was used only as a means of obtaining a crude measure of the heterogeneity of the data.)

As a result, a correction factor for heterogeneity of variance suggested by Greenhouse and Geisser was employed. Their conservative correction involves reducing the degrees of freedom by a factor $1/p - 1$ (where p , in this instance, equals the number of source-message pairs) for the F tests of the source-message pairs and of the interaction between the pairs and the independent variables in this study (23, p. 102).

In addition to testing the null hypothesis of no difference in the mean D^2 scores of the open and closed groups, four additional null hypotheses were simultaneously tested:

1. The mean D^2 scores among the six source-message pairs are not different, (i.e. $D_I^2 = D_{II}^2 = D_{III}^2 = D_{IV}^2 = D_V^2 = D_{VI}^2$).

2. The mean D^2 scores under the Source Primacy conditions are not different from those under the Message Primacy conditions, (i.e. $D_S^2 = D_M^2$).

3. There is no interaction between the variable of open- or closed-mindedness and that of source or message primacy.

4. There is no interaction between the groups and the source-message pairs.

The results of testing these five hypotheses are reported in Table 5. The obtained F 's listed in the table:

1. Permit rejection of the hypothesis of no difference in the mean D^2 scores of the openminded and closed-minded groups ($p < .001$);

2. Fail to permit rejection of the hypothesis of no difference in the mean D^2 scores among the six source-message pairs;

3. Fail to permit rejection of the hypothesis of no difference in the mean D^2 scores under the Source Primacy and Message Primacy conditions;

4. Fail to permit rejection of the hypothesis of no interaction between the variables of open- or closed-mindedness and of source or message primacy; and,

5. Fail to permit rejection of the hypothesis of no interaction between the groups and the source-message pairs.

Conclusions

From the results of statistical analysis of the data, it was concluded that there was evidence in support of the theoretic hypothesis. The mean D^2 scores of the openminded respondents were significantly different from those of the closedminded respondents. Assuming that D^2 is a reliable and valid index of the dependent variable, it was inferred on the basis of the

results of the analysis (a) that open- and closedminded individuals differ in their ability to differentiate between and evaluate the substantive content and the source of a message and (b) that, based on the greater \underline{D}^2 scores of the open respondents, the ability of openminded individuals to make this differentiation is greater than that of closedminded individuals.

Each of the other null hypotheses were rejected in the statistical analysis of the data. The mean \underline{D}^2 scores did not differ significantly between the Source Primacy and Message Primacy conditions, nor did they differ significantly among the six source-message pairs. Similarly, no interaction was observed between the variables of degree of dogmatism and reference point, nor between the four groups and the source-message pairs.

Rejection of each of these hypotheses contributed to the generalizability of the applicability of the theoretic hypothesis. The influence of openmindedness or closedmindedness upon the ability to differentiate and evaluate information and source of information was not contaminated by the nature of the communication. The effect of open- or closedmindedness upon this ability did not change significantly from one source-message pair to another, indicating the generalizability of the results to communications of relatively diverse content and intent. Similarly, the reference point utilized by the respondents in making the evaluations of sources and statements did not contaminate the effect of the inde-

TABLE 5

Analysis of Variance
of Mean \underline{D}^2 scores of the Four Groups

Source	df	Sum of Squares	F ^a	p
Pairs	5	$Q_1 = 3122.5276$	$F_1^b = .7596$	n.s.
Groups	3	$Q_2 = 56391.1990$	$F_2 = 8.9575$.001
Open/ Closed ^c	(1)	$Q_{21} = 54978.1780$	$F_{21} = 25.9730$.001
Source/ Message	(1)	$Q_{22} = 1908.9670$	$F_{22} = .9010$	n.s.
Inter- Action	(1)	$Q_{23} = 4.0950$	$F_{23} = .0019$	n.s.
Indivi- duals	72	$Q_3 = 152430.3253$		
Groups x Pairs	15	$Q_4 = 3270.9335$	$F_3 = .2652$	n.s.
Indivi- duals x Pairs	360	$Q_5 = 317592.8320$		
TOTAL	455	$Q_6 = 533225.7900$		

^aFollowing the procedures of Greenhouse and Geisser, the F values were computed and tested as follows:

$$F_1 = \frac{(72) Q_1 / Q_5}{df's.}, \text{ tested with 1 and 72}$$

$$F_2 = \frac{(72) Q_2 / (3) Q_3}{72 df's.}, \text{ tested with 3 and 72}$$

$$F_{21} = \frac{(72) Q_{21} / Q_3}{df's.}, \text{ tested with 1 and 72}$$

$$F_{22} = \frac{(72) Q_{22} / Q_3}{df's.}, \text{ tested with 1 and 72}$$

$$F_{23} = \frac{(72) Q_{23} / Q_3}{df's.}, \text{ tested with 1 and 72}$$

pendent variable upon the dependent variable. The findings were the same regardless of whether the source served as a reference point for judging the statements or the statements were employed as a reference point for evaluating the sources.

Finally, none of the variables was found to be operating in conjunction with another or interacting so as to confound the effect of open- or closedmindedness upon the ability to differentiate between and evaluate independently messages and their sources.

$$F_3 = (72) Q_4 / (3) Q_5, \text{ tested with } 3 \text{ and } 72 \text{ df's.}$$

^bThe degrees of freedom for F_1 and F_3 were reduced from 5 and 360, and from 15 and 360, by a factor 1/5 as suggested by Greenhouse and Geisser in order to correct for heterogeneity of variance in the data.

^cSee George W. Snedecor, *Statistical Methods* (Ames: Iowa State College Press, 1956), pp. 254-56 and 329-33, for the procedure of subdividing a term into independent or orthogonal components for the purpose of designed comparisons among the components.

CHAPTER IV

Chapter IV presents a summary of the study, discusses the results of the data analysis in light of the major hypothesis, and suggests some areas for further study.

Summary

The present study attempted to obtain empirical evidence in support of the fundamental distinction suggested by Rokeach and his associates between open and closed belief-disbelief systems namely, the differential capacity to distinguish between information and source of information and to evaluate and act upon each on its intrinsic merits.

In order to test the validity of this distinction, a series of source-message pairs were prepared and presented to respondents who were asked to judge each source and statement (message) on the basis of 14 Semantic Differential scales. One group of respondents used the source as the reference point for subsequently evaluating the statements; the other group used the statements of the source as the reference point for judging that source.

The distance (D) between each respondent's judgment of the source and his statements on the Semantic Differential scales was taken as an index of his ability to differentiate the source and the message and to evaluate each independently. In order to compare the distance

scores of the openminded respondents with those of the closedminded respondents, and to compare the distance scores of the respondents using the sources as reference points with the scores of those using the statements as reference points for subsequently judging the statements or the sources, it was necessary to square the distance scores, obtaining a distance squared (D^2) score for each of the respondents on the six source-message pairs presented in the questionnaire.

Each respondent's dogmatism score--his degree of open- or closedmindedness-- was measured by administration of the Rokeach Dogmatism Scale.

On the basis of Rokeach's formulation, it was expected and hypothesized that the D^2 scores of the openminded respondents (those with low dogmatism scores) would (a) differ significantly from, and (b) be greater than, the D^2 scores of the closedminded respondents (those with high dogmatism scores as measured by the Rokeach Scale). Empirical evidence in support of this expectation or hypothesis was to be taken as evidence of the validity of Rokeach's fundamental distinction between open and closed minds--the relative ability to differentiate between and evaluate independently information and source of information.

It was also expected that the D^2 scores of both the open and the closed respondents who utilized the sources as reference points for judging the statements would not differ significantly from the D^2 scores of the

open and closed respondents, respectively, who employed the statements as a reference point for subsequently evaluating the sources.

Inspection of the data indicated that the D^2 scores of the open respondents were, in fact, greater than those of the closed respondents. Comparison of the D^2 scores of the open and closed respondents by means of analysis of variance procedures provided evidence that the D^2 scores of the open and closed groups were significantly different.

The D^2 scores of the reference point (Source Primacy versus Message Primacy) groups were not found to be significantly different. Similarly, the D^2 scores of all four groups (openminded, Source Primacy condition; openminded, Message Primacy condition; closedminded, Source Primacy condition; and closedminded, Message Primacy condition) did not differ significantly among the six source-message pairs.

Discussion

On the basis of these empirical results, it was concluded that open- and closedminded individuals do, in fact, differ in their relative ability to differentiate between information and source of information and to evaluate and act upon each independently of the other. It was further concluded that openminded individuals exhibit the capacity to do so to a greater degree than do closedminded individuals.

It was also found that this relationship of open- or

closedmindedness to the ability to differentiate information and source of information holds regardless of the reference point (source or statement) utilized by the individuals in evaluating either the source or the message and regardless of the position advocated by the source in the message.

In this manner, then, it was felt that empirical support of the validity of the fundamental distinction between open and closed belief-disbelief systems proposed by Rokeach was obtained in a more or less everyday communication situation.

It was concluded, on the basis of this validation of Rokeach's proposition, that the personality predisposition of dogmatism (in terms of the individual's degree of open- or closedmindedness) is a useful variable in predicting the use a receiver will make of judgments about a source and a message before responding to the communication. It was felt that the open- or closedmindedness of the communicatee is an important consideration when attempting to construct effective and efficient communications.

Some Areas for Further Study

The differential capacity of open- and closedminded individuals to distinguish between the substantive content and the source of a message, and to evaluate and act upon each of them on its intrinsic merits, may have some implications for the study of cognitive balance, source credibility and reference group influence or pressures

particularly as they are related to efficient and effective communication.

Cognitive Balance

In general, cognitive imbalance or incongruity or dissonance is experienced by an individual whenever he is confronted with new cognitions, beliefs, and knowledge which are incompatible with his existing cognitions, information, etc. The presence of such incongruity gives rise to pressures within the individual to reduce that incongruity. In order to resolve the incompatibility, these pressures may lead to attempts on the part of the individual to change the new cognitions, etc., to add other new cognitions, etc. which tend to reinforce the existing ones or to decrease the importance to the individual of those which are incongruent.

In the communication situation, the receiver may experience incongruity between his perceptions of the source and of the message. The source may be favorable to him while the message is unfavorable, or the source may be unfavorable and the message favorable. The receiver may also experience incongruity between his beliefs and attitudes and those advocated by the source, either favorable or unfavorable.

In such an event, the receiver may attempt to resolve the incongruity by changing his cognitions of the source or of the message, by seeking additional new information which will reinforce his cognition of the source or of the message content, or by decreasing the importance to

him of either the source or the message content.

It is suggested that open and closed individuals may differ in the degree to which they experience such incongruity between the source and the message and the strength of their attempts to resolve the dissonance. Inasmuch as closed individuals are less able to differentiate between the source and the message and to evaluate each on its own merits, they may experience pressures to reduce incongruity between the source and a message to a greater extent than would open individuals. Open-minded individuals, because of their greater ability to differentiate source and message, may be more tolerant of any dissonance between their cognitions of the source and of the message content.

Further study is needed in order to determine whether openminded receivers are, in fact, more tolerant than closedminded receivers of incongruity between source and message, and whether they experience, as a result, less pressure to resolve the incongruity by changing their cognitions of the source and/or message, by seeking new information, or by decreasing the importance to them of the source and/or the message.

Source Credibility

A great number of studies have undertaken to investigate and explain the influence of source credibility upon the acquisition and retention of material presented in a message and upon initial and retained opinion change as a result of exposure to the message. The results of these

studies generally indicated that the greater the prestige, trustworthiness, and expertness attributed to the source by communicatees, the greater is the amount of the opinion change effected by his message. No significant difference has been found in the amount of information learned and retained when it is presented by a high credibility source or by a low credibility source.

It is proposed that the influence of source credibility may operate differentially among open- and closedminded individuals. The receiver's degree of open- or closed-mindedness should not affect the amount of information that is acquired and retained from a message; however, it may be relevant to the ability of both high and low credibility sources to effect opinion change.

In the case of closed receivers, it is possible that the credibility of the source is largely influential in determining whether or not the receiver's opinions will be changed as a result of a persuasive communication. Unless the message strongly contradicts the existing opinions and attitudes of the receiver (thereby creating dissonance), a high credibility source may be highly effective in changing the opinions of the receiver. A low credibility source, on the other hand, may be unable to effect such a change.

In the case of openminded receivers, capable of evaluating the source and the message content independently, it is suggested that the credibility of the source is not as influential in effecting opinion change as it is in

the case of closed receivers. Opinion change in the open-minded individuals may be dependent largely upon the position advocated in the message and the receivers' evaluation of that position, independent of their evaluation of the source and his credibility. It is possible that the credibility of the source will only take on importance when the open receiver is undecided or unable to evaluate the position advocated by the source. In this event, high credibility sources should be more effective than low credibility sources in bringing about opinion changes.

Several of the source credibility studies report a sleeper effect in which the initial opinion change effected by a high credibility source diminishes over a period of time and low credibility sources, over time, come to effect opinion changes. This has been attributed to, in both instances, the receiver's forgetting of the source more rapidly than his forgetting of the message content. It is suggested that the diminishment of opinion change may occur only in closedminded receivers who have changed their opinion in response to the appeals of a high credibility source. Here, having forgotten the source more rapidly than the message, they may come to reject the position advocated by the source.

In the case of closed receivers who did not change their opinions in response to a low credibility source, they may come to accept the position advocated by such a source as they forget the source more rapidly than the content of the message.

It is also suggested that the sleeper effect may not operate at all in the case of openminded individuals in that before changing their opinion or attitude in response to the persuasive appeals of either a high or a low credibility source they arduously evaluate both the source and the position advocated and are not as greatly dependent upon the credibility of the source in deciding whether or not to alter their opinion as advocated by the source.

As with the relationship of open- or closedmindedness to cognitive imbalance, further research is needed into the relationship of open- or closedmindedness to source credibility in the communication situation.

Reference Group Influences

Many studies have been reported which have investigated the effect of reference or membership group influences and pressures upon attitude and opinion changes in individuals. It has been found that some individuals readily yield to group influences toward opinion changes while other individuals remain independent of the group and fail to change their opinions in response to influences from the group.

Some of the many factors which have been found to be related to yielding or failing to yield to reference group influences toward opinion change are the character of the stimulus situation, salience and importance of the group to the individual, the cohesiveness of the group, the group's capacity to reward or punish the in-

dividual, the magnitude of the group opposition, the nature of the decision to change opinion as a result of a group decision or that of a power minority, the necessity of private versus public commitment to the new position, and a variety of individual personality characteristics.

It is suggested that one of the more important and influential personality predispositions which might determine whether or not an individual will yield to group influences toward opinion or attitude change is that of the individual's degree of open- or closedmindedness. It is proposed that closedminded individuals may be more responsive to group influences toward opinion change than are openminded individuals.

Closedminded individuals may not be as capable of differentiating between and evaluating the nature and implications of the desired opinion change and the nature and purpose of the reference group exerting pressure toward such a change. If the reference group which is advocating a change of opinion is important or very salient to the individual, it is possible that the individual, failing to differentiate between the group and the desired opinion change as a function of a closed belief-disbelief system, will more readily yield to group pressures and experience an opinion change than will an openminded individual who is more capable of evaluating both the group and the desired opinion change on their intrinsic merits.

The same phenomenon may be expected with increased cohesiveness and power of the group to reward or punish the individual for yielding or failing to yield to reference group influences toward opinion change.

Empirical studies designed to investigate the differential effects, if any exist as suggested here, of reference group influences upon open- and closedminded group members and aspirants are needed.

Should research efforts bear out the relationships of open- and closedmindedness to cognitive imbalance, source credibility, and reference group influences which were suggested here, Rokeach's fundamental distinction between open and closed individuals--the ability to differentiate and evaluate independently information and source of information--will be a valuable addition to the understanding of efficient and effective interpersonal communication.

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APPENDIX A

The Pretest of Concepts and Semantic Differential Scales

A pretest was conducted for the following purposes:

1. To select from a list of 30 adjective pairs a list of ten to fifteen such pairs to be used in the study. The adjective pairs or Semantic Differential scales were to be used by the respondents in evaluating the candidates and the statements made by them.

2. To select from a series of statements made by the two candidates (five by each of them) a lesser number of statements, preferably three by each of the candidates. The statements selected for use in the study were to be matched, as nearly as possible, with respect to subject matter and source intent.

(In addition to the two Presidential candidates and the ten statements, the two Vice Presidential candidates and the two major political parties were utilized as concepts in the pretest.)

The 30 adjective pairs pretested were:

optimistic - pessimistic
responsible - irresponsible
interesting - boring
strong - weak
meaningful - meaningless
honest - dishonest
impulsive - deliberate
near - far
friendly - unfriendly
relaxed - tense
active - passive
severe - lenient
good - bad
valuable - worthless

complex - simple
 potent - impotent
 pleasant - unpleasant
 fair - unfair
 emotional - unemotional
 brave - cowardly
 clear - hazy
 motivated - aimless
 deep - shallow
 safe - dangerous
 accurate - inaccurate
 difficult - easy
 wide - narrow
 biased - unbiased
 prohibitive - permissive

These Semantic Differential scales were presented to the respondents, together with instructions for their use. The concepts to be evaluated, using these scales, were typed on cards and presented to the respondents one at a time. In addition to the candidates and the political parties, the concepts evaluated were:

Nixon statements:

1. "The United States is, and will under proper leadership remain, the strongest nation militarily, economically and morally in the world."
2. "We hold above everything else, whether in the field of foreign policy or domestic policy, the rights of the individual."
3. "If the Russians doubt our will to carry out our commitments to resist aggression anywhere in the world, and again resort to arms, they are in for a terrific surprise."
4. "We believe in an aggressive action to remove the remaining vestiges of segregation or discrimination in all areas of national life."

5. "This country and its allies will not be deflected by Soviet threats from arming with ballistic missiles or taking any other joint defensive measures."

Kennedy statements:

1. "The choice lies not merely between two men or two parties, but between public interest and private comfort, between national greatness and national decline, between progress and 'normalcy,' between dedication and mediocrity."

2. "The essential goal of foreign policy is an enduring peace in which the universal values of human dignity, truth and justice under law are finally secured for all men everywhere."

3. "We will use all the will, power, resources and energy at our command to resist the further encroachment of Communism on freedom--whether at Berlin, Formosa, or new points of pressure."

4. "The time has come to assure equal access for all Americans to all areas of community living, including voting booths, schoolrooms, jobs, housing and public facilities."

5. "We must make invulnerable a nuclear retaliatory force second to none."

These statements were selected from the many statements made by both candidates and reported in the national press. In the case of both candidates, the first statement deals with domestic policy; the second with foreign policy; the fourth with integration; and the third and

fifth with defense.

Ten respondents, six Republicans and four Democrats, judged the 16 concepts on the 30 Semantic Differential scales. Of the ten, only nine of the respondents' evaluations were usable, as one individual, a Republican, failed to follow instructions.

Correlation and item analysis of the respondents' evaluations resulted in the following:

1. The list of 30 adjective pairs was reduced to 14 pairs. The scales were selected for their polarization, their ability to differentiate between the responses of Democrats and Republicans, their ability to differentiate between the Nixon and Kennedy statements, and the average distance between source and statement on each of the scales.

The 14 adjective pairs chosen for use in the study were:

Evaluative dimension

good - bad
 clear - hazy
 responsible - irresponsible
 relaxed - tense
 fair - unfair
 pleasant - unpleasant

Activity dimension

active - passive
 impulsive - deliberate
 emotional - unemotional
 motivated - aimless
 interesting - uninteresting

Potency dimension

strong - weak
 severe - lenient

brave - cowardly

The connotative loadings of each group of scales is indicated by the dimension beneath which it was placed above. However, none of these pairs was considered pure; all have some degree of loading in dimensions other than that under which they are grouped.

2. The series of ten statements was reduced to six, three matching statements by the two candidates. The statements selected for use in the study were those dealing with domestic affairs, foreign affairs, and integration. They were selected for their greater average distance from the source in semantic space (as reflected by the responses of the pretest respondents) and for the consistency of responses by open- and closedminded respondents; that is, openminded respondents agreed in their evaluations and closedminded respondents agreed in their responses.

In order to make the latter decision, it was necessary to obtain a crude measure of the pretest respondents' degree of open- or closedmindedness. Five items were used from the Rokeach Dogmatism Scale for this purpose:

1. "Even though freedom of speech for all groups is a worthwhile goal, it is unfortunately necessary to restrict the freedom of certain political groups.

2. "Once I get wound up in a heated discussion, I just can't stop."

3. "Most of the ideas which get printed nowadays aren't worth the paper they are printed on."

4. "In this complicated world of ours, the only way we can know what's going on is to rely on leaders or experts who can be trusted."

5. "Unfortunately, a good many people with whom I have discussed important social and moral problems don't really understand what's going on."

These items were selected from the 40-item form of the Dogmatism Scale because they seem to deal primarily with the communication process or situation.

The pretest also provided some additional findings pertinent to the study:

1. With this small group of respondents, the basic hypothesis of the study was borne out in that openminded respondents were better able to differentiate between the source and the statements than were the closedminded respondents.

2. The closedminded respondents tended to rely more upon the evaluative scales in making their judgments. Their judgments on these scales were more polarized than on the potency and activity scales. In addition, the closed respondents revealed a slightly greater tendency to polarize the entire schedule of scales than did the openminded respondents.

APPENDIX B

(Sample questionnaire. In this version of the questionnaire, the respondents were required to first judge the statements and then to judge the sources, using the statements as a reference point for judging the sources. In the other version, the respondents first judged the sources and subsequently judged the statements, using the sources as reference points for judging the statements.)

A SURVEY
of
POLITICAL AND SOCIAL ATTITUDES

Case No: _____

Sex (check): Male ()

Female ()

(interviewer)

A Word of Explanation

This study is a survey of your own personal attitudes and feelings about a number of political, social and personal issues. The study is divided into two parts: the first is concerned with your feelings about the two presidential candidates in the coming election, the two major political parties and a series of statements made by the two candidates; the second part of the study is concerned with your thinking about some important social and personal questions.

On the final page of this booklet are a few questions about yourself, the answers to these questions will aid in the evaluation of your responses to the items in the survey.

At the outset of each of the two parts of the survey are instructions which outline what you are to do in each part. If the instructions are not clear to you, ask any questions about them that you desire. It is essential that you fully understand what you are to do in each part of the survey.

Your responses to the items in this survey will be held in the strictest confidence. Your address is recorded only so that we may identify the socio-cultural environment of respondents. You will not be asked to give any additional information which will in any way identify you in the evaluation of your responses.

The instructions for Part I of the survey are on the next page.

The purpose of this part of the study is to ascertain the meanings to you of a number of statements made by the presidential candidates of the two major political parties. This part is also concerned with your personal feelings about the two candidates and the Democratic and Republican parties.

You are to judge each statement, the candidates and the parties against a series of descriptive scales. Please make your judgments on the basis of what each means to you.

On the following pages you will find the statements, the candidates and the parties to be judged. Beneath each are a set of scales. You are to rate the statements, candidates and parties on each of the scales in order.

Here is how you are to use the scales:

If your feeling about the statement, candidate or party at the top of the page is very closely related to one end of the scale, place your check-mark as follows:

fair X : ____ : ____ : ____ : ____ : ____ : ____ : unfair
 or
 fair ____ : ____ : ____ : ____ : ____ : ____ : X : unfair

If your feeling about the statement, candidate or party is quite closely related to one or the other end of the scale (but not extremely related), place your check-mark as follows:

strong ____ : X : ____ : ____ : ____ : ____ : ____ : weak
 or
 strong ____ : ____ : ____ : ____ : ____ : X : ____ : weak

If the statement, candidate or party seems only slightly to one end of the scale as opposed to the other end (but is not really neutral), then place your check-mark as follows:

active ____ : ____ : X : ____ : ____ : ____ : ____ : passive
 or
 active ____ : ____ : ____ : ____ : X : ____ : ____ : passive

Obviously, the direction toward which you place your check-mark depends upon which of the two ends of the scale seem to you most characteristic of the statement, candidate or party which you are judging.

Case No: _____

If you consider the statement, candidate or party to be neutral on the scale, both sides of the scale equally associated with the statement, candidate or party, or if the scale is completely irrelevant or unrelated to the statement, candidate or party, place your check-mark in the middle space:

safe _____ : _____ : _____ : X : _____ : _____ : _____ dangerous

IMPORTANT:

(1) Place your check-marks in the middle of the spaces, not on the boundaries:

_____ : X : _____ : _____ : _____ X : _____

(2) Be sure to check every scale for every statement, candidate or party -- do not omit any scale.

(3) Never put more than one check-mark on a single scale.

Sometimes you may feel that you have had the same item before on the test. This will not be the case, so do not look back and forth through the items. Do not try to remember how you checked similar items earlier in the test. Make each item a separate and independent judgment. Work at a fairly rapid speed through this part; do not worry or puzzle over individual items. It is your first impressions, the immediate "feelings" about the statements, candidates and parties, that are sought. On the other hand, please do not be careless, as your true impressions or feelings are important.

Now please turn the page and begin marking each scale on the basis of your personal judgment of the candidate, statement or party.

"We hold above everything else, whether in the field of foreign policy or domestic policy, the rights of the individual."

emotional	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	unemotional
strong	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	weak
clear	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	hazy
aimless	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	motivated
good	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	bad
brave	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	cowardly
relaxed	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	tense
unfair	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	fair
active	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	passive
pleasant	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	unpleasant
impulsive	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	deliberate
severe	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	lenient
responsible	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	irresponsible
interesting	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	uninteresting

"The essential goal of foreign policy is an enduring peace in which the universal values of human dignity, truth and justice under law are finally secured for all men everywhere."

emotional	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	unemotional
strong	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	weak
clear	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	hazy
aimless	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	motivated
good	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	bad
brave	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	cowardly
relaxed	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	tense
unfair	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	fair
active	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	passive
pleasant	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	unpleasant
impulsive	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	deliberate
severe	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	lenient
responsible	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	irresponsible
interesting	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	uninteresting

"The choice lies not between two men or two parties, but between the public interest and private comfort, between national greatness and national decline, between progress and 'normalcy,' between dedication and mediocrity."

emotional	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	unemotional
strong	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	weak
clear	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	hazy
aimless	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	motivated
good	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	bad
brave	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	cowardly
relaxed	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	tense
unfair	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	fair
active	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	passive
pleasant	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	unpleasant
impulsive	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	deliberate
severe	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	lenient
responsible	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	irresponsible
interesting	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	uninteresting

"The United States is, and under proper leadership will remain, the strongest nation militarily, economically and morally in the world."

emotional	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	unemotional
strong	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	weak
clear	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	hazy
aimless	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	motivated
good	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	bad
brave	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	cowardly
relaxed	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	tense
unfair	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	fair
active	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	passive
pleasant	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	unpleasant
impulsive	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	deliberate
severe	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	lenient
responsible	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	irresponsible
interesting	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	uninteresting

"to believe in an aggressive action to remove the remaining vestiges of segregation or discrimination in all areas of national life."

emotional	_____ : _____ : _____ : _____ : _____ : _____ : _____	unemotional
strong	_____ : _____ : _____ : _____ : _____ : _____ : _____	weak
clear	_____ : _____ : _____ : _____ : _____ : _____ : _____	hazy
aimless	_____ : _____ : _____ : _____ : _____ : _____ : _____	motivated
good	_____ : _____ : _____ : _____ : _____ : _____ : _____	bad
brave	_____ : _____ : _____ : _____ : _____ : _____ : _____	cowardly
relaxed	_____ : _____ : _____ : _____ : _____ : _____ : _____	tense
unfair	_____ : _____ : _____ : _____ : _____ : _____ : _____	fair
active	_____ : _____ : _____ : _____ : _____ : _____ : _____	passive
pleasant	_____ : _____ : _____ : _____ : _____ : _____ : _____	unpleasant
impulsive	_____ : _____ : _____ : _____ : _____ : _____ : _____	deliberate
severe	_____ : _____ : _____ : _____ : _____ : _____ : _____	lenient
responsible	_____ : _____ : _____ : _____ : _____ : _____ : _____	irresponsible
interesting	_____ : _____ : _____ : _____ : _____ : _____ : _____	uninteresting

"The time has come to assure equal access for all Americans to all areas of community life, including voting booths, school-rooms, jobs, housing and public facilities."

emotional	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	unemotional
strong	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	weak
clear	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	hazy
aimless	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	motivated
good	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	bad
brave	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	cowardly
relaxed	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	tense
unfair	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	fair
active	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	passive
pleasant	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	unpleasant
impulsive	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	deliberate
severe	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	lenient
responsible	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	irresponsible
interesting	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	uninteresting

The statements on the following pages are concerned with how you think and feel about a number of important social and personal questions. The best response to each of the statements is your own personal opinion. Many different and opposing points of view are represented in the statements; you may find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others and perhaps uncertain about still others. Whether you agree or disagree with any statement, you can be sure that many other people feel the same way as you do.

You are to mark each statement in the space provided according to how much you agree or disagree with it. Please mark every one of the statements. Write +1, +2, +3, or -1, -2, -3 in the space provided, depending upon how you feel about each statement. Remember, your personal opinion is important.

key

+1: I AGREE A LITTLE	-1: I DISAGREE A LITTLE
+2: I AGREE ON THE WHOLE	-2: I DISAGREE ON THE WHOLE
+3: I AGREE VERY MUCH	-3: I DISAGREE VERY MUCH

Example

If the statement were:

"The principles I have come to believe in are quite different from those believed in by most people,"

and you feel that you AGREE ON THE WHOLE with the statement, you would mark the statement +2 in the space provided to the left of it.

IMPORTANT: The same cautions given in the preceding part of the study are applicable in this part. Be sure to mark each statement -- do not omit any.

Each item is different, although you may feel that you have had the same statement earlier in the series. Try not to remember how you marked earlier statements. Make each statement a separate and independent judgment. work at a fairly rapid speed through the series of statements; it is your first impressions that are sought. On the other hand, work carefully as your true personal opinions are important.

Now please turn the page and mark each statement on the basis of how much you personally agree or disagree with the statement.

Key

Case No: _____

+1: I AGREE A LITTLE

-1: I DISAGREE A LITTLE

+2: I AGREE ON THE WHOLE

-2: I DISAGREE ON THE WHOLE

+3: I AGREE VERY MUCH

-3: I DISAGREE VERY MUCH

-
- _____ 1. The United States and Russia have just about nothing in common.
- _____ 2. Man on his own is a helpless and miserable creature.
- _____ 3. Once I get wound up in a heated discussion I just can't stop.
- _____ 4. Even though freedom of speech is a worthwhile goal, it is unfortunately necessary to restrict the freedom of certain political groups.
- _____ 5. In the history of mankind there have probably been just a handful of really great thinkers.
- _____ 6. While I don't like to admit this even to myself, my secret ambition is to become a great man.
- _____ 7. In times like these, a person must be pretty selfish if he considers primarily his own happiness.
- _____ 8. It is better to be a dead hero than to be a live coward.
- _____ 9. A person who gets enthusiastic about too many causes is likely to be a pretty "wish-washy" sort of person.
- _____ 10. The present is all too full of unhappiness. It is only the future that counts.
- _____ 11. Most of the ideas which get printed nowadays aren't worth the paper they are printed on.
- _____ 12. The worst crime a person could commit is to attack publicly the people who believe in the same thing he does.
- _____ 13. Most people just don't know what's good for them.
- _____ 14. There is so much to be done and so little time to do it in.

Key

+1: I AGREE A LITTLE	-1: I DISAGREE A LITTLE
+2: I AGREE ON THE WHOLE	-2: I DISAGREE ON THE WHOLE
+3: I AGREE VERY MUCH	-3: I DISAGREE VERY MUCH

- _____ 15. In a discussion I often find it necessary to repeat my self several times to make sure I am being understood.
- _____ 16. A man who does not believe in some great cause has not really lived.
- _____ 17. The highest form of government is a democracy and the highest form of democracy is a government run by those who are most intelligent.
- _____ 18. It is only natural that a person would have a much better acquaintance with ideas he believes in than with ideas he opposes.
- _____ 19. Most people just don't give a "damn" for others.
- _____ 20. The main thing in life is for a person to want to do something important.
- _____ 21. When it comes to differences of opinion in religion we must be careful not to compromise with those who believe differently from the way we do.
- _____ 22. There are a number of people I have come to hate because of the things they stand for.
- _____ 23. To compromise with our political opponents is dangerous because it usually leads to betrayal of our own side.
- _____ 24. My blood boils whenever a person stubbornly refuses to admit he's wrong.
- _____ 25. In the long run the best way to live is to pick friends and associates whose tastes and beliefs are the same as one's own.
- _____ 26. It is often desirable to reserve judgment about what's going on until one has had a chance to hear the opinions of those one respects.
- _____ 27. If a man is to accomplish his mission in life it is necessary to gamble "all or nothing at all".

Key

+1: I AGREE A LITTLE	-1: I DISAGREE A LITTLE
+2: I AGREE ON THE WHOLE	-2: I DISAGREE ON THE WHOLE
+3: I AGREE VERY MUCH	-3: I DISAGREE VERY MUCH

-
- _____ 28. A person who thinks primarily of his own happiness is beneath contempt.
- _____ 29. A group which tolerates too much differences of opinion among its own members cannot exist for long.
- _____ 30. It is only when a person devotes himself to an ideal or cause that life becomes meaningful.
- _____ 31. If given a chance I would do something of great benefit to the world.
- _____ 32. In times like these it is often necessary to be more on guard against ideas put out by people or groups in one's own camp than by those in the opposing camp.
- _____ 33. In a heated discussion I generally become so absorbed in what I am going to say that I forget to listen to what the others are saying.
- _____ 34. Of all the different philosophies which exist in this world there is probably only one which is correct.
- _____ 35. There are two kinds of people in this world: those who are for truth and those who are against the truth.
- _____ 36. In this complicated world of ours the only way we can know what's going on is to rely on leaders or experts who can be trusted.
- _____ 37. Unfortunately, a good many people with whom I have discussed important social and moral problems don't really understand what's going on.
- _____ 38. Fundamentally, the world we live in is a pretty lonesome place.
- _____ 39. It is only natural for a person to be rather fearful of the future.
- _____ 40. I'd like it if I could find someone who would tell me how to solve my personal problems.

In order that we may properly evaluate your responses in the preceding two sections, some information about you is needed. Please answer the questions below as accurately as you can.

Age (check appropriate box):

Less than 20 ()	45 through 49 ()
20 through 24 ()	50 through 54 ()
25 through 29 ()	55 through 59 ()
30 through 34 ()	60 through 64 ()
35 through 39 ()	65 and over ()
40 through 44 ()	

Last year of school completed (circle):

Less than 8 8 9 10 11 12 13 14 15 16 over 16

Approximate annual household income (check):

Less than \$3,000 ()
\$3,000 through \$4,999 ()
\$5,000 through \$6,999 ()
\$7,000 through \$8,999 ()
\$9,000 through \$10,999 ()
\$11,000 through \$12,999 ()
\$13,000 through \$14,999 ()
\$15,000 or more ()

Who did you vote for in the last Presidential election (check)?

Dwight D. Eisenhower (Republican) ()
Adlai E. Stevenson (Democrat) ()
Other ()
Did not vote ()

Who do you think should be the next President of the United States (check)?

John F. Kennedy (Democrat) ()
Richard M. Nixon (Republican) ()
Undecided ()

Who do you think will be our next President (check)?

John F. Kennedy (Democrat) ()
Richard M. Nixon (Republican) ()
Don't know ()

* * *

Thank you for your patience and your fine cooperation.

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