COPING WITH UNCERTAINTY, INFORMATION USAGE AND TICKET SPLITTING

Dissertation for the Degree of Ph. D.
MICHIGAN STATE UNIVERSITY
AKIBA AARON COHEN
1973

ABSTRACT

COPING WITH UNCERTAINTY, INFORMATION USAGE AND TICKET SPLITTING

By

Akiba Aaron Cohen

This dissertation deals with some aspects of the communication behavior of voters who voted a straight ticket and those who split their ticket in the 1972 Presidential and Senatorial elections in Michigan. The research tested hypotheses from a coping with uncertainty model of information usage.

The theoretical position posits that the more an individual can cope with uncertainty during a conflict, the more information he would expose himself to about the available alternatives. Conversely, the less the individual can cope with uncertainty, the more he would tend to seek information on the one alternative most acceptable to him.

In an election situation, where the prime objective is to make voting decisions, it is assumed that information about the candidates and their issue positions helps the individual make those decisions. If an individual exposes himself to information on only one party's candidates, he is more likely to vote for all the candidates of that party.

Thus, the model suggests that individuals who are more able to cope with uncertainty would tend to expose themselves to information on both parties and their respective candidates and would tend to split their

ticket to a greater extent than the individuals who have a lower ability to cope with uncertainty.

A three-wave survey study was conducted with a final sample size of 114 voters. The respondents were interviewed in June, in late October and one week following the 1972 election. Coping with uncertainty was measured using a modified version of the Budner Intolerance of Ambiguity Scale. Information usage was measured by the extent of exposure to the candidates in the mass media, the respondents' self perceived familiarity with the positions of the candidates on several campaign issues, and the frequency and nature of the conversations held about the candidates. Ticket splitting was defined as voting for one party's candidate for the presidency and another party's candidate for the Senate.

The results of the study may be summarized as follows. Coping with uncertainty was positively related to the degree of perceived familiarity with the positions of the candidates on several campaign issues, and it had a moderate negative relationship with the degree of selectivity in the use of information during the campaign. Coping with uncertainty was unrelated to the time at which the voting decision was made, to the amount of attention given to the candidate in the mass media nor to the extent of and selectivity to conversations held about the candidates.

As for ticket splitting, coping with uncertainty was not directly related to ticket splitting. The later in the campaign the decision was made, the more it tended to be for a split ticket. The more information the individual had and was exposed to during the campaign, the more he tended to split his ticket. The more selectivity exhibited by the individual in exposure to candidates in the mass media, the more he

tended to vote a straight ticket. However, there was no relationship between having or not having conversations about the candidates and ticket splitting and between selectivity in perceived familiarity with the candidates' positions on the issues, and the degree of ticket splitting.

The discussion centered around a possible extension of the "knowledge-gap" hypothesis to the election area, and the question of the directionality of the relationship between coping with uncertainty and information usage. It was suggested that one's ability to cope with uncertainty may be a result of the amounts of information one usually deals with or prefers to deal with rather than being a personality dimension.

COPING WITH UNCERTAINTY, INFORMATION USAGE AND TICKET SPLITTING

By

Akiba Aaron Cohen

A DISSERTATION

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

DOCTOR OF PHILOSOPHY

Department of Communication

1973

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

Bradley S. Greenberg
Director of Thesis

Guidance Committee: Bradley S. Greenberg, Chairman
Randall C. Harrison
L. P. Peterson
Charles Atkin

Until his untimely death on June 30, 1973, Professor Verling C. Troldahl served as chairman of the committee and director of thesis.

ACKNOWLEDGMENTS

The three years I spent at Michigan State were highly rewarding in many ways. One of the contributing factors was the encouragement and support I received from several people.

I would like to begin by paying tribute to the late Dr. Verling (Pete) Troldahl. Dr. Troldahl was Chairman of my guidance committee and dissertation director until his untimely death this summer. Pete was more than a teacher and advisor; he was a wonderful friend, who gave of himself day and night. He was also instrumental in securing the sample for the study.

I am also indebted to my new dissertation director, Dr. Bradley Greenberg. Although he was not involved in the study from its inception, his tireless efforts and insightful observations and comments helped me pull through and complete the data analyses and the writing of this dissertation.

Dr. Randall Harrison served both on my doctoral and masters committees. He introduced me to the field of nonverbal communication and together we spent much time in teaching and research. I also worked closely with Dr. Charles Atkin, with whom I debated the issues of this study. Working with him on this and other projects has given me much valuable research experience. Dr. Everett Rogers raised poignant questions which helped evaluate the theoretical position taken in

this paper, and Dr. Leroy Ferguson provided the much needed expertise in the election research area which was the setting for the study.

This project would not have been possible without the generous help I received from the Market Opinion Research Company of Detroit. I am grateful to the entire organization and in particular to Bob Teeter and Fred Currier. Also, to my colleagues at the Department of Communication who helped in the interviewing despite their own heavy schedules. They are too numerous to list.

Mark Miller, Bill Richards and Mark Steinberg read and discussed with me parts of the manuscript and provided constructive criticism which was much appreciated. The enormous pile of computer output was made possible thanks to my friend, Dr. Hovav Talpaz, Joanne Helfrich and Jeff Tulley.

My family deserves special credit. Although my wife, Ettie, was completing her doctoral studies at the same time I was, she still found the time and energy to be supportive. Had it not been for her, I would probably never have gotten to this point. I thank Ettie for her love, patience and understanding despite my fretful behavior at times. I also thank my parents, sister and in-laws who encouraged us with their frequent and warm letters from Israel. And finally, I thank our daughter, Orlee, for being a bundle of joy and source of inspiration throughout this long and arduous task. It is to Orlee that I dedicate this volume. Perhaps she will read it some day...

TABLE OF CONTENTS

TABLE OF CONTENTS (cont'd)

LIST OF TABLES

LIST OF TABLES (cont'd)

LIST OF FIGURES

Chapter I

RATIONALE AND HYPOTHESES

Introduction

This dissertation deals with some aspects of the communication behavior of voters during an election campaign. The research tests some of the hypotheses derived from a coping with uncertainty model of information seeking. More specifically, it is aimed at examining the differences in the use of information between straight ticket voters and split ticket voters.

The setting for the study is the United States presidential election campaign of 1972 between Richard Nixon and George McGovern. The data were gathered in Michigan and, thus, also dealt with the Senatorial race between Robert Griffin, the Republican incumbent, and Frank Kelley, the Democratic challenger.

Briefly stated, the theoretical position is that the more an individual can cope with uncertainty, the more information he would seek concerning all the available alternatives in the situation. Conversely, the less the individual can cope with the uncertainty, the less he would seek information on all the alternatives, but rather would tend to seek information on the one alternative which seems most acceptable to him.

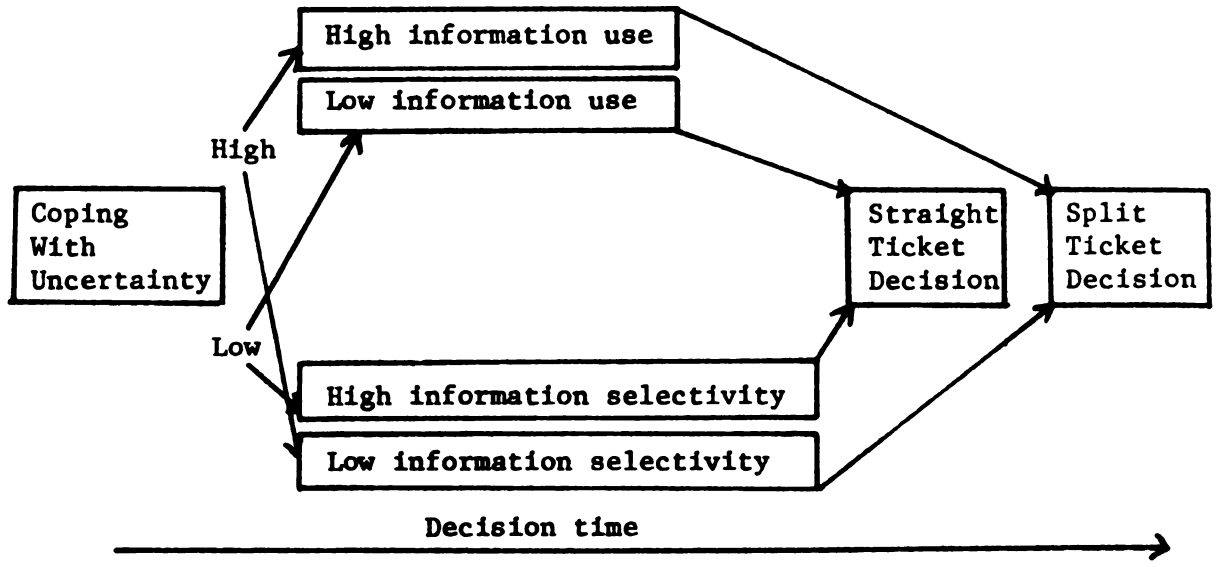
In an election situation, where the prime objective is to make a decision on whom to vote for in the various contests, it is assumed that information concerning the candidates and their positions on the issues

is a commodity which helps the individual make his decision. If an individual seeks information on only one party's candidates, he is likely to vote for all the candidates of that party for the different races. If, however, the individual seeks information on the candidates of both parties, he would be more likely to split his vote between the candidates of both parties for the various races.

When joining together both these aspects of the theory, the resulting paradigm suggests that individuals who are more able to cope with uncertainty would tend to expose themselves to and seek information on both parties and their respective candidates and would tend to split their tickets to a greater extent than the individuals who have a lower ability of coping with uncertainty, and, therefore, who would tend to expose themselves to and seek information on only one of the parties and its candidates. Figure 1 describes the proposed paradigm.

Figure 1

The Coping with Uncertainty Paradigm



Conflict as an Arena of Uncertainty

The proposed model views a conflict situation as an arena of uncertainty. Each of the alternatives creating the conflict contributes its share to the total uncertainty of the situation. A conflict situation is one in which an individual usually responds by selecting one of several alternative courses of action. The more equally attractive and/or repelling the alternatives are at the outset, the greater the conflict situation. If one of the alternatives is preferred relatively more than the others, the conflict is clearly less intense and could ordinarily be solved in an easier fashion. In uncertainty terms, the greater the number of alternatives, and the more equally probable the outcome of each of the alternatives is, at the initial stage, the greater the amount of uncertainty.

According to information theory (Attneave, 1955), uncertainty can be reduced by the utilization of information. Thus, if an individual is in a state of uncertainty and wishes to reduce the uncertainty, he may do so by seeking information and exposing himself to information pertaining to the alternatives in the situation. The problem becomes most complex when the demand is to come up with the best possible resolution of the conflict. This would be the case since the best resolution would seemingly involve a careful consideration of <u>each</u> of the alternatives, examining their advantages and disadvantages.

In order to use the terminology of information theory, two sets of parameters must be determined concerning the conflict situation. First, it must be possible to clearly state all the alternatives in the conflict situation. Second, it must be possible to specify the probability of the individual selecting each of the alternatives at the initial stage of the conflict.

It seems fair to say that the first condition is usually met. For example, the question might be which job a person would take among several offers he receives; what film a person will go to see on a Saturday night; or what party a person would vote for in the elections.

It would be far more difficult, however, to state that the second condition is usually met. What is the initial probability that John, upon completing law school, would choose to accept the teaching offer at Harvard versus the U.S. attorney's position at the Department of Justice? What is the initial probability that James associates with going to see each of the five films being shown in town? Or, what is the probability that Mary would vote for the Democrats, Republicans or perhaps for some other party's candidates?

To overcome this question of initial probabilities an assumption is usually made that the probabilities are equal. The logical argument behind this assumption is that unless the probabilities are equal, there would not be that great a conflict requiring the entire decision making process. For practical reasons this is a convenient assumption to make since it allows for relatively easy simulations to be conducted in the laboratory setting. Clearly, however, this assumption is most often erroneous, except if the situation is one of zero information on all the alternatives. Moreover, a conflict may definitely exist even if the initial probabilities of choosing each of the alternatives is not equal.

Since the proposed model does attempt to deal with conflicts which are not necessarily confined to the laboratory situation, it will often be necessary to make this equal probabilities assumption. A more desirable approach, however, would be to obtain an evaluation from the individuals being studied as to their initial probabilities for each of the alternatives.

This approach would, no doubt, be more costly but also would be more precise. Nevertheless, even if the exact probabilities cannot be ascertained, and the assumption of equal probabilities is untenable, it is still felt that information theory concepts are applicable to the present coping with uncertainty model.

Coping with Uncertainty

One dimension on which individuals differ is their ability to cope with uncertainty. The notion of the ability to cope with uncertainty is conceptually related to several other concepts that have been developed in the past quarter century. Frenkel-Brunswick (1949) dealt with intolerance of ambiguity as an emotional and perceptual personality variable. The definition in Frenkel-Brunswick's work was basically derived from a psychoanalytic framework involving ambiguity in the Freudian sense of ambivalence. Accordingly, individuals who habitually cope with their psychological conflicts by means of repression and denial tend to perceive the world and events in terms of fixed, extreme, conventional and preferably dichotomous variables such as right or wrong. These people cannot deal with the actual complexity of the stimulus situation.

The main thrust of Frenkel-Brunswick's research was in studying the behavior of prejudiced individuals. She did not deal much, however, with the type of conflicts that are of interest here where a person is faced with the choice of behaving in one of several ways.

Based on the work of Frenkel-Brunswick, Budner (1960, 1962) defined intolerance of ambiguity as "the tendency to perceive (i.e., interpret) ambiguous situations as sources of threat" (1960, p. 3). He argued that this variable is a continuous one, the continuum lying between the avoider

of ambiguity and the seeker of ambiguity. The former views ambiguity as a threat and the latter views it as a challenge.

The range of possible reactions to threat are basically submission and denial. Submission is the recognition of the situation as an ineluctable fact of one's existence which cannot be altered. Denial is the performance of some act by which the objective reality is altered to suit the desires of the perceiver. Thus, the extent to which the individual exhibits these behaviors following situations characterized by novelty, complexity or insolubility, all of which create the threat, is the degree to which he is intolerant of ambiguity.

Unfortunately, despite the numerous studies that Budner conducted using a scale he constructed to measure intolerance of ambiguity, none deal with information seeking behaviors during conflicts involving choices between actions, objects or beliefs. His conceptualization of intolerance of ambiguity, however, is a step in the direction that the coping with uncertainty model takes.

Another concept which seems to bear on coping with uncertainty is what Brim (1955) termed <u>desire for certainty</u>. This concept came out of the Guttman and Suchman (1949) research involving the relationship between the content-directional attribute of an attitude and the intensity which is the strength or conviction with which the attitude is held. Guttman and Suchman had previously shown that the relationship is U-shaped, that is, when the respondents' positions with regard to content and intensity are correlated, persons who are neutral on content are usually low on intensity while persons who take extreme positions on content in either direction usually have higher intensity scores.

Brim claimed that this general finding was usually explained by reference to "verbal habit", i.e., some individuals have the habit of using words or responding to words such as "Very Strong" while others do not. Brim argued, however, that "all individual differences in intensity of response are not simply verbal habits, but are the effects of different degrees of motivation to escape from uncertainty" (p. 74). He maintained that individuals high on intensity have a greater need for security, and so they respond with greater conviction.

Brim constructed a test measuring desire for certainty in which respondents are asked for their estimates of the probabilities of various events and their certainty of the estimates. This test yields a fairly reliable score for the individual's cognitive perception of events in the world but fails to deal with the individual's willingness and ability to deal with situations containing varying degrees of uncertainty, mainly those involving making choices between alternatives.

The final concept to be mentioned here is that of dogmatism which was developed by Rokeach (1954, 1960). Part of the definition states that dogmatism is "a relatively closed cognitive organization of beliefs and disbeliefs about reality" which provides a "framework for patterns of intolerance and qualified tolerance towards others" (Rokeach, 1954, p. 195).

The concept of dogmatism has generated considerable research, mainly with respect to the derived notion that it is a personality variable consisting of a continuum ranging from the "closed minded" to the "open minded" person. In this sense, then, low dogmatism resembles high coping ability, to the extent that the "open minded" person would be prepared to look at

information on various alternatives of a situation while being able to withstand the resulting potentially larger amount of uncertainty.

All these concepts deal with various aspects of the individual's way of dealing with and organizing his perception of reality. None of them, however, relate by definition to conflict situations and the seeking of information which individuals do during their attempts to resolve conflicts. The conceptualization of the notion of coping with uncertainty in the proposed model attempts to deal primarily with conflict situations and the information utilized by the individual concerning the alternatives of the situation.

The Need to Reduce Uncertainty

An assumption of the proposed model is that the state of uncertainty, inherent in the conflict situation, is an uncomfortable one. Accordingly, it is assumed that the individual would eventually wish to rid himself of the uncomfortable state by making the decision. In other words, there exists a need for certainty. In making this assumption, the model does not disregard the fact that following the decision there is often another uncomfortable period, namely, dissonance. Also, the model does incorporate the notion that individuals also often have a need for curiosity (Berlyne, 1960). This latter notion is taken into account in that the high coper with uncertainty (i.e., the person who can tolerate high levels of uncertainty) is also the person who would have a greater need for curiosity or at least he could afford to gratify such a need, given that the need for curiosity often involves seeking novel and discrepant information which tends to increase predecisional uncertainty.

Several studies have indicated that people attempt to reduce uncertainty. For example, Lanzetta and Driscoll (1969) found in a laboratory

using various kinds of problem solving tasks, that the mean search for information increases as a function of the amount of uncertainty. Also, information search was at a consistently higher level for high importance conditions.

Atkin (1973) makes a related point when he deals with four kinds of adaptation which an individual is often in need of, each leading to a need for specific kinds of information, mediated by means of various types of uncertainty. Atkin speaks of cognitive adaptation, mediated by awareness and understanding uncertainties, and leading to the need for surveillance information; behavioral adaptation, mediated by communicatory, enactment and task uncertainties, leading to the need for performance information; defensive adaptation, mediated by post-cognitive and post-affective uncertainties, leading to the need for reinforcement information; and affective adaptation, mediated by evaluative and decisional uncertainties, leading to the need for guidance information. The latter two forms of adaptation are what usually are dealt with in the realm of selective exposure research, and will be the central focus of this paper. The need for reinforcement information is in the realm of postdecisional information seeking and that aspect of the predecisional information seeking process in which the individual pursues the direction he has tentatively chosen. The need for guidance information is totally in the realm of predecisional information seeking.

Another aspect of the reduction of uncertainty process is the speed at which this is accomplished. Brody (1961) predicted that high demand for certainty would lead to a more rapid rate of decrease of uncertainty than low demand for certainty. Also, high demand for certainty would lead to the requirement of a lower level of uncertainty before a decision

can occur. Brody found that the level of uncertainty at the time of the decision and the rate of decrease of uncertainty were negatively correlated with each other; thus, subjects who eliminated uncertainty rapidly tend to decide at lower levels of uncertainty. He also found that strong motivation which increases the importance of a decision to the individual, produces a greater demand for certainty than weak motivation.

Schoen (1963) hypothesized that an individual's speed of decision-making would be a function of his conflict tolerance level. He found that low tolerance subjects made significantly faster decisions than high tolerance subjects. Low tolerance subjects appeared to have a "veritable need for action" while high tolerance subjects were unable to make a quick decision, even in a low conflict situation. These results appear to support the coping with uncertainty model. This is even further strengthened with the additional finding that low tolerance individuals restricted their attention to a few alternatives.

In this context one can view the behavior of the so called "impulsive" decision maker. As Festinger (1964) notes:

> Perhaps such behavior is a means of avoiding a situation that promises to be a difficult one. If it were the case, one would expect such impulsive decisions more frequently if the decision is important and the person thinks the alternatives would prove to be very close together in attractiveness. Perhaps such impulsive decisions are made when the information gathering process seems almost endless. If this were the case one would expect a greater frequency of impulsive decisions in instances where the person is faced with a large number of alternatives (pp. 154-155).

This is exactly what would be predicted from the coping with uncertainty model. The impulsive decision-maker is presumed to be an extremely low coper. The greater the uncertainty, the more unbearable the situation becomes, mainly for the low copers, and they would seek an immediate solution while seeking little if any information.

Several of the studies discussed above allude to the effect of the perceived importance of the decision in terms of the speed of the decision-making and the extent to which information could be sought. It is suggested here that within the coping with uncertainty model there is virtually no interaction with the variable of importance. Perhaps only when dealing with highly trivial conflicts will there be a similar pattern of information seeking for both the low and the high copers in which the high coper would tend to behave in a manner generally typical of the lower coper. The reason for this is that it is believed that the coping with uncertainty variable primarily constitutes a personality style in dealing with information in conflict situations. Some individuals will seek information on only the one alternative which seems to be able to solve the conflict for them, while others will be prepared to seek information on the entire range of alternatives. It is felt that this style will be strongly established in the individual's way of dealing with things. The only exception would be on trivial matters, when the high coper would feel that it is not worth the effort involved in seeking information on all the alternatives.

Coping with Uncertainty and Conflict Resolution

The coping with uncertainty model argues that the person who <u>can</u> cope with uncertainty to a high degree would be more likely to examine each of the alternatives, seek information related to each choice and to make the final decision after having collected as much as possible information to reduce the uncertainty. The person who <u>cannot</u> cope well with situations of uncertainty, would seek less information, would tend to concentrate on only one of the alternatives, would make an earlier decision and base it on less information.

The difference between these modes of resolution is not only in terms of the amount of information sought, however. If the initial conflict state is one of several exactly equally probable alternatives, then as a first step the individual would decide to seek information at random, on one of the alternatives. By seeking information on one alternative, the total uncertainty picture would shift somewhat. This would be the case if the information was interpreted as being favorable to that alternative or unfavorable to it (in which case the other alternatives would gain somewhat). If the initial conflict state is one where one of the alternatives is somewhat preferred over the others, then the first random choice is omitted and the second step commences. The second step in the decision process would be one of two possibilities; either making a decision based on the presently available information, or continuing to seek more information on that alternative. This decision would depend on the state of uncertainty present in the conflict situation. If the uncertainty had been reduced sufficiently, the individual would make his final decision. If there still remained high uncertainty, the search for information would continue.

If the individual chooses to make his decision at this point, the problem presumably ends (except for the need to justify it in the post-decisional stage). If, however, he chooses to seek more information, the question is whether he would seek information that might increase the total uncertainty once again by favoring one of the rival alternatives, or whether he would seek information that would tend to reduce the uncertainty even further by obtaining arguments in favor of the alternative already holding an edge over the others. This dilemma would be repeated again following the decision made in this step, until a final decision is made.

Thus, the proposed model suggests that the better an individual can cope with uncertainty, the more likely he would be to seek information on all the alternatives, even if this meant remaining for a longer period of time at a higher state of uncertainty; conversely, the less an individual is able to cope with uncertainty, the more likely he is to continue reducing the uncertainty by seeking information about the same alternative that he dealt with first. In sum, it is argued that the individual's ability to cope with uncertainty mediates his information seeking strategies in the decision making stage of the conflict.

Several studies have attempted to relate one or more of these variables to information seeking behavior. Except for one such study, all the research that is reviewed here deals with postdecisional information seeking.

Miller and Rokeach (1968) review several studies relating authoritarianism, dogmatism and intolerance of ambiguity to postdecisional information seeking. Their general conclusion is that there is some tendency for high dogmatic individuals to prefer consistent information after a decision. It seems that what Miller and Rokeach are dealing with is tolerance for dissonance (another kind of uncomfortable state) rather than coping with uncertainty as defined earlier.

Clarke and James (1967) conducted an experiment in which they found a positive correlation between dogmatism and information selectivity under conditions of private information use.

Feather (1969) found that subjects preferred consistent to inconsistent information, and novel information more than familiar information. When the data were analyzed separately for high and low dogmatic subjects (including high and low intolerant subjects) he found that high dogmatic subjects showed a more pronounced preference for consistent information

than did low dogmatic subjects. Also, the high dogmatics showed less preference for novel as opposed to familiar information than did the low dogmatic subjects. It seems that these results would fit into the coping with uncertainty model, but since they concern a postdecisional situation, they cannot be brought as direct evidence.

A somewhat different interpretation of the relationship between dogmatism and postdecisional seeking of consistent information is found in a study by Donohew and Palmgreen (1971). They found that for the low dogmatic subjects, discrepant information induced more stress than supportive information, especially when the information was considered to be important. They conclude that low dogmatic persons may be motivated to expose themselves to stress-inducing discrepant information because failing to do so would run counter to their open-minded concept and perhaps produce even greater stress. On the other hand, the high dogmatic subjects experienced less stress than the low dogmatic subjects after being confronted with discrepant information. Perhaps it may be inferred that the high dogmatic individual might have a weaker tendency to avoid discrepant information.

The one study previously referred to that deals with predecisional information seeking and dogmatism is by Long and Ziller (1965). In it subjects were required to make decisions and were allowed to use information made available to them. The study found significant negative correlations between dogmatism and each of four decision measures: delaying the decision, engaging in predecisional search, requiring more time for making psychological judgments, and responding "don't know" to statements of opinion under conditions of inadequate information. In the interpretation of the study limited or inadequate predecisional search was presumed to be a manifestation of dogmatism. Dogmatism leads to being

closed to new information, the convictions of the subjects are inviolable, thus permitting their cognitive structure to remain momentarily secure.

The problem with this study in terms of its usefulness for the proposed model is that the tasks involved decisions of a very mechanical nature in a word completion task, a concept identification task, and a line judgment task. These situations are highly dissimilar to the types of decisions with which the coping with uncertainty model deals. Furthermore, in the first two tasks the set of alternatives was unknown to the subjects at the commencement of the experiment so that the notion of uncertainty in information theory terms was not relevant.

The Use of Information in Voting Decisions

The election campaign presents a fairly adequate "natural" setting in order to test some of the hypotheses derived from the coping with uncertainty model. In such a setting it is theoretically possible to specify the alternatives available to the voters, to obtain some measures of the individual's initial tendency to vote for each of the alternatives, and to determine, to some extent, the point in time at which the decision is made on whom to vote for.

Much has been written on information seeking behavior during political election campaigns. McCombs (1972) and Atkin (1973) present major and comprehensive reviews of the literature in this area. Most of the studies dealing with information seeking do not make a clear distinction between the predecisional and postdecisional stages as far as the individual respondents are concerned, although several have attempted to do so. Atkin summarizes the research and concludes that "Most of this research on predecisional exposure patterns documents the obvious role of decisional

uncertainty in determining information seeking. When people face an important decision, such as the choice between political candidates, they are motivated to seek out mass media content to help them decide." Thus, it seems that the assumption made at the outset that information on the candidates and the issues aids the voter in making his decision is a valid one.

The question of this assumption becomes more complex when examining selectivity in the use of information based upon one's voting predispositions. Many studies have shown that people are selective in their choice of information during political campaigns. The general findings are that the Democratic oriented individual tends to expose himself to more information on the Democratic party's candidates as compared to the Republican party's candidates, and vice versa. As for active information seeking, people generally seek information that tends to support their predispositions. Results along these lines have been obtained in such major studies by Lazarsfeld, Berelson and Gaudet (1948) on the 1940 campaign; Berelson, Lazarsfeld and McPhee (1954) on the 1948 campaign; Campbell, Gurin and Miller (1954) on the 1952 campaign; Campbell, Converse, Miller and Stokes (1960) on the 1952 and 1956 campaigns; and Blumler and McQuail (1969) on the 1964 campaign in Great Britain. There have also been many studies on smaller scales dealing with local elections which have generally yielded similar findings.

Most researchers in this area interpret their data in line with the position that people use the media in order to reinforce their existing attitudes and predispositions (Klapper, 1960; Atkin, 1973), and that the extent of their exposure to media information is determined, at least partially, by its availability.

Split Ticket Voting Research

In contrast to the voluminous number of general studies on elections, very little attention has been given by researchers to one particular aspect of the election, namely, to the split ticket voting phenomenon. Moreover, with the one exception of DeVries and Tarrance (1972), none of the data on split ticket voting pertain to communication variables such as media exposure and the use of information, but rather to the political implications of this growing phenomenon.

While the minimal previous research on the phenomenon dealt with ticket splitting, DeVries and Tarrance also deal with the ticket splitter. This emphasis clearly implies that the voter who splits his ticket is viewed as a particular kind of voter with special characteristics.

One of the major problems of dealing with the split ticket voting phenomenon is its definition and scope. Conceptually, ticket splitting is a casting of a vote for a candidate of a given party for one office and for a candidate of another party for a different office, both in the same election campaign. Operationally, however, ticket splitting may range from dealing with two national offices only, to a wide array of offices including the president of the United States and the city clerk and drain commissioner.

Traditionally the split ticket voter has often been confused with the so called "independent" voter (Meyer, 1962). The term "independent" voter does not even have a standardized use in the political science literature. One school of thought views the independent as the individual who lacks interest in the campaign and who changes his vote from election to election. The other school views the independent voter as a truly neutral person who makes his decision in each election solely on the basis of an examination

of the information available. Thus, some researchers would tend to view the ticket splitter as one who makes a decision not necessarily based on information-- one of the possibilities according to Campbell and Miller (1957)-- whereas others tend to regard the ticket splitter as a rational person, genuinely independent, who carefully examines the alternatives before making his decision (DeVries and Tarrance, 1972).

Independence is viewed here as a latent self perception dealing with the realm of party affiliation. Ticket splitting (and straight ticket voting) are viewed as manifest behavioral phenomena. Ticket splitters are not identical to independents. Nevertheless, the premises of the coping with uncertainty model would posit the split ticket voter as being more similar to the rational type independent voter, the most relevant characteristic of which is the rational examination of alternatives before making the decision.

It is felt that DeVries and Tarrance would probably agree on this point. They maintain that the split ticket voter, defined by his actual voting record, is not necessarily as independent voter, as defined by a response to the question "Are you a Democrat, a Republican or an Independent?" (the method employed in the majority of survey research and polling studies). Moreover, the split ticket voter tends to be slightly on the younger side, somewhat more educated, a bit more white collar, and more suburban. Finally, the split ticket voter, according to DeVries and Tarrance, is a larger consumer of the mass media and engages in more interpersonal communication during the campaign.

These findings are, no doubt, in line with the predictions of the coping with uncertainty model, yet to be specified. Unfortunately, however, DeVries and Tarrance do not make any attempt to explain why these results

are obtained. Furthermore, two additional criticisms must be made regarding the analyses which they present of the media consumption of split ticket voters versus the straight ticket voters. First, the percent differences cited are no doubt significant from a statistical point of view, being based on a sample of 1169 respondents. From a substantive viewpoint, however, the differences are often negligible, sometimes in the range of 2-3 percentage points.

Second, DeVries and Tarrance draw their media differences conclusion based on data which do not unequivocally show that ticket splitters differ from straight ticket voters. Rather, their analyses are done separately for straight Democrats, for straight Republicans, as well as for the ticket splitters. We have reinterpreted their data to show that when combining straight Democratic voters with straight Republican voters and comparing this group to split ticket voters, the originally minute differences often become smaller and at times even totally disappear. In essence, then, DeVries and Tarrance show that split ticket voters are more similar to straight Democrats on some media uses and more similar to straight Republicans on other media uses. Here too, they fail to present adequate explanations.

This second point is the more crucial one for the theoretical approach advanced here. DeVries and Tarrance suffice with an examination of the total media use of the voters, but fail to look at the relationships between the voting behavior (split or straight) and the kinds of information the voters use and expose themselves to, that is, the use of candidate information from only one party or from both parties.

They do dispute, however, the political scientists' belief that the most important factors entering into the decision making process of an election are party identification, various group affiliations and finally

the campaign issues themselves. Instead, they argue: "When people are asked how they make up their minds about a candidate, they discuss his general ability, his personality, his ability to handle the job, his stand on issues and so on" (p. 74).

It seems reasonable to argue that the latter set of factors can be obtained by voters only by means of information seeking from various sources, whereas factors such as party identification and group affiliations are not sought as such since they are directly part of the individual's constitutional make-up. The voter can determine for himself whether to seek, expose himself to, and be interested in information on candidates from only one party or candidates from both parties. Thus, in order to vote a split ticket, a voter would need to seek information on both political parties and on its candidates. In other words, some minimal amount of information is a necessary condition in order to vote, and some minimal information on both parties and their candidates is a necessary condition for ticket splitting.

Hypotheses

The hypotheses tested in this study are on two levels. The first level deals with the relationship between the ability to cope with uncertainty and the use of information during the election campaign. The second level deals with the relationship between the use of information during the campaign and voting behavior on election day. In addition, a direct examination is made of the relationship between coping with uncertainty and voting behavior. Figure 2 diagrams the hypotheses.

The specific hypotheses to be tested are:

H_1: The more the individual ability to cope with uncertainty, the later in the campaign the voting decision would be made.

The rationale for this hypothesis is that if the individual can cope with uncertainty, he would be able to tolerate uncertainty for a longer period of time, without having made a decision. The individual who is less able to cope with uncertainty would attempt to reduce it sooner by making a decision.

H_2: The more the individual ability to cope with uncertainty, the more information the individual would be exposed to during the campaign.

This hypothesis is based on the notion that information is a commodity which helps to reduce uncertainty, and that coping with uncertainty will enable the individual to be exposed to information without being threatened by it.

H_3: The more the individual ability to cope with uncertainty, the less selective the individual would be to seek information on the candidates of only one of the parties.

This hypothesis is derived from the proposition that being exposed to and seeking information on the various alternatives would not be as uncomfortable for a person who is able to cope with uncertainty, compared to the person who is unable to cope with uncertainty. This, despite the fact that additional information may temporarily increase the amount of uncertainty and prolong its duration.

H_4: The later during the campaign an individual makes his voting decision, the more likely he is to vote for candidates from more than one party (i.e., split his ticket).

Assuming that information on both parties is necessary in order to split one's ticket, the later in the campaign the decision is made, the greater the opportunity the voter would have to obtain that level of information.

H_5: The more information the individual is exposed to during the campaign, the more likely he is to split his ticket.

Assuming, again, that information on both parties is necessary in order to split one's ticket, the more information one obtains on both parties combined, the greater the likelihood of voting a split ticket.

H_6: The less selective the individual is in his use of information, the more likely he would be to split his ticket.

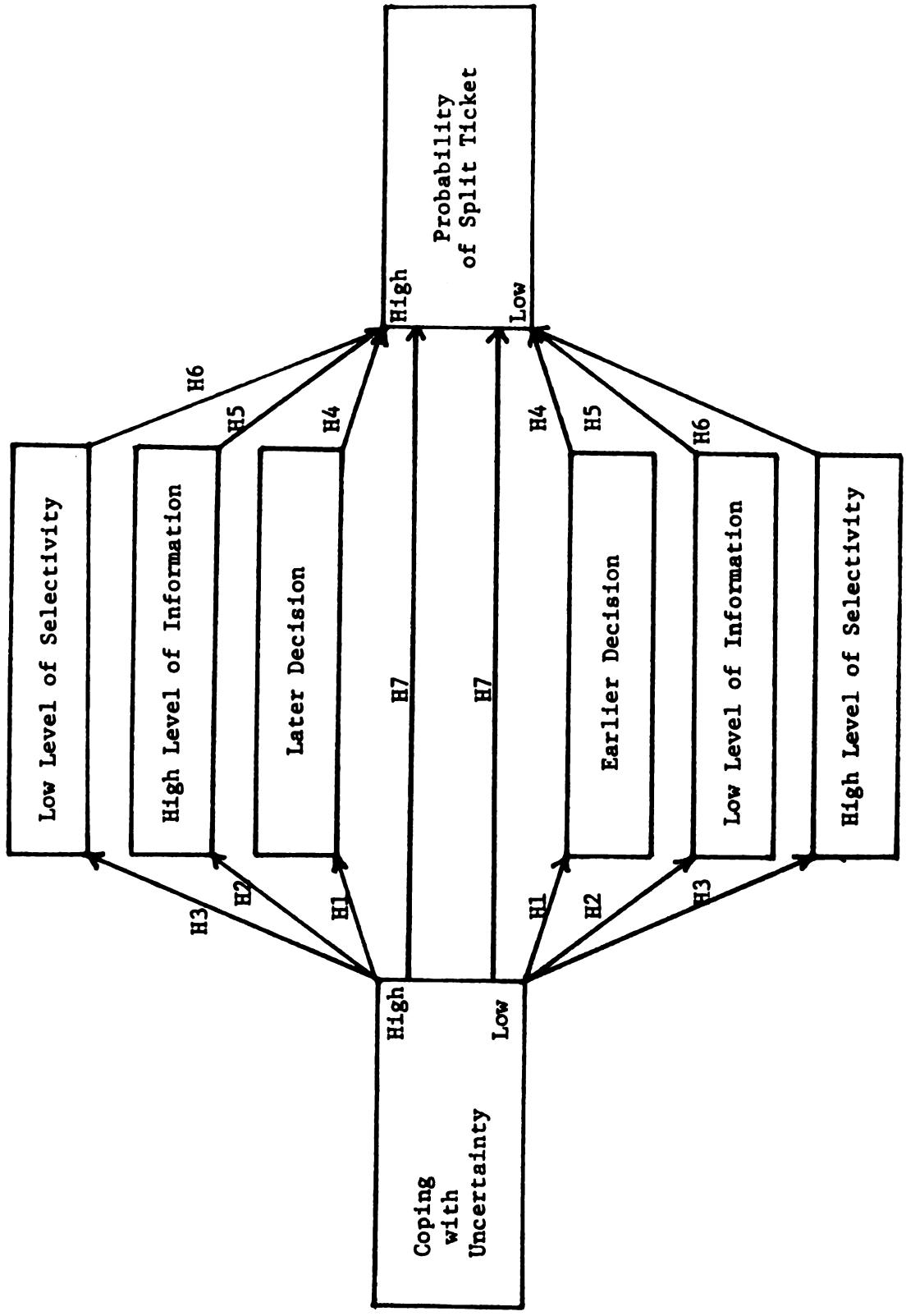
Assuming, once more, that information on both parties is necessary in order to split one's ticket, the less selective one is, the greater the likelihood that one's ticket would be split.

H_7: The higher the ability of the individual to cope with uncertainty, the more likely he is to split his ticket.

This hypothesis integrates both levels of the theoretical approach. If H_1 through H_6 are correct, then it also should be that one's ability to cope with uncertainty would directly predict one's voting pattern.

Figure 2

The Hypotheses to be Tested



Chapter II

METHODOLOGY

Overview

The data for this study consist of only one part of the data collected in a state-wide survey of eligible voters in Michigan. The purpose of the larger study was to determine the attitudes of potential voters in the 1972 elections on matters relating to the candidates and the issues of the campaign. An additional purpose was to make predictions as to voter turnout and results of the elections, held on November 7, 1972.

The purpose of the present study differs, however, from those of the larger study in two main respects. First, no attempt was made to make predictions as to voter turnout and election results, with the aim of making inferences from the survey sample to the general population. Instead, the purpose was to determine the communication behaviors of voters during the campaign and the relationship between these behaviors and coping with uncertainty, on the one hand, and split ticket versus straight ticket voting, on the other hand. Second, rather than being concerned with all potential voters, this study was concerned only with those eligible voters who actually went to the polls on election day.

Study Design

The special objectives of the present study, while drawing data from a conventional survey project, explain some of the deviations from the conventional study design.

The study consisted of three waves of interviews, all aimed at the same respondents. The first wave was conducted in June of 1972, before the national nominating conventions of the two major political parties; the second wave was conducted during the last five days of October, 1972, i.e., one week prior to the elections; the third and final wave was conducted between November 11 and 13, within one week following the elections.

Only those respondents who actually voted and on whom data were obtained on all three waves were included in the final analyses. The three-stage data collection focussed the attention of the respondents to one aspect of the campaign at a time, at the most relevant period, rather than compressing the entire campaign and its aftermath into one interviewing session.

Questionnaire Development

The first questionnaire-- Wave 1-- was designed for personal interviews to be conducted in the homes of the respondents. It was composed mainly by the Market Opinion Research Company of Detroit, Michigan, as part of its regular pre-election survey. It contained sets of questions on the extent to which the electorate perceived the ways in which the president and the U.S. senators from Michigan were fulfilling their duties. It inquired on the respondents' past voting behaviors, their intentions and plans for the 1972 elections, and it sought their positions on several bills that were pending at the time. The questionnaire also contained questions on several demographic variables such as sex, age, race, religion, education, occupation, union membership and family income. Finally, it contained the items used for the coping with uncertainty index (although they were placed in the middle of the questionnaire). Those segments used

for this study were the respondents' past voting behavior, plans for the 1972 elections demographic variables and the coping with uncertainty items.

The second questionnaire-- Wave 2-- was designed to be administered in telephone interviews lasting approximately ten to fifteen minutes. It was composed solely for the present study by this author. It contained a series of questions on the degree of familiarity of the voters with Nixon's and McGovern's positions on several issues, attention paid to the Democratic and Republican nominating conventions, attention given to both presidential candidates in newspapers and on television, and interpersonal communication in the forms of conversations concerning the elections and the presidential candidates. With the exception of the questions dealing with the familiarity on the issues and the nominating conventions, the same sets of questions were repeated for the senatorial race between Senator Griffin, the Republican, and his Democratic challenger, the Attorney General of Michigan, Frank Kelley. Finally, there were several questions as to the voting intentions for the office of president and U.S. senator from Michigan.

The third questionnaire-- Wave 3-- was composed jointly by the Market Opinion Research Company and the present author. It was designed as a follow-up to the election in order to learn about the behavior of voters during the campaign, their perceptions of the campaign and of the various candidates. It attempted to ascertain the events during the campaign that were perceived as being influential in the respondents' voting decision making process, and it dealt with the point in time at which the voters made their decisions as to whom they would vote for.

The pretesting of Waves 1 and 3 were done by the Market Opinion Research Company, as part of their regular pre-interviewing procedures.

The coping with uncertainty items were pretested using approximately 15 respondents. They seemed to be having no problems in following the statements and in responding to them. Wave 2 was pretested using approximately 10 respondents in randomly dialed telephone interviews in the Lansing area. Several modifications of the questions were made on the basis of the pretest.

Sampling

The respondents for each of the three waves of the study were sampled in different manners. The first wave was a sample of the entire adult population of the State of Michigan (age 17 and over). The sampling was prepared by the Sampling Division of the Market Opinion Research Company, according to the general model found in Backstrom and Hursh (1963).

The sampling procedure was that of Probability Proportionate to Size (PPS), employing the United States Department of Commerce, Bureau of the Census data from the 1970 population census. The sampling frame was the entire State of Michigan. Fifty primary sampling units were randomly selected using the SMSA (Standard Metropolitan Statistical Areas) for the metropolitan areas and the MCD (Minor Civil Divisions) for the rural areas. Within each such primary unit two clusters were randomly selected. The sampling blocks within the clusters were randomly selected while maintaining the PPS criteria. Within each block, by skipping a predetermined number of households based on the total number of households per block, the interviewers were instructed to select eight households. In four of these households they were to interview one male per household, and in the other four households, one female per household. Replacement procedures for unavailable households or respondents required that the first substitue be selected in the household to the left of the original one, and the

second substitute to the right of the original one. The sample of Wave 1 consisted of 799 respondents.

The sample for Wave 2 was prepared by the present author, based on totally different criteria. Michigan State University in East Lansing, maintains toll-free telephone lines to several areas of the state, including the entire Detroit Metropolitan area, the Ann Arbor, Grand Rapids and Pontiac areas as well as the Lansing and East Lansing areas. Since Wave 2 was to be accomplished by telephone interviews, all the respondents in these free access areas constituted the sampling frame for this wave. Of the 799 completed interviews of Wave 1, 289 respondents were not recontacted since they lived outside the toll-free areas (including 28 respondents from Wave 1 who refused to give their telephone numbers), or since they were not registered voters. The 510 remaining respondents were broken into groups by their telephone districts. Each interviewer received a list of respondents from a given telephone district including their sex and telephone number. The interviewer was asked to reach as many respondents as possible during the time available, while attempting to interview an equal number of males and females. The interviewers began by selecting every other respondent in their lists. After going through the lists, they started from the beginning of the lists and attempted to complete more interviews. The interviewers also made callbacks in order to increase the number of completed interviews. The resources which were available enabled the completion of 226 interviews.

The Wave 3 respondents were sampled by the Market Opinion Research Company. This time the procedure involved a series of state-wide telephone interviews made from Detroit with any four of each block of eight respondents from the Wave 1 sample. The interviewers were not instructed to

obtain equal numbers of males and females from each block. Wave 3 consisted, therefore, of 399 completed interviews.

Interviewing

The interviews of Wave 1 and Wave 3 were conducted by professional interviewers of the Market Opinion Research Company. Wave 1 interviews were conducted in the homes of the respondents and lasted from 30 minutes to one hour. Wave 3 interviews were conducted by telephone and lasted 15 to 20 minutes. Briefing sessions were held before each wave at which time examples of the expected answers were provided.

Several days following the completion of Wave 1, verification of the interviews was conducted. For this purpose one respondent was chosen at random from each of the 100 blocks. Those respondents were telephoned and asked several questions in order to make sure that the interview was conducted properly and that the responses were recorded accurately. The verification procedure indicated that no problems existed. No verification was made for Wave 3 since the respondents had been interviewed twice before, and it was assumed that they had cooperated well throughout the study.

The interviews of Wave 2 were conducted by graduate students in Communication at Michigan State University. The interviews were by telephone and lasted ten to 15 minutes. The interviewers were briefed on the objectives of the study and were given the possible answers. No verification of the interviews was done for lack of time and resources.

Attrition of Subjects

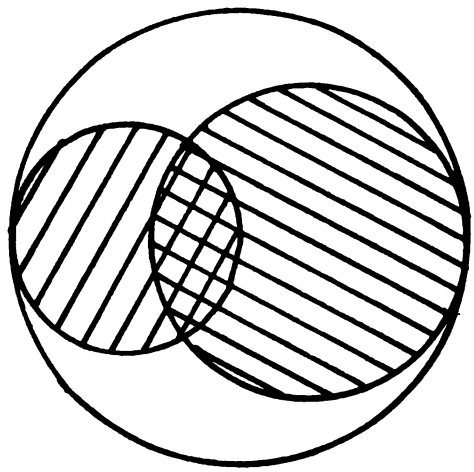
Wave 1 resulted in 799 complete questionnaires. Wave 2 yielded 226 complete questionnaires. Finally, Wave 3 produced 399 complete questionnaires.

Since the voting decision is the dependent variable of this study, it was necessary to reject the 84 respondents from Wave 3 who claimed that they did not vote and the 14 respondents who refused to disclose for whom they voted. Thus, there remained 301 respondents from Wave 3.

Of the 799 respondents from Wave 1, the 226 from Wave 2 and the 301 from Wave 3, only 114 respondents had completely overlapped. This group of 114 respondents forms the basis of the data analyses and hypotheses testing. Figure 3 diagrams the three sampling waves and the resulting final sample.

Figure 3

The Three Waves of the Study



Wave 1 n=799 | Wave 2 n=226 | Wave 3 n=301 | Final Sample n=114

It should be emphasized that since the objective of the study did not involve making predictions as to the turnout and results of the elections, it was not imperative that the samples be perfectly representative of the Michigan population. Nevertheless, a check was made comparing census data to the distributions of five demographic variables in the Wave 1 sample and in the final sample. Table 1 presents the data.

Table 1 indicates that with the exception of the 17-20 year old age group, the ages of the sampled individuals closely resemble the age distribution of the population. The proportions of males and females in the samples is very close to that of the population. Black respondents were sampled above their state level in the Wave 1 sample and even more so in the final sample. There is a bias towards the oversampling of higher educated individuals, although this might be an artifact of the educational statistics being based on persons over 25 years of age. Generally, the family income distribution in the samples resembles that of the population, notwithstanding the general shift in the direction of higher income over time (1970 census data versus 1972 sample data).

Measurement of Variables

This section describes the development of the variables used in the study and the construction of the various indices.

Coping with Uncertainty

The basis for the coping with uncertainty measure was the Budner (1960) scale for the measurement of Intolerance of Ambiguity. Of the 16 original items, four positively worded items and four negatively worded items were chosen on the basis of two criteria: their reported

Table 1. Comparison of Selected Demographic Distributions from the 1970 Census in Michigan and the Wave 1 and Wave 3 Samples* (in percent)

	Michigan Population	Wave 1 Sample (N=799)	Final Sample (N=114)
Age			
17-20	11.2	8.3	1.8
21-24	9.6	9.9	9.6
25-29	10.4	12.5	15.7
30-34	8.4	8.1	12.3
35-39	8.2	8.4	10.5
40-44	9.1	10.4	11.4
45-49	9.1	10.0	8.8
50-54	8.2	8.2	5.3
55-59	7.0	7.0	7.9
60-64	5.8	5.0	5.3
65+	13.0	12.2	11.4
	100.0	100.0	100.0
Sex			
Male	47.9	50.4	49.1
Female	52.1	49.6	50.9
	100.0	100.0	100.0
Race			
White	89.0	81.0	75.4
Non-white	11.0	19.0	24.6
	100.0	100.0	100.0
Education**			
0-8 years	25.0	11.2	9.6
9-11 years	22.1	19.4	19.3
12 years	33.7	40.5	32.5
13-15	9.7	17.4	21.0
16 years	5.2	6.6	12.3
17+ years	4.3	4.9	5.3
	100.0	100.0	100.0
Family Income			
$0-2999	7.5	6.4	6.0
$3000-4999	7.1	9.5	9.0
$5000-5999	4.1	3.7	1.0
$6000-6999	4.6	6.1	6.0
$7000-9999	19.5	20.1	18.0
$10000-14999	30.5	33.6	40.0
$15000-24999	21.4	16.9	17.0
$25000+	5.3	3.7	3.0
	100.0	100.0	100.0

*All calculations from the census data had to be made excluding ages 1-16.
**Educational census data includes individuals from age 25 and over only.

reliability and their face validity in terms of the conceptualization of the notion of coping with uncertainty as used in this study. Also, two additional items were written which have high face validity (items 3 and 6). See Appendix A for the reliability coefficients. The ten items are:

1. A good job is one where what is to be done and how it is to be done are always clear.
2. I would like to live in a foreign country for a while.
3. I prefer situations having few alternatives to choose from, to situations that require choosing among several alternatives. (new item)
4. Often the most interesting and stimulation people are those who don't mind being different and original.
5. What we are used to is always preferable to what is unfamiliar.
6. I normally examine both sides of an issue even though it makes my decision a more difficult one. (new item)
7. A person who leads an even regular life, in which few surprises or unexpected happenings arise, really has a lot to be grateful for.
8. It is more fun to tackle a complicated problem than to solve a simple one.
9. I like parties where I know most of the people more than parties where all or most of the people are complete strangers.
10. People who insist upon a yes or no answer just don't know how complicated things really are.

After doing the necessary recoding for the missing data, the sum of all the items for each respondent was computed. Following that, an 11 x 11 matrix of product moment correlations was prepared, including the ten items and their sum. An examination of the matrix showed low to moderate correlation coefficients. It also seemed highly desirable to discard items 6 and 10 which had the lowest intercorrelations with the other items and with the sum score.

A new sum score was computed for each respondent based on the eight remaining items. The distribution of the new sum scores was divided into seven groups, as equally as possible, in order to form the index for the Coping With Uncertainty Scale (CWUS). Table 2 presents the distribution of the sum scores and their breakdown into the seven groups. The possible range of the sum of scores was eight to 40. The actual range was 12-40.

Table 2. Distribution of Coping with Uncertainty Sum Scores and Index Levels in Wave 1 (N=799).

Index Level	Sum Scores	f	F
1	12-19	100	100
2	20-21	131	231
3	22	111	342
4	23-24	150	492
5	25-26	105	597
6	27-28	105	702
7	29-40	97	799

Finally, a new 10 x 10 matrix of intercorrelations was prepared, including the eight items, the sum score and the CWUS index score. Table 3 presents this matrix. Appendix B contains the correlations of the discarded items, 6 and 10, with the Sum and Index Scores.

The same CWUS index scores which were obtained from Wave 1 were used for the final sample of 114. The distribution of the index scores for the final sample is presented in Table 4.

Table 3. Matrix of Product Moment Correlations for the Final Coping with Uncertainty Items, Sum and Index Scores (N=114).

	Item 1	Item 2	Item 3	Item 4	Item 5	Item 7	Item 8	Item 9	Sum	Index
Item 1	1.00	.14	.25	.06	.04	.05	- .10	.01	.43	.36
Item 2		1.00	- .09	.04	- .09	.09	.03	.10	.41	.43
Item 3			1.00	.13	.12	.20	- .02	.02	.48	.47
Item 4				1.00	.04	.15	.20	- .19	.40	.36
Item 5					1.00	- .21	- .13	.00	.36	.34
Item 7						1.00	.07	.25	.62	.61
Item 8							1.00	- .00	.30	.28
Item 9								1.00	.34	.32
Sum									1.00	.96
Index										1.00

Table 4. Distribution of Coping with Uncertainty Index Scores in Final Sample (N=114).

Score	f	F
1	8	8
2	15	23
3	16	39
4	21	60
5	19	79
6	22	101
7	13	114

In all the analyses involving the CWUS, the scores used were those of the Index ranging from 1 (lowest) to 7 (highest). The only exception was when the CWUS was divided into three groups of Low, Medium and High. When this division was used, it was based upon the sum score rather than on the index with the following breakdown, which yielded the best possible division into three groups: Low-- 16 through 22 (n=39); Medium-- 23 through 25 (n=40); and High-- 26 through 35 (n=35).

Time of Voting Decision

The point in time during the campaign at which the individual decided whom to vote for was measured twice. The first measure was in Wave 2 and was inferred from the respondents' answers to the following two questions:

> Now that the elections are almost here, would you please tell me for whom you plan to vote for the presidency....McGovern or Nixon?
>
> What about the race for the Senate....Griffin or Kelley?

If a respondent indicated that he had not yet made a decision or that he did not know, the response was coded as "no decision". The data were combined for both races. Thus, the measure distinguishes between the voters who had made a decision at least one week before the elections and those who were still undecided at that time. Of the 114 respondents, only 13 did not decide by the time Wave 2 was administered. This was the WAVE 2 DECISION measure.

The second measure of the time of the voting decision was obtained in Wave 3. This was the response to the following questions:

> Looking back at the whole presidential campaign, when did you finally make up your mind how you would vote for the President?
>
> Before either of the nominating conventions (1)
> After the Democratic convention (2)
> After the Republican convention (3)
> During September (4)
> During the first half of October (5)
> During the last half of October (6)
> During the last week before the election (7)
> On the day before or on Election Day (8)
> Don't know

It should be noted that this question was worded specifically for the presidential decision. Two groups were created for the analyses: the first consisted of the respondents who decided no later than immediately following the two nominating conventions (categories 1, 2, and 3), i.e., when it was clear who both candidates were; the second consisted of all the respondents who decided later in the campaign (categories 4-8). The measure is named RETROSPECTIVE DECISION TIME.

Amount of Information

The following groups of questions were used to test H_2 and H_5 (concerning the amount of information), and H_3 and H_6 (concerning information selectivity).

Familiarity with Issues

In the Wave 2 questionnaire eight questions dealt with the perceived familiarity of the individual with the positions of Nixon and McGovern on four issues that were considered to be central in the campaign. The following were the questions to which the respondents were asked to indicate that they were Very familiar, Fairly familiar, Not very familiar or Not familiar at all:

> I'm going to ask you how familiar you are on Nixon's and McGovern's positions on four different issues. First of all, how familiar do you feel you are with Nixon's position on
> The Vietnam war
> Busing of school children
> Welfare
> Federal control over wages

The same questions were then repeated for McGovern's positions on the issues. It should be emphasized that the respondents were not asked to indicate what the positions of the candidates were, but only to say to what extent they felt that they knew the candidates' positions. The assumption behind this set of questions was that in order to be familiar with the candidates' positions one needs to be exposed to information and actively seek such information.

Respondents who said they were very familiar with a given issue were coded as 4, while "Not familiar at all" was coded as 1 (including "Don't know"). The familiarity with each issue was computed by combining the familiarity with both the candidates' positions on the issue (VIETNAM FAMILIARITY, BUSING FAMILIARITY, WELFARE, FAMILIARITY, and WAGE-CONTROL FAMILIARITY). Indices of familiarity were also constructed for each candidate over all four issues (NIXON FAMILIARITY and MCGOVERN FAMILIARITY) and for both candidates combined (TOTAL FAMILIARITY).

The justification for the creation of the indices was the moderate product moment correlations obtained between the specific questions for each candidate (the range of the correlation coefficients was .32 to .48 for Nixon, and .25 to .55 for McGovern).

Attention to Nominating Conventions

Two questions in Wave 2 dealt with the attention paid to the two nominating conventions on television. The questions were identical for both conventions and were worded as follows:

> How closely did you follow the Democratic/Republican national convention on television this year?
>
> Very closely
> Fairly closely
> Not very closely
> Not at all
> Don't know (coded as "Not at all")

The responses to both questions were combined into an index of CONVENTION ATTENTION. The product moment correlation between both questions was .50.

Candidates in the Mass Media

The extent to which the respondents paid attention to the Democratic and Republican candidates for the presidency and the senate on television and in newspapers was measured by the following set of questions:

> How much attention have you been giving to McGovern/Nixon/Kelley/Griffin on television?
>
> Very much attention
> A fair amount
> Not very much
> None at all
> Don't know (coded as "None at all")

> How closely are you following Nixon/McGovern/Griffin/Kelley in the newspapers?
>
> Very closely
> Fairly closely
> Not very closely
> Not at all
> Don't know (coded as "Not at all")

The responses were combined into seven indices:

1. PRESIDENTIAL TELEVISION (both Nixon and McGovern on television, the correlation coefficient between the two was .39.
2. SENATORIAL TELEVISION (both Griffin and Kelley on television, the correlation coefficient between the two was .78).
3. PRESIDENTIAL NEWSPAPERS (both Nixon and McGovern in the newspapers, the correlation coefficient between the two was .68).
4. SENATORIAL NEWSPAPERS (both Griffin and Kelley in the newspapers, the correlation coefficient between the two was .70).
5. TOTAL TELEVISION (all four candidates on television, the lowest correlation coefficient between all four candidates was .17 and the highest was .78).
6. TOTAL NEWSPAPERS (all four candidates in the newspapers, the lowest correlation coefficient between all four candidates was .38 and the highest was .70).
7. TOTAL MASS MEDIA (all four candidates on television and in the newspapers, the lowest correlation coefficient between all four candidates was .17 and the highest was .78).

Interpersonal Communication

Wave 2 included the following set of two questions concerning conversations on the candidates:

> During the past week or two, when you discussed the presidential candidates/senatorial candidates with your friends and relatives, did you talk more about Nixon/Griffin, more about McGovern/Kelley, or did you talk about both candidates about equally?
> More about Nixon/Griffin
> Both about equally
> More about McGovern/Kelley
> Didn't discuss either
> Don't know

For the purpose of dealing with the amount of interpersonal communication, these questions were coded as having had conversations (the first three response categories combined) and not having conversations (the last two response categories combined). The measures created were PRESIDENTIAL CONVERSATIONS and SENATORIAL CONVERSATIONS.

Information Selectivity

As noted earlier, the same questions were also used to measure the selective use of information by respondents exhibited by consuming more information regarding candidates of one party than the other party. This was done for the questions on familiarity with issues, attention to the conventions, attention to the candidates in the mass media and interpersonal communication about the candidates.

The basic operation for all these measures (with the exception of interpersonal communication) involved the computation of the percentage of an individual's deviation from equal information consumption on each of the parties' candidates. In other words, the ratio involved the amount of information consumed by the respondents concerning the candidate or candidates of one party relative to the amount of information consumed concerning the candidates of both parties, corrected for an estimate of the "availability" of the information on both parties.

The estimate of the "availability" was defined as the ratio of the sum total for the entire sample of the amount of attention paid to or the degree of familiarity with issues concerning one party's candidate or candidates relative to the sum total over all respondents of the same measures, combined for the candidates of both parties. Thus, availability (A) is computed in the following manner for each variable:

$$A = \frac{\sum_{N=1}^{114} \text{Republicans}}{\sum_{N=1}^{114} \text{Republicans} + \sum_{N=1}^{114} \text{Democrats}}$$

In the computation of this ratio the same party must always be in the numerator. It was arbitrarily decided to put the sum scores for the Republican party in the numerator.

The selectivity score (S) is the amount of attention or familiarity units reported by a given respondent i for the Republican candidate or candidates out of the total units reported by that respondent for the candiates of both parties. Since it was considered irrelevant at this point which party the respondent was selectively favoring, the absolute value was computed. Thus, the general formula for the S was:

$$S_i = \left| \frac{\text{Republican}_i}{\text{Republican}_i + \text{Democrat}_i} \right| - A \quad \times 200$$

The ideal situation would be one in which the availability of information for each party's candidates would be the same. The availability level for each of the measures was, therefore, computed using the empirical sample data. The lowest ratio (with Republican candidates in the numerator) was 0.489 and the highest was 0.554. Thus, based on the obtained data, it seems that the availability levels were nearly equal for the candidates of both parties, with a slight advantage for Republican party information. Since the differences were relatively small, however, it was decided to subtract the 0.5 level of availability for all the measures, which best simulates the ideal situation of equal availability. Accordingly, a constant multiplication factor of 200 was included in the selectivity

score formula in order to be able to deal with a scale ranging from zero (no selectivity) to nearly 100 (maximum selectivity). It should be noted that the selectivity score cannot reach 100 because this would mean that the attention to candidates or familiarity with issues is zero for one of the parties' candidates, which is an unrealistic possibility.

For example, if a respondent had indicated that he was "Very familiar" with Nixon's position on Vietnam (scored as 4) and "Not familiar at all" with McGovern's position on the same issue (scored as 1), then the selectivity score for that individual on VIETNAM FAMILIARITY would be

$$S = \frac{4}{4 + 1} - .5 \times 200 = 60$$

If, however, the respones for both candidates was "Very familiar", the selectivity score would be

$$S = \frac{4}{4 + 4} - .5 \times 200 = 0$$

As noted above, this selectivity measure was computed for each of the variables, from familiarity with the Vietnam positions of Nixon and McGovern to the attention paid to the Republican candidates for the presidency and the senate in the mass media (on television and in the newspapers) versus the attention paid to the Democratic candidates for both offices in the mass media (for a complete list see Figure 4).

The data on selectivity in interpersonal communication about the candidates was dealt with in a different manner. The question cited earlier on discussions was recoded by combining the respondents who indicated more conversations about either candidate and comparing them to respondents who indicated an equal amount of conversation about both candidates. The respondents who did not have any conversations were

excluded from the analyses. The measures used were SELECTIVE PRESIDENTIAL CONVERSATIONS and SELECTIVE SENATORIAL CONVERSATIONS.

Furthermore, two additional questions were used to deal with the selectivity in interpersonal communication. Those respondents who indicated that they did have conversations about the elections were asked the following:

> Think for a moment about the conversations you had in the last couple of weeks on the presidential/senatorial campaign. Did most of the people you talked to favor McGovern/Kelley, or Nixon/Griffin or were they about equally divided?
> Favored McGovern/Kelley
> Equally divided
> Favored Nixon/Griffin

The respondents who indicated either of the candidates as being favored were compared to those who indicated that neither candidate was favored. The measures used were PRESIDENTIAL CONVERSATION BIAS and SENATORIAL CONVERSATION BIAS.

Voting Behavior

As discussed in Chapter I, the split ticket voting variable can be defined as narrowly or as broadly as the researcher desires. Since the format and scope of this study did not allow for collecting data on races other than that of the presidency and the senate, the definition of split and straight ticket voting was confined primarily to these races. The high disadvantage in this operationalization lies in the fact that both these offices are in the realm of national politics and, thus, generally, yield a lower rate of ticket splitting. On the other hand, if an individual splits his ticket in voting for these offices, he would seem to be a more pronounced ticket splitter than if he split his ticket between national offices and local offices.

The actual measurement was made by asking the respondents in Wave 3 whom they voted for in both these races. Thirty-five respondents split their ticket while 79 voted a straight ticket. This measure was called ACTUAL VOTE.

An additional type of measure for ticket splitting was obtained. Respondents were asked the following question in Wave 3 concerning their voting behavior in the 1972 election:

> Thinking about all the races on the ballot in the election on November 7, which of these answers best describes how you voted?
>
> Straight Democratic (1)
> Mostly Democratic (2)
> A few more Democrats than Republicans (3)
> About equally for both parties (4)
> A few more Republicans than Democrats (5)
> Mostly Republican (6)
> Straight Republican (7)

The responses to this question were recoded by combining categories 1 and 7, 2 and 6, and 3 and 5. Thus, an index of the degree of ticket splitting was created with four levels ranging from totally straight to totally split. This measure was referred to as 1972 VOTING PATTERN. Both measures of voting behavior were used in the analyses.

In sum, Figure 4 lists all the measures used in the analyses, arranged into five main categories: coping with uncertainty, time of voting decision, amount of information use, selectivity of information use, and voting behavior.

Figure 4

Summary of Measures

Category	Specific Measures	Range
Coping with uncertainty	Coping with Uncertainty Scale (CWUS)	1-7
Time of voting decision	WAVE 2 DECISION	1=Decided 2=Undecided
	RETROSPECTIVE DECISION TIME (based on Wave 3)	1=up to immediately following conventions 2=later than 1
Information use	Familiarity with Issues	
	VIETNAM FAMILIARITY	2-8
	BUSING FAMILIARITY	2-8
	WELFARE FAMILIARITY	2-8
	WAGE-CONTROL FAMILIARITY	2-8
	NIXON FAMILIARITY	4-16
	MCGOVERN FAMILIARITY	4-16
	TOTAL FAMILIARITY	8-32
	Attention to Conventions	
	CONVENTION ATTENTION	2-8
	Mass Media Attention	
	PRESIDENTIAL TELEVISION	2-8
	SENATORIAL TELEVISION	2-8
	PRESIDENTIAL NEWSPAPERS	2-8
	SENATORIAL NEWSPAPERS	2-8
	TOTAL TELEVISION	4-16
	TOTAL NEWSPAPERS	4-16
	TOTAL MASS MEDIA	8-32
	Interpersonal Communication	
	PRESIDENTIAL CONVERSATIONS	1=had conversations 2=no conversations
	SENATORIAL CONVERSATIONS	1=had conversations 2=no conversations

Figure 4 (cont'd)

Category	Specific Measures	Range
Information selectivity	**Familiarity with Issues**	
	SELECTIVE VIETNAM FAMILIARITY	0 → 100
	SELECTIVE BUSING FAMILIARITY	0 → 100
	SELECTIVE WELFARE FAMILIARITY	0 → 100
	SELECTIVE WAGE-CONTROL FAMILIARITY	0 → 100
	Attention to Conversations	
	SELECTIVE CONVENTION ATTENTION	0 → 100
	Mass Media Attention	
	SELECTIVE PRESIDENTIAL TELEVISION	0 → 100
	SELECTIVE SENATORIAL TELEVISION	0 → 100
	SELECTIVE PRESIDENTIAL NEWSPAPERS	0 → 100
	SELECTIVE SENATORIAL NEWSPAPERS	0 → 100
	SELECTIVE TOTAL TELEVISION	0 → 100
	SELECTIVE TOTAL NEWSPAPERS	0 → 100
	SELECTIVE TOTAL MASS MEDIA	0 → 100
	Interpersonal Communication	
	SELECTIVE PRESIDENTIAL CONVERSATIONS	1=on one candidate 2=on both candidates
	SELECTIVE SENATORIAL CONVERSATIONS	1=on one candidate 2=on both candidates
	PRESIDENTIAL CONVERSATION BIAS	1=bias present 2=no bias present
	SENATORIAL CONVERSATION BIAS	1=bias present 2=no bias present
Voting behavior	1972 VOTING PATTERN	1-4
	ACTUAL VOTE	1=straight 2=split

Incomplete Data

As noted earlier, missing data on how an individual voted in the election for president and senator necessitated the rejection of the individual from the sample. This was the only ground, however, for complete rejection of a respondent's data.

Missing data on other items were treated in several different ways. Based on the Wave 1 sample, means were calculated for all the items comprising the coping with uncertainty scale. If an individual did not respond to an item, as opposed to making a response of "undecided", the mean of that item for all other respondents was assigned to him (rounding off to the nearest real score). This procedure was required for no more than 17 of the 799 respondents on any item.

On the questions dealing with the familiarity with the various issues and the amount of attention paid to the candidates on television and in the newspapers, no response at all or a response of "Don't know" were scored as "Not familiar at all" for the familiarity questions and "No attention" for the attention questions. This occurred no more than 12 times on any given question of Wave 2.

On the questions dealing with having conversations about the candidates where the possible responses were "More about candidate x", "More about candidate y" or "The same amount for both"" -- a response of "Don't know" was scored as "No conversations." This occurred no more than seven times for any of the relevant questions in Wave 2.

In the question dealing with the 1972 voting pattern in Wave 3, five respondents said they did not know which pattern they voted. These respondents were excluded from the analyses. The same question in Wave 1 yielded 14 responses of "Don't know" which were also excluded from the analyses.

The only recoding of data in the demographic variables was for race, where black respondents were combined with other minority respondents to form only two racial categories: white respondents and non-white respondents. This was done in only five cases of the entire Wave 1 sample.

Chapter III

Results

This chapter presents the results of the statistical analyses performed on the data. Each of the seven hypotheses in Chapter I is treated separately. An interpretation of the results and their implications is presented in the next chapter.

Coping with Uncertainty and Voting Decision Time

The first hypothesis stated that the more the individual ability to cope with uncertainty, the later in the campaign the voting decision would be made. This hypothesis was tested using two measures of the time the voting decision was made. The first measure used was WAVE 2 DECISION, combined for a decision on the vote for the presidency and for the senate.

A t test was performed between the mean CWUS score (the higher the score, the higher the coping ability) for those who decided and those who did not decide in Wave 2. The mean CWUS score for those who decided (n=101) was 4.27, and for the undecided respondents (n=13) was 4.38. The difference between the means was not significant.

The second measure used was the RETROSPECTIVE DECISION TIME. The respondents were divided into two groups: the first group, the "early" deciders (n=73), consisted of those who claimed to have made a decision up to the period following the two nominating conventions; the second group, the "late" deciders (n=41), consisted of those who claimed to

have decided later on during the campaign. Here, too, a t test was performed between the mean CWUS score of the groups. The mean CWUS score for the "early" deciders was 4.21, and for the "late" deciders was 4.41. The difference was not significant. Thus, H_1 was not supported.

Coping with Uncertainty and Information Use

The second hypothesis predicted that the more the individual ability to cope with uncertainty, the more information the individual would be exposed to during the campaign. This hypothesis was tested using several measures of exposure to information: familiarity with the positions of the candidates on campaign issues, attention to the conventions, exposure to the candidates in the mass media, and conversations about the candidates.

Table 5 presents the mean information use scores for the respondents on all the variables except for the conversations. The CWUS scores were divided into three nearly equal groups based on the raw CWUS scores.

A preliminary analysis of the data in Table 5 was done using two separate Friedman two-way analyses of variance (Siegel, 1956, pp. 166-172). For each analysis, means of each of the dependent variables were rank-ordered for the three coping with uncertainty levels. The first analysis was done for the familiarity variables. It yielded a Chi Square value of 13.00 which was significant ($df=2$; $p < .01$). The rank-ordering of the means was in the predicted direction. The second analysis was done for the mass media variables. The Chi Square value obtained was 7.80 which also was significant ($df=2$; $p < .05$). Here, too, the rank orderings of the means were in the predicted direction.

Next, zero-order correlations were computed between the CWUS index scores and each of the dependent measures (except the conversations). The correlations are in Table 6.

Table 5. Mean Scores of the Information Use Variables for Three Levels of Coping with Uncertainty.

Information Use Variables	Low Copers n=39	Medium Copers n=40	High Copers n=35
Familiarity with Nixon's position on Vietnam	2.90	2.98	3.43
Familiarity with McGovern's position on Vietnam	2.92	3.08	3.49
Familiarity with Nixon's position on busing	2.87	2.98	3.31
Familiarity with McGovern's position on busing	2.90	2.80	2.94
Familiarity with Nixon's position on welfare	2.62	2.73	2.86
Familiarity with McGovern's position on welfare	2.70	2.72	2.97
Familiarity with Nixon's position on wage-control	2.67	2.88	3.17
Familiarity with McGovern's position on wage-control	2.38	2.10	2.51
Attention to Republican convention on TV	2.49	2.43	2.40
Attention to Democratic convention on TV	2.64	2.65	2.69
Attention to Nixon on television	2.87	2.58	2.66
Attention to McGovern on television	2.74	2.83	2.91
Attention to Nixon in the newspapers	2.92	2.60	3.03
Attention to McGovern in the newspapers	2.90	2.63	3.00
Attention to Griffin on television	2.49	2.58	2.80
Attention to Kelley on television	2.46	2.48	2.77
Attention to Griffin in the newspapers	2.54	2.35	2.71
Attention to Kelley in the newspapers	2.44	2.28	2.63

Table 6. Zero-Order Correlations Between the Coping with Uncertainty Scale Scores and the Information Use Measures.

Information Use Measures	r
VIETNAM FAMILIARITY	.33****
BUSING FAMILIARITY	.13*
WELFARE FAMILIARITY	.21***
WAGE-CONTROL FAMILIARITY	.20**
NIXON FAMILIARITY	.29****
MCGOVERN FAMILIARITY	.18**
TOTAL FAMILIARITY	.28****
CONVENTION ATTENTION	-.02
PRESIDENTIAL TELEVISION	.01
SENATORIAL TELEVISION	.16**
PRESIDENTIAL NEWSPAPERS	.01
SENATORIAL NEWSPAPERS	.07
TOTAL TELEVISION	.11
TOTAL NEWSPAPERS	.05
TOTAL MASS MEDIA	.09

*p < .10
**p < .05
***p < .01
****p < .001

All seven correlations for the familiarity measures were significant. Of the eight correlations with the mass media exposure measures only one was significant, and an additional six were in the predicted direction. A Sign Test (Siegel, 1956, pp. 68-75) performed on the data (excluding the summary measures which were not independent) indicated that the probability of obtaining, by chance, eight correlations in one direction out of nine correlations was less than two percent.

Thus, across these measures, coping with uncertainty was found to be positively related to the amount of information to which the respondents were exposed during the campaign. These findings support H_2. These results are particularly significant for the measures of familiarity with the positions of the candidates on the campaign issues.

The analysis of the data dealing with the conversations held on the candidates was done by performing t tests for the difference in the mean score of the CWUS between the respondents who claimed that they had conversations about the candidates and the respondents who claimed that they did not have such conversations. This was done separately for the PRESIDENTIAL CONVERSATIONS and the SENATORIAL CONVERSATIONS variables.

The mean CWUS score for those who had conversations on the presidential candidates (n=104) was 4.25, and the mean CWUS score for those who did not have conversations (n=10) was 4.60. The difference was in the opposite direction from the prediction but was not significant (t=0.59, df=112). The mean CWUS score for those who had conversation about the senatorial candidates (n=89) was 4.16, and the mean CWUS score for those who did not have conversations (n=25) was 4.72. Here, too, the difference was in the opposite direction from that predicted but was not significant (t=1.39, df=112). Thus, on the conversation measures H_2 not supported.

Coping with Uncertainty and Information Selectivity

The third hypothesis stated that the more the individual ability to cope with uncertainty, the less the individual would expose himself to and seek information on the candidates of only one of the parties, that is, the less selective he would be in his use of information. This hypothesis was tested using several measures of selective information use in the areas of familiarity with the positions of the candidates on the campaign issues, attention to the conventions, exposure to the candidates in the mass media and conversations about the candidates.

Table 7 presents the mean information selectivity scores for the respondents on all the dependent variables except for the conversations. The CWUS scores were divided into the same three levels of coping with uncertainty used in Table 5.

A preliminary analysis of the data in Table 7 was done using the Friedman two-way analysis of variance. The means of each of the information selectivity measures (excluding the summary measures which were not independent) were rank-ordered for the three coping with uncertainty levels. The results of the analysis were not significant.

Following this analysis, zero-order correlations were computed between the CWUS scores and each of the information selectivity measures (except for the conversations). The correlations are in Table 8.

Of the nine independent correlations, six were in the predicted direction, three of which were significant at the .07 or better. Also, of the four correlations with the summary measures, three were significant at the .07 level or better. A Sign Test performed on the data indicated that the probability of obtaining, by chance, six correlations in one direction out of nine correlations was one in four.

Table 7. Mean Scores of the Information Selectivity Measures for Three Levels of Coping with Uncertainty.

	Low Copers n=39	Medium Copers n=40	High Copers n=35
SELECTIVE VIETNAM FAMILIARITY	5.55	14.68	8.11
SELECTIVE BUSING FAMILIARITY	14.55	11.27	18.42
SELECTIVE WELFARE FAMILIARITY	14.12	13.77	14.59
SELECTIVE WAGE-CONTROL FAMILIARITY	19.88	13.66	17.90
SELECTIVE TOTAL FAMILIARITY	8.00	11.43	10.08
SELECTIVE CONVENTION ATTENTION	12.01	13.32	13.71
SELECTIVE PRESIDENTIAL TELEVISION	13.06	13.21	9.22
SELECTIVE SENATORIAL TELEVISION	6.63	7.73	4.89
SELECTIVE PRESIDENTIAL NEWSPAPERS	7.46	5.13	7.68
SELECTIVE SENATORIAL NEWSPAPERS	8.46	9.19	2.91
SELECTIVE TOTAL TELEVISION	8.45	8.22	8.99
SELECTIVE TOTAL NEWSPAPERS	6.58	7.44	2.98
SELECTIVE TOTAL MASS MEDIA	7.73	7.19	4.90

Table 8. Zero-Order Correlations Between the Coping with Uncertainty Scale Scores and the Measures of Information Selectivity.

Information Selectivity Measures	r
SELECTIVE VIETNAM FAMILIARITY	-.30***
SELECTIVE BUSING FAMILIARITY	-.06
SELECTIVE WELFARE FAMILIARITY	-.06
SELECTIVE WAGE-CONTROL FAMILIARITY	.06
SELECTIVE TOTAL FAMILIARITY	-.18**
SELECTIVE CONVENTION ATTENTION	.01
SELECTIVE PRESIDENTIAL TELEVISION	-.14*
SELECTIVE SENATORIAL TELEVISION	.05
SELECTIVE PRESIDENTIAL NEWSPAPERS	-.06
SELECTIVE SENATORIAL NEWSPAPERS	-.14*
SELECTIVE TOTAL TELEVISION	-.09
SELECTIVE TOTAL NEWSPAPERS	-.14*
SELECTIVE TOTAL MASS MEDIA	-.14*

*$p < .07$
**$p < .05$
***$p < .001$

Thus, for some of the selectivity measures, coping with uncertainty was found to be negatively related to the amount of selectivity in the use of information. These findings provide some support for H_3.

Testing this hypothesis on the conversations held about the candidates was done using t tests between the mean CWUS score of the respondents who had conversations about only one of the candidates for each office and the mean CWUS score of the respondents who had conversations on both candidates for each office. The former respondents were considered to be more selective than the latter respondents. The respondents who had no conversations were excluded from the analysis.

As for the SELECTIVE PRESIDENTIAL CONVERSATIONS variable, the mean CWUS score for those who talked about either Nixon or McGovern (n=44) was 4.11, and the mean CWUS score for those who talked about both candidates (n=59) was 4.35. The difference between the means was not significant (t=0.69; df=101). As for the SELECTIVE SENATORIAL CONVERSATIONS variable, the mean CWUS score for those respondents who talked about either Griffin or Kelley (n=38) was 3.84, and the mean CWUS score for those who talked about both candidates (n=51) was 4.39. Here, too, the results were in the predicted direction but not significant (t=1.50; df=87).

Finally, an analysis was made of the differences between the mean CWUS scores of the respondents who claimed that they had conversations with other individuals who favored one of the candidates for a given office and the mean CWUS scores of the respondents who claimed that they had conversations with people who favored both candidates for a given office about equally. Here, too, respondents who had no conversations were excluded from the analysis.

For the PRESIDENTIAL CONVERSATIONS BIAS variable, the mean CWUS score for those who had had conversations with people who favored Nixon or McGovern (n=77) was 4.32, and the mean CWUS score for those who had had conversations with people who favored both candidates about equally (n=26) was 4.38. The difference was not significant.

For the SENATORIAL CONVERSATIONS BIAS variable, the mean CWUS score for those who talked with people who favored Griffin or Kelley (n=60) was 4.28, and the mean CWUS score for those who talked to people who favored both candidates about equally (n=29) was 4.09. The results were not significant.

Thus, the results of the analyses dealing with the conversations offer no support for the hypothesis.

Decision Time and Ticket Splitting

The fourth hypothesis was that the later in the campaign an individual makes his voting decision, the more likely he is to split his ticket. The measures of the decision time used for this hypothesis were the same as for H_1, namely, WAVE 2 DECISION and RETROSPECTIVE DECISION TIME. The measures used for ticket splitting were ACTUAL VOTE, i.e., how the respondent reported having voted for the presidency and for the senate, and 1972 VOTING PATTERN, namely, how the respondent evaluated his entire voting pattern in terms of straight ticket voting versus split ticket voting.

The direct test of the hypothesis involved the computation of zero-order correlations between the decision time measures and the ticket splitting measures. Table 9 presents the correlations.

All the correlations were in the predicted direction, three of the four being significant. Thus, H_4 is supported.

Table 9. Zero-Order Correlations Between the Decision Time Measures and the Ticket Splitting Measures.

	ACTUAL VOTE (n=114)	1972 VOTING PATTERN (n=109)
WAVE 2 DECISION	.11	.17*
RETROSPECTIVE DECISION TIME	.26**	.18*

*p < .05.
**p < .01.

Information Use and Ticket Splitting

The fifth hypothesis stated that the more information the individual seeks and is exposed to during the campaign, the more likely he is to split his ticket. The measures of information use were the same as in H_2, namely, familiarity with the positions of the candidates on the campaign issues, attention to the conventions, mass media information use, and conversations on the candidates. The measures used for ticket splitting were the same as in H_4, that is, ACTUAL VOTE and 1972 VOTING PATTERN.

Table 10 presents the mean scores of the information use variables (except for the conversations) for the straight ticket voters and the split ticket voters using the ACTUAL VOTE measure. The mean of the ticket splitters is highly on only ten of the 18 variables which is not significant using the Sign Test criterion.

The direct test of the hypothesis was done by computing zero-order correlations between the information use measures and the voting decision (splitting versus not splitting). The correlations are in Table 11.

All the nine independent correlations are in the predicted direction indicating that the more information one uses, the more one tends to

Table 10. Mean Scores of the Information Use Variables for the Straight Ticket Voters and Split Ticket Voters (ACTUAL VOTE Measure).

Information Use Variables	Straight Ticket Voters (n=79)	Split Ticket Voters (n=35)
Familiarity with Nixon's position on Vietnam	2.77	3.23
Familiarity with McGovern's position on Vietnam	2.94	3.24
Familiarity with Nixon's position on busing	2.77	3.16
Familiarity with McGovern's position on busing	2.71	2.95
Familiarity with Nixon's position on welfare	2.66	2.76
Familiarity with McGovern's position on welfare	2.83	2.77
Familiarity with Nixon's position on wage-control	2.94	2.87
Familiarity with McGovern's position on wage-control	2.29	2.34
Attention to Republican convention on TV	2.44	2.43
Attention to Democratic convention on TV	2.62	2.74
Attention to Nixon on television	2.68	2.74
Attention to McGovern on television	2.75	3.00
Attention to Griffin on television	2.52	2.83
Attention to Kelley on television	2.46	2.80
Attention to Nixon in the newspapers	2.91	2.69
Attention to McGovern in the newspapers	2.82	2.86
Attention to Griffin in the newspapers	2.49	2.60
Attention to Kelley in the newspapers	2.38	2.57

Table 11. Zero-Order Correlations Between the Information Use Measures and the Voting Decision (ACTUAL VOTE Measure).

Information Use Measures	r
VIETNAM FAMILIARITY	.04
BUSING FAMILARITY	.01
WELFARE FAMILIARITY	.09
WAGE-CONTROL FAMILIARITY	.06
NIXON FAMILIARITY	-.02
MCGOVERN FAMILIARITY	.13*
TOTAL FAMILIARITY	.07
CONVENTION ATTENTION	.12
PRESIDENTIAL TELEVISION	.24***
SENATORIAL TELEVISION	.16**
PRESIDENTIAL NEWSPAPERS	.14*
SENATORIAL NEWSPAPERS	.14*
TOTAL TELEVISION	.25***
TOTAL NEWSPAPERS	.16**
TOTAL MASS MEDIA	.23***

*p < .10
**p < .05
***p < .01

split one's ticket. Obtaining such results by chance would occur less than twice in one-thousand times. Furthermore, all the correlations with the mass media summary measures are significant, whereas only one of the correlations with the familiarity summary measures is significant. Thus, H_5 is supported, primarily for the mass media measures.

A test was also made of the relationship between the conversation variable and ticket splitting. Chi Squares were computed between the PRESIDENTIAL CONVERSATIONS and SENATORIAL CONVERSATIONS variables and the ACTUAL VOTE variable but none were significant. Thus, no support was found for H_5 in terms of having or not having had conversation about the candidates.

H_5 was also tested using the 1972 VOTING PATTERN measure of the degree of ticket splitting. Table 12 presents the mean scores of the information use variables for the four levels of ticket splitting.

A Friedman two-way analysis of variance was done for the rank-ordering of the means of the 18 variables. It yielded a Chi Square value of 25.80 which is highly significant ($df=3$; $p < .001$). The rank orders were in the predicted direction.

A direct test of the hypothesis was done by computing zero-order correlations between the information use measures and the ticket splitting measure. The correlations are in Table 13.

All 15 correlations were in the predicted direction, 11 being significant. Thus, the correlations in Table 11 and in Table 13, for both measures of ticket splitting, generally support H_5.

As for the conversation measures, the same picture was obtained for the 1972 VOTING PATTERN measure of ticket splitting as with the ACTUAL

Table 12. Mean Scores of the Information Use Variables for the Straight Ticket Voters and Split Ticket Voters (1972 VOTING PATTERN Measure).

Information Use Variables	Totally Straight (n=48)	Mostly Straight (n=35)	Fairly Straight (n=12)	Totally Split (n=14)
Familiarity with Nixon's position on Vietnam	2.98	3.29	3.08	2.93
Familiarity with McGovern's position on Vietnam	3.04	3.20	3.42	3.36
Familiarity with Nixon's position on busing	2.96	3.17	3.08	3.21
Familiarity with McGovern's position on busing	2.75	3.03	3.00	3.14
Familiarity with Nixon's position on welfare	2.69	2.77	2.92	2.43
Familiarity with McGovern's position on welfare	2.75	2.83	2.83	3.00
Familiarity with Nixon's position on wage-control	2.60	3.17	2.92	3.14
Familiarity with McGovern's position on wage-control	2.23	2.29	2.42	2.79
Attention to Republican convention on television	2.40	2.43	2.25	2.64
Attention to Democratic convention on television	2.48	2.60	2.83	3.29
Attention to Nixon on television	2.52	2.86	2.58	3.00
Attention to McGovern on television	2.77	2.83	2.58	3.21
Attention to Griffin on television	2.58	2.51	2.67	2.86
Attention to Kelley on television	2.50	2.54	2.42	2.86
Attention to Nixon on newspapers	2.65	2.94	3.00	3.14
Attention to McGovern in newspapers	2.69	2.80	3.00	3.29
Attention to Griffin in newspapers	2.35	2.80	2.42	2.57
Attention to Kelley in newspapers	2.31	2.43	2.58	2.71

Table 13. Zero-Order Correlations Between the Information Use Measures and the Degree of Ticket Splitting (1972 VOTING PATTERN Measure).

Information Use Measures	r
VIETNAM FAMILIARITY	.09
BUSING FAMILIARITY	.15*
WELFARE FAMILIARITY	.03
WAGE-CONTROL FAMILIARITY	.23***
NIXON FAMILIARITY	.09
MCGOVERN FAMILIARITY	.19**
TOTAL FAMILIARITY	.17**
CONVENTION ATTENTION	.17**
PRESIDENTIAL TELEVISION	.15*
SENATORIAL TELEVISION	.09
PRESIDENTIAL NEWSPAPERS	.22***
SENATORIAL NEWSPAPERS	.13*
TOTAL TELEVISION	.15*
TOTAL NEWSPAPERS	.20**
TOTAL MASS MEDIA	.21**

*p < .10
**p < .05
***p < .01

VOTE measure. There was no relationship between having had or not having had conversations and ticket splitting.

Information Selectivity and Ticket Splitting

The sixth hypothesis was that the less selective the individual is in his use of information, the more likely he would be to split his ticket. The measures used for information selectivity were the same as in the third hypothesis and dealt with familiarity with the positions of the candidates on the campaign issues, attention to the conventions, exposure to the candidates in the mass media, and conversations about the candidates. The measures of ticket splitting were the same as in H_4 and H_5, namely, ACTUAL VOTE and 1972 VOTING PATTERN.

Table 14 presents the mean scores of the information selectivity measures for straight ticket voters and split ticket voters, based on the ACTUAL VOTE measure.

In only five of the nine independent measures of information selectivity the mean of the ticket splitters is lower than the mean of the straight ticket voters. This is not significant using the Sign Test.

A direct test of the hypothesis was done by computing zero-order correlations between the information selectivity measures and the ACTUAL VOTE measure. The correlations are in Table 15.

Of the four independent familiarity measure correlations, only one is in the predicted direction but it is not significant. The only significant correlation is in the direction opposite to that predicted. The summary familiarity measure correlation is also significant but in the opposite direction. As for the mass media independent measures, all are in the predicted direction, two being significant, and the three summary measures are significant and in the predicted direction.

Table 14. Mean Scores of the Information Selectivity Measures for the Straight Ticket Voters and the Split Ticket Voters (ACTUAL VOTE Measure).

Information Selectivity Measures	Straight Ticket Voters (n=79)	Split Ticket Voters (n=35)
SELECTIVE VIETNAM FAMILIARITY	8.63	11.69
SELECTIVE BUSING FAMILIARITY	12.64	19.99
SELECTIVE WELFARE FAMILIARITY	13.19	16.30
SELECTIVE WAGE-CONTROL FAMILIARITY	17.40	16.57
SELECTIVE TOTAL FAMILIARITY	8.73	12.56
SELECTIVE CONVENTION ATTENTION	12.63	13.86
SELECTIVE PRESIDENTIAL TELEVISION	13.62	8.15
SELECTIVE SENATORIAL TELEVISION	8.07	2.53
SELECTIVE PRESIDENTIAL NEWSPAPERS	6.84	6.79
SELECTIVE SENATORIAL NEWSPAPERS	7.91	4.98
SELECTIVE TOTAL TELEVISION	10.11	5.07
SELECTIVE TOTAL NEWSPAPERS	6.63	3.83
SELECTIVE TOTAL MASS MEDIA	8.07	3.50

Table 15. Zero-Order Correlations Between the Information Selectivity Measures and the Voting Decision (ACTUAL VOTE Measure).

Information Selectivity Measures	r
SELECTIVE VIETNAM FAMILIARITY	.10
SELECTIVE BUSING FAMILIARITY	.19**
SELECTIVE WELFARE FAMILIARITY	.08
SELECTIVE WAGE-CONTROL FAMILIARITY	-.02
SELECTIVE TOTAL FAMILIARITY	.15*
SELECTIVE CONVENTION ATTENTION	.03
SELECTIVE PRESIDENTIAL TELEVISION	-.15*
SELECTIVE SENATORIAL TELEVISION	-.20**
SELECTIVE PRESIDENTIAL NEWSPAPERS	-.00
SELECTIVE SENATORIAL NEWSPAPERS	-.10
SELECTIVE TOTAL TELEVISION	-.22***
SELECTIVE TOTAL NEWSPAPERS	-.14*
SELECTIVE TOTAL MASS MEDIA	-.25***

*p < .10
**p < .05
***p < .01

Thus, these results provide support for H_6 for the mass media measures but fail to support the hypothesis for the familiarity measures.

As for the conversations, Chi Squares were computed between the ACTUAL VOTE measure and the SELECTIVE PRESIDENTIAL CONVERSATIONS and the SELECTIVE SENATORIAL CONVERSATIONS measures. Neither of the two Chi Squares were significant. However, in both cases there was a tendency for a greater percentage of ticket splitters among those who talked about equally on both candidates for a given office than among those who talked more about one candidate (for the SELECTIVE PRESIDENTIAL CONVERSATIONS measure there was a three percentage points difference and for the SELECTIVE SENATORIAL CONVERSATIONS measure the difference was 18 percentage points).

Another set of Chi Squares was computed between the ACTUAL VOTE measure and the PRESIDENTIAL CONVERSATIONS BIAS and the SENATORIAL CONVERSATIONS BIAS measures. Here, too, neither test was significant, but the difference in percentage points was in the predicted direction. Thus, among those who had had conversations with people who favored both candidates for a given office about equally, there was a greater percentage of ticket splitters as compared to the percentage of ticket splitters among those who had had conversations with people who favored one candidate over another for a given office. For the presidential measure the difference was 17 percent and for the senatorial measure it was six percent.

Similar analyses were done for the 1972 VOTING PATTERN measure of ticket splitting. Table 16 presents the mean scores of the information selectivity measures for each of the four levels of ticket splitting.

A Friedman two-way analysis of variance was done for the rank-ordering of the means of the 13 measures. It yielded a Chi Square value of 1.62 which is not significant.

Table 16. Mean Scores of the Information Selectivity Measures for the Straight Ticket Voters and the Split Ticket Voters (1972 VOTING PATTERN Measure).

Information Selectivity Measures	Totally Straight (n=48)	Mostly Straight (n=35)	Fairly Straight (n=12)	Totally Split (n=14)
SELECTIVE VIETNAM FAMILIARITY	9.58	7.50	11.43	12.24
SELECTIVE BUSING FAMILIARITY	16.52	14.82	14.[illegible]2	13.16
SELECTIVE WELFARE FAMILIARITY	15.09	15.36	15.43	12.17
SELECTIVE WAGE-CONTROL FAMILIARITY	18.50	17.50	14.59	16.31
SELECTIVE TOTAL FAMILIARITY	9.56	9.42	9.94	10.62
SELECTIVE CONVENTION ATTENTION	14.64	10.05	12.50	18.88
SELECTIVE PRESIDENTIAL TELEVISION	15.83	14.57	11.95	3.81
SELECTIVE SENATORIAL TELEVISION	6.02	5.00	6.82	7.14
SELECTIVE PRESIDENTIAL NEWSPAPERS	8.08	7.49	8.49	2.38
SELECTIVE SENATORIAL NEWSPAPERS	3.33	7.67	9.66	6.71
SELECTIVE TOTAL TELEVISION	9.84	8.72	4.35	9.67
SELECTIVE TOTAL NEWSPAPERS	5.88	6.31	5.18	5.57
SELECTIVE TOTAL MASS MEDIA	5.76	4.74	7.60	7.25

The direct test of the hypothesis was done by computing zero-order correlations between the information selectivity measures and the 1972 VOTING PATTERN measure. These correlations are in Table 17.

Of the 13 correlations, nine are in the predicted direction indicating a negative relationship between the amount of information selectivity and degree of ticket splitting. Only two of the correlations were significant, however, and then only at the .10 level. Thus, H_6 does not seem to be supported using the 1972 VOTING PATTERN measure.

As for conversations about the candidates, t tests were computed between the mean ticket splitting scores (based on 1972 VOTING PATTERN) of the respondents who talked about equally on both candidates for a given office and the mean score of those who talked more about one candidate. In the presidential race, the mean of those who talked about equally on both candidates was 2.03, and the mean of those who talked more about one candidate was 1.81. The difference was not significant (t=1.04; df=99). In the senatorial race the respective means were 1.96 and 1.95, the difference between them not being significant either.

The other measure of selectivity in the conversations was the question of the candidates who were favored by the people with whom the respondents talked. In the presidential race, the mean ticket splitting score for those who spoke to people favoring both candidates about the same was 2.24, and the mean for those who spoke to people who favored only one of the candidates was 1.87. The difference is in the predicted direction but not significant (t=1.60; df=98). In the senatorial race the respective means were 1.87 and 1.98, the difference between them not being significant and in the opposite direction from that predicted (t=-0.49;

Table 17. Zero-Order Correlations Between the Information Selectivity Measures and the Degree of Ticket Splitting (1972 VOTING PATTERN Measure).

Information Selectivity Measures	r
SELECTIVE VIETNAM FAMILIARITY	.06
SELECTIVE BUSING FAMILIARITY	-.02
SELECTIVE WELFARE FAMILIARITY	.07
SELECTIVE WAGE-CONTROL FAMILIARITY	-.01
SELECTIVE TOTAL FAMILIARITY	.02
SELECTIVE CONVENTION ATTENTION	.04
SELECTIVE PRESIDENTIAL TELEVISION	-.16*
SELECTIVE SENATORIAL TELEVISION	-.04
SELECTIVE PRESIDENTIAL NEWSPAPERS	-.09
SELECTIVE SENATORIAL NEWSPAPERS	.03
SELECTIVE TOTAL TELEVISION	-.15*
SELECTIVE TOTAL NEWSPAPERS	.02
SELECTIVE TOTAL MASS MEDIA	-.11

*$p < .10$

df=92). Thus, the tests performed on the conversation measures also fail to support H_6.

Coping with Uncertainty and Ticket Splitting

The seventh and last hypothesis predicted that the higher the ability of the individual to cope with uncertainty, the more likely he would be to split his ticket. This hypothesis was tested by computing zero-order correlations between the CWUS scores and both measures of ticket splitting.

The correlations between coping with uncertainty and ticket splitting were not significant for both measures used. For the ACTUAL VOTE measure, r=.03, (n=114); and for the 1972 VOTING PATTERN measure r=.06, (n=109).

Thus, coping with uncertainty does not directly predict ticket splitting, and H_7 is not supported.

Summary of Results

Seven specific hypotheses were tested in this study. The results of these tests may be summarized as follows.

H_1 Coping with uncertainty was not related to the time at which the voting decisions were made.

H_2 Coping with uncertainty was positively related to the degree of familiarity with the positions of the candidates on several campaign issues. It was not related, however, to the amount of attention respondents gave to the candidates in the mass media. Also, coping with uncertainty was not related to having or not having conversations about the candidates.

H_3 Coping with uncertainty had a moderate negative relationship with the degree of selectivity in the use of information during the

campaign. There was no relationship between coping with uncertainty and selectivity in conversations held about the candidates.

H_4 The earlier in the campaign the individual made his decision on whom to vote for, the more he tended to vote a straight ticket.

H_5 The more information the individual had and was exposed to during the campaign, the more he tended to split his ticket. There was no relationship, however, between having or not having conversations about the candidates and splitting one's ticket.

H_6 The more selectivity exhibited by the individual in exposure to the mass media about the candidates, the more he tended to vote a straight ticket. There was no relationship, however, between selectivity in familiarity and conversations and the degree of ticket splitting.

H_7 Coping with uncertainty did not relate to the degree of ticket splitting.

Chapter IV

DISCUSSION

This chapter presents an integration of the findings of the study. It also attempts to point out some of the problems that were encountered during the execution of the study and to suggest a possible approach in dealing with the kind of issues involved in such endeavors. The chapter concludes with a discussion of some of the implications of the present findings both in terms of studying information usage and in terms of decision making based on the use of such information.

Discussion of the Findings

An overall view of the results indicates that some of the hypotheses were supported in their entirety, some were only partially supported, and two hypotheses were not supported at all.

The last hypothesis to be tested was not supported for the 1972 elections. It stated that the higher the individual ability to cope with uncertainty, the more likely the individual would be to split his ticket. The assumption underlying this hypothesis was that the "high coper" would utilize more information during the campaign, and at the same time he would be less selective in choosing the information to utilize. Therefore, it was argued, he would obtain the information that is considered necessary in order to vote a split ticket.

Having failed to support this hypothesis in a direct manner, it became even more interesting to look at the other hypotheses. This is

because the first three hypotheses deal with the first part of the said assumption, namely, that coping with uncertainty leads to more information use and to less selectivity in its acquisition. Moreover, the next three hypotheses relate the information used and its relationship to one of its possible behavioral manifestations, namely, the voting decision. Thus, viewing the six hypotheses in their totality, it seems reasonable to argue that they cover the entire area bearing on the assumption.

In general, the picture obtained from the first three hypotheses is as follows. The "high coper" tends to make a later voting decision (although not significantly so), and tends to have more information than the "low coper" as expressed in terms of the perceived familiarity with the campaign issues. Yet, the "high coper" does not seem to expose himself to the candidates in the mass media more than the "low coper", nor does he have more conversations about the candidates. Since the "high coper" seems to expose himself to the mass media to the same general extent as the "low coper" but at the same time he is less selective, he is, thus, more familiar with the positions of the opposing candidates on the campaign issues.

What these findings may suggest is that the "high coper" spends an equal amount of time with the mass media, but shares this time period with the opposing candidates rather than just with the candidates of one party. Furthermore, the "high coper" tends to retain more from what he is exposed to in the mass media, which is reflected in his claim of greater familiarity with the issues.

When going into the question of retention from the mass media, it seems imperative to examine how education (as the best available index

of intelligence) might have made the same prediction without the need for the coping with uncertainty variable. Such a test was done by conducting partial correlations controlling for education between the CWUS index and the summary measures of the information use variables (TOTAL FAMILIARITY and TOTAL MASS MEDIA) and the summary measures of the selectivity of information use variables (SELECTIVE TOTAL FAMILIARITY and SELECTIVE TOTAL MASS MEDIA).

In addition, partial correlations were calculated between the same summary measures and the CWUS index controlling for age. Finally, partial correlations were also computed between the CWUS index and TOTAL FAMILIARITY controlling for TOTAL MASS MEDIA and between the CWUS index and SELECTIVE TOTAL FAMILIARITY controlling for SELECTIVE TOTAL MASS MEDIA. This was done in order to test for the relationship between coping with uncertainty and familiarity controlling for the amount of exposure to the mass media, from which the individual presumably obtains his information (the correlation between TOTAL MASS MEDIA and TOTAL FAMILIARITY was .43). Table 18 presents the results of the partial correlations. Appendix C presents the correlations of education with the main summary measures.

It seems reasonable to argue that the educational level of the individual, his age and the total mass media exposure do not have a significant effect on the relationship between coping with uncertainty and familiarity, which remains at or about its original level before the partialing out of these variables.

The question, then, is how can these findings be explained? The explanation that seems most adequate is related to what Tichenor, Donohue and Olien (1970) call the "knowledge-gap hypothesis." According to their formulation, as the mass media system in society infuses information,

Table 18. Partial Zero-Order Correlation Coefficients Between Coping with Uncertainty and Summary Measures of Familiarity with Issues and Total Mass Media Exposure Controlling for Education, Age, and Exposure.

	Partial r	Original r
Partial r between CWUS and TOTAL FAMILIARITY controlling for education	.20**	.28***
Partial r between CWUS and TOTAL MASS MEDIA controlling for education	.06	.09
Partial r between CWUS and SELECTIVE TOTAL FAMILIARITY controlling for education	-.15**	-.18**
Partial r between CWUS and SELECTIVE TOTAL MASS MEDIA controlling for education	-.10	-.14*
Partial r between CWUS and TOTAL FAMILIARITY controlling for age	.27***	.28***
Partial r between CWUS and TOTAL MASS MEDIA controlling for age	.11	.09
Partial r between CWUS and SELECTIVE TOTAL FAMILIARITY controlling for age	-.16**	-.18**
Partial r between CWUS and SELECTIVE TOTAL MASS MEDIA controlling for age	-.12*	-.14*
Partial r between CWUS and TOTAL FAMILIARITY controlling for TOTAL MASS MEDIA	.27***	.28***
Partial r between CWUS and SELECTIVE TOTAL FAMILIARITY controlling for SELECTIVE TOTAL MASS MEDIA	-.19**	-.18**

*p < .10
**p < .05
***p < .001

the segments of the population with higher socioeconomic status tend to acquire the information at a faster rate than the lower status segments, so that the gap in knowledge between the segments tends to increase. This holds even when the messages are prepared and designed especially for the lower status segments. It should be noted that the Tichenor et al. formulation views education as a valid indicator of socioeconomic status, and that the hypothesis applies primarily to public affairs and science news.

The findings of the present study relating to coping with uncertainty seem to be somewhat analogous to the "knowledge-gap hypothesis" notion. Despite the lack of differential exposure patterns for the "high copers" and the "low copers", the former claim to be more familiar with the positions of the candidates, which may be interpreted as information acquisition. It should be recalled that the questions dealing with the degree of familiarity with the issues did not ask the respondents what the positions of the candidates were, but rather how familiar they thought they were with the positions. These questions can be characterized as being "projective" and not a direct test of information and knowledge. Furthermore, it should be pointed out that the nature of the present data does not make a test of the rate of acquisition possible, so that this statement must be limited to an estimate of "accumulated" acquisition, and not speed of acquisition.

Finally, a multiple correlation was computed to predict the amount of familiarity using coping with uncertainty, education, age and the measure of TOTAL MASS MEDIA as the predictor variables. The multiple correlation obtained was $R=.53$ which is highly significant ($p < .001$).

The findings relating to H_4, H_5, and H_6 deal with the use of information and ticket splitting. The fourth hypothesis was supported

indicating that the later in the campaign the voting decision is made, the more the likelihood of splitting one's ticket. From a communication viewpoint, this finding seems to support the notion advanced earlier that in order to split one's ticket one needs to obtain information on all the alternatives, and since this acquisition of information takes time, the decision is postponed until the necessary information is available. In this context it should be pointed out that coping with uncertainty did not significantly relate to the decision time (H_1) but it was in the predicted direction, namely, that the higher the coping ability of the individual, the later in the campaign the decision was made. This fits well into the discussion of H_4 in that only the higher coping individuals can "afford" to wait for a longer period of time to acquire all the necessary information before making their decision, given that as long as the decision is not made, the state of uncertainty persists.

The fifth hypothesis predicted more ticket splitting when one uses more information. The hypothesis was supported for mass media exposure using both measures of ticket splitting (the ACTUAL VOTE and 1972 VOTING PATTERN) and was significant for the familiarity measures only using the 1972 VOTING PATTERN measure. It should be noted, however, that all the correlations using the ACTUAL VOTE measure, except for one, were in the predicted direction.

Since H_7 was not supported, that is, coping with uncertainty was not found to be related to the degree of ticket splitting, but at the same time coping with uncertainty was positively related to the amount of information use (H_2) and the amount of information use was positively related to ticket splitting (H_5), it must be concluded that information use cannot be viewed as a mediating variable between coping with uncertainty

and ticket splitting. If the amount of information use was a mediating variable between coping with uncertainty and ticket splitting, then the correlation between coping with uncertainty and ticket splitting, controlling for the amount of information use, should have been lower than the direct correlation between coping with uncertainty and ticket splitting. The correlations between coping with uncertainty and ticket splitting were non-significant anyway (r=.03 and r=.06 for both measures of ticket splitting), and the partial correlations between coping with uncertainty and ticket splitting controlling for the amount of information used (using both the familiarity measure and the mass media measure) were also non-significant.

Instead, two possible explanations are suggested, neither of which, unfortunately, can be tested using the data from this study. The first possibility seems to be in line with the implied directionality presented in the theory, that is, that coping with uncertainty, as a personality trait, and, thus, as a predispositional state, explains some of the variance of the information use variable, but it does not explain that <u>same</u> part of the variance in the ticket splitting variable which is explained by the information use variable.

The other possible explanation suggests a change in the directionality of the theory. Accordingly, coping with uncertainty is not a predispositional state inherent in the personality of the individual, but rather a result of the individual's past experience in dealing with information. If the individual deals with great amounts of information, he learns to cope with uncertainty, thus explaining the correlation between coping with uncertainty and information use. The relationship between information use and ticket splitting may remain as stated in the theoretical

position, that is, that information is necessary in order to split one's ticket. In this case coping with uncertainty would not be expected to correlate with ticket splitting. Further research would be required to test this hypotheses.

The sixth hypotheses was supported for the mass media exposure measures but not for the familiarity measures, and then mainly for the ACTUAL VOTE measure of ticket splitting. These findings are congruent with the general theoretical framework in that the less selective the individual is, the more he is likely to split his ticket. The reason for this is that in order to know about the various alternatives, the individual needs to obtain information on them, and he cannot obtain this information if he is selective in his use of information.

In sum, it seems that the findings may be viewed as partially supporting each of the two segments of the paradigm. However, the direct test of coping with uncertainty as a predicter of split ticket voting failed to materialize. Further discussion on the possible implications of this study in terms of communication variables and in terms of political science variables is deferred to the last section of this chapter.

At this point it should be noted that the measures relating to conversations about the candidates did not support any of the hypotheses, although in several instances the obtained relationships were in the predicted direction and sometimes were even nearly significant (this was the case for both hypotheses involving the selectivity measures--H_3 and H_6).

Finally, in terms of the results, the generally low level of the correlations is noted. The sample of 114 required a correlation of .15 to be significant at the .05 level. In one sense, such a correlation

is almost meaningless since it indicates that only slightly more than two percent of the variance in one variable is explained by the other variable, despite the fact that it is significant using the statistical criterion.

Yet, when examining some of the recent literature dealing with mass media and information use, zero-order correlations ranging from .10 to .35 seem to be the "modal" findings (e.g., Atkin, Bowen, Nayman and Sheinkoph, 1973; Atkin, Crouch and Troldahl, 1973; Sheinkoph, Atkin and Bowen, 1972). It is suggested that at least one of the factors responsible for this state of affairs is the enormous complexity of the mass communication phenomenon, and its relationship to other variables. Mass communication variables and information use variables, although no doubt important, are apparently only two small sets of variables which explain only a small portion of the behavioral phenomena often associated with the mass media and information utilization.

Methodological Considerations

The design and execution of this study was a complex task, and involved the coordination of efforts of two main groups: the Market Opinion Research Company, on the one hand, and the activities at Michigan State University, on the other hand. Despite the large extent of cooperation between these two groups, there were at times difficult conflicts which needed to be resolved. The main problem in this respect was the fact that the research firm, by its very nature, was interested in utilizing the data for predictive purposes and strategy planning, while the emphasis on the part of the University team was on the explanatory power of the variables.

Operationally this meant that the study was very limited in the amount of space that was allocated to it in the Wave 1 and Wave 3

questionnaires. Also, the wording of the questions had to be approved by the commercial firm's director, and had to fit the style of its activities.

The best example in this respect is the Coping with Uncertainty Scale. Ideally, the entire Budner (1960) scale would have been used, but space was allocated for only half the items. Also, because of space limitations it was not possible to check the reliability of the items by the test-retest method repeating the items in the third questionnaire (it was felt that doing this in Wave 2 on the telephone would prolong the interviews beyond a reasonable period and cause a decrease in the cooperation of the respondents). Nevertheless, despite the rather low inter-item correlations obtained, the CWUS index seemed to attain at least some face validity in the correlations it yielded with education (r=.31), with age (r=-.20) and with sex (r=.00). Had these correlations been different, this would have caused some serious concerns.

Another example is that of the "familiarity" questions. This measure was restricted to Wave 2 only, since the space provided for in Wave 1 was not sufficient. It would clearly have been desirable to be able to ask the respondents these questions more than once during the campaign.

This relates to another issue of prime importance, that of the number of contacts with the respondents. From the experience of this study, the cooperation received from the great majority of the respondents was excellent. The strategy of the study was to start off with a large statewide sample, since this was the prime interest of the commercial firm. However, due to lack of funds the final sample was drastically reduced, resulting in the use of 114 respondents out of the original 799 respondents (even the commercial firm only contacted 399 of the original 799 in Wave 3).

In order to overcome the problem of attrition of respondents, thereby collecting much data which could not be utilized, it is suggested that the design of this study might have differed greatly. Instead of working with a large sample, and being able, within the constraints of the available resources, to contact each respondent only a limited number of times, it is suggested that an attempt be made to study such phenomena using a pseudo "clinical" approach. According to this approach, a relatively small number of respondents would be selected, controlling for demographic variables such as age, sex and education, and each respondent would be studied in an intense manner. In such a design, careful study of the decision making process could be made, with the respondents providing frequent inputs as to their use of information during the campaign. The study over time which was attempted here by contacting the respondents three times could thus be greatly magnified.

Another important reason for this type of approach in dealing with decision making processes is to be able to detect relatively small changes in the information use patterns and the careful determination of the point in time at which the decision was made. In this study the respondents were asked during Wave 2 whether or not they had made their decision on whom to vote for. Only if the answer was negative was it clear that one week prior to the election the respondent had not decided. If the answer was in the affirmative, which was the case for most of the respondents, the only way to determine the time of the actual decision was by asking the kind of question used in Wave 3 (the RETROSPECTIVE DECISION TIME measure). However, it seems that such a question is difficult to reply to, in particular if it comes several weeks after the decision was made. Using the suggested approach, such determinations would become much easier and more reliable.

This would be highly desirable from a theoretical viewpoint as well. The notion advanced in Chapter I concerning the relationship between coping with uncertainty and information utilization suggested that the point in time at which the decision is made is a crucial variable in terms of the information utilization behavior. During the predecisional stages of the conflict, the individual uses information in order to help make the decision, whereas in the postdecisional stage, information is used to reinforce the decision already made. Coping with uncertainty may predict information use behaviors differently in the predecisional and postdecisional stages of the conflict.

Thus, the only way to be able to test such hypotheses would be to make an accurate determination of the point in time at which the decision was made. Also, this would enable the researcher to determine whether any particular informational input was mainly responsible for the decision to be made the way it was, or whether it was the accumulation of information over time.

Another aspect which could be better dealt with using the "clinical" approach is the determination of the probabilities associated with each of the alternatives at the initial point in the conflict. As stated earlier, sometimes this can be empirically determined, and sometimes the probabilities are assumed to be equal for each of the alternatives. It seems, however, that in a survey type of questionnaire dealing with political elections the only way to go about this question is to ask the individual about his political affiliation. However, since the party label is far from being the best predicter of voting, especially when dealing with ticket splitting over a range of offices, this would not be sufficient in a survey type study.

The main drawback of the "clinical" methodology would be the problem of sensitization of the respondents to the issues being studied and perhaps even making them aware of the hypotheses. This problem is rather typical of panel research even when a respondent is approached only a few times. Thus, it will no doubt create some hazards which would need to be overcome.

In research designed to measure a variable more than once, while avoiding the sensitization problem, it is often possible to randomly create several "experimental" groups, which are presumed to be equal on all relevant variables. The procedure then involves measuring the variable of interest once for each group, at different points in time (Campbell and Stanley, 1963).

However, in the "clinical" approach suggested here it is felt that the same respondents would be necessary and that "equivalent" groups would not be sufficient in order to get at the minute changes over time. Therefore, a different approach is suggested for the sensitization problem. It entails revealing to the respondents exactly what the objectives of the study are and the nature of the hypotheses. Also, it would be made clear to the respondents that they would be approached periodically. It is felt that by emphasizing to the respondents these facts, the problem of sensitization would be alleviated. One of the primary data collection techniques would be the "diary" in which the respondents would maintain daily records of their communication behavior and activities. This technique fits well within the suggested paradigm and requires the cooperation of the respondents.

Implications of the Findings and Future Research

This final section will deal with implications of the findings both in terms of the communication variables studied and the significance of the application of the theoretical position to the election study.

This study has dealt with some of the central variables in the field of communication. It seems fair to state that information and information utilization clearly belong in this category. The vast amount of information available to people in our society must somehow be dealt with. However, research has shown that people tend to utilize information in different ways and in different amounts. The human senses are limited in their abilities to process, store and retrieve information. Considerable research has shown the physiological and neurological limitations to the processing of information. Significantly less research has been done on the personality-oriented dimensions of dealing with these great amounts of information. This study has demonstrated that the construct of coping with uncertainty as a personality trait might be useful in dealing with these issues.

The first three hypotheses tested in this study deal solely with the theoretical relationships between coping with uncertainty on the one hand, and decision time, information use and selective information use on the other hand. The last four hypotheses attempt to relate this theoretical position to a real-life situation. Katz (1968) advocated the use of field studies dealing with the use of information, rather than relying too heavily upon laboratory research. Perhaps the results obtained in this study, and in others of a similar nature, were not as statistically significant as the studies more typically performed in the laboratory

(and reported in the literature), but it is clearly felt that it was more meaningful in terms of its realistic settings.

More work is needed in the refinement of the measurement instrument for coping with uncertainty. Also, more careful conceptualizations are necessary for the various aspects of information utilization that have been brought together in this study under the one concept of information use, namely, information getting, information seeking, selective exposure and information avoidance. In any event, coping with uncertainty seems to be an important variable in dealing with the use of information.

It should be emphasized here that the relationship between coping with uncertainty and information use is not limited to conflict situations, although one possible way of looking at any situation involving information utilization is within a very broad definition of the term conflict. According to such a definition, any time a person uses information, whether it be active seeking, passive exposure, or whatever, he is essentially responding to a conflict of whether to seek or not to seek, whether to expose or not to expose one's self, or whether to avoid or not to avoid information. Either way one wishes to view information utilization, however, the concept of coping with uncertainty seems to be an important one.

The theoretical position and the available evidence are not sufficiently developed at this time to warrant a clear statement concerning the causality and directionality of the relationship between coping with uncertainty and information utilization, including selective information use As has been pointed out earlier, the position initially suggested was that of coping with uncertainty being the independent variable and information use being the dependent variable. It has also been implied, however, that the relationship might be the reverse, that

is, that one's ability to cope with uncertainty might be dependent upon one's patterns of information use, which, in turn, are the result of one's past experiences. In order to resolve this issue, more research is needed, which would cover longer periods of time, and deal, perhaps, with additional types of variables such as socialization factors.

Conducting mass media research on election campaigns involves a severe problem of generalization of the findings. This is the case since no two elections are alike in terms of the candidates, the issues, the political climate and so forth. The major election studies of the past quarter century included communication variables. However, the rapid change of the communication system in our society has made the generalization of findings from one study to another rather difficult. The most prominent example in this respect is the development of television, and along side it the changes that have occurred in radio broadcasting and the print media. The information available today to the voter is different from what it was ten and twenty-five years ago, both in quantity and the ways in which it is presented. The ways the campaigns are covered today are not as they were in the past. Moreover, the chances are that these patterns will still change before they settle into a permanent style, if they ever will.

The question, then, is whether communication researchers can make valid knowledge claims in this area. The answer seems to be positive. Communication theory and research involve the task of learning about the relationships between communication variables. It seems that this can be accomplished even though, and perhaps even because, there is considerable change within the communication system of society (such change might enable the creation of several unique "independent variables").

However, in order to make proper use of these research possibilities, long range planning must be done and long range funding must be guaranteed. Such studies must be designed with these changes in mind, and the operationalizations of the variables must take account of them. Furthermore, replications of the same study in various election districts would enable the partialling of the variance into the components that are general and those that are election-specific.

Much still needs to be studied concerning the relationship between coping with uncertainty and information use. The next phase ought to be done on several fronts. First, special effort must be put into testing the reliability of the coping with uncertainty measurement instrument, and improving it. Second, effort must be made to measure the initial probabilities associated with each of the alternatives in whatever area a specific study happens to be. This must be done so that changes may be detected over time. Third, the relationship between coping with uncertainty and information utilization must be studied by measuring the information use at frequent points in time. This will also enable the study of the different patterns of information utilization before and after decisions are made.

In view of the suggestion made earlier about the directionality of the relationship between coping with uncertainty and information use, a special long range project ought to be designed to study this relationship and to determine which is the antecedent variable and which is the dependent variable. Living as we do in a world where information is a central commodity being consumed all the time, it is important to know how people cope with uncertainty and with information, and how this relates to their patterns of information utilization.

The setting for the study described in this volume was the political arena, which has been widely studied by communication scholars as well as other social scientists. It is not, however, the only setting where the use of information can be studied. Information use can be studied in such areas as the diffusion of ideas and innovations into cultural systems, educational systems, organizational systems and so forth. In all these areas information plays a crucial role and the coping with uncertainty and information are highly related to the functioning of these systems.

REFERENCES

Atkin, C. K. "Instrumental Utilities and Information Seeking." In Peter Clarke (Ed.), New Models of Communication. Beverley Hills: Sage Publications, 1973 (forthcoming).

Atkin, C. K., Bowen, L., Nayman, O., and Sheinkoph, K. "Quality Versus Quantity in Televised Political Ads," Public Opinion Quarterly, 37, 1973, 209-224.

Atkin, C. K., Crouch, W., and Troldahl, V. C. "The Role of the Campus Newspaper in the New Youth Vote." Paper presented at the annual conference of the International Communication Association, 1973, Montreal, Canada.

Attneave, F. Application of Information Theory to Psychology: A Summary of Basic Concepts, Methods and Results. New York: Holt, Rinehart and Winston, 1959.

Backstrom, C. H., and Hursh, G. D. Survey Research. Evanston, Illinois: Northwestern University Press, 1963.

Berelson, B., Lazarsfeld, P., and McPhee, W. N. Voting. Chicago: University of Chicago Press, 1954.

Berlyne, D. E. Conflict, Arousal and Curiosity. New York, McGraw Hill, 1960.

Blumler, J. G, and McQuail, D. Television in Politics: Its Uses and Influence. Chicago: University of Chicago Press, 1969.

Brim, O. G. "Attitude Content-Itensity and Probability Expectations," American Sociological Review, 1955, 20, 68-76.

Brody, N. Demand for Certainty, Motivation, and the Decision Process. Unpublished doctoral dissertation, University of Michigan, 1961.

Budner, S. An Investigation of Intolerance of Ambiguity. Unpublished doctoral dissertation, Columbia University, 1960.

Budner, S. "Intolerance of Ambiguity as a Personality Variable," Journal of Personality, 1962, 30, 29-50.

Campbell, A., and Miller, W. "The Motivational Basis of Straight and Split Ticket Voting," American Political Science Review, 1957, 51, 293-312.

Campbell, A., Converse, P. E., Miller, W. E., and Stokes, D. E. The American Voter. New York: John Wiley and Sons, 1960.

Campbell, A., Gurin, G., and Miller, W. E. The Voter Decides. Evanston, Illinois: Row, Peterson and Company, 1954.

Campbell, D. T., and Standly, J. C. Experimental and Quasi-Experimental Designs for Research. Chicago: Rand McNally and Company, 1963.

Clarke, P., and James, J. "The Effects of Situation, Attitude Intensity and Personality on Information Seeking," Sociometry, 1967, 30, 235-245.

DeVries, W., and Tarrance, L., The Ticket-Splitter. Grand Rapids, Michigan: W.B. Eerdmans Publishing Company, 1972.

Donohew, L., and Palmgreen, P. "An Investigation of 'Mechanisms' of Information Selection," Journalism Quarterly, 1971, 48, 627-639, 666.

Feather, N. T. "Preference for Information in Relation to Consistency, Novelty, Intolerance of Ambiguity, and Dogmatism," Australian Journal of Psychology, 1969, 21, 235-249.

Festinger, L. Conflict, Decision and Dissonance. Stanford: Stanford University Press, 1964.

Frenkel-Brunswick, E. "Intolerance of Ambiguity as an Emotional and Perceptual Personality Variable," Journal of Personality, 1949, 18, 108-143.

Guttman, L., and Suchman, E. A. "Intensity and a Zero Point for Attitude Analysis," American Sociological Review, 1949, 12, 57-67.

Katz, E. "On Reopening the Question of Selectivity in Exposure to Mass Communications," in Abelson, R. P., Aronson, E., McGuire, W. J., Newcomb, T. M., Rosenberg, M. J., and Tannenbaum, P. H., (Eds.), Theories of Cognitive Consistency: A Sourcebook. Chicago: Rand McNally, 1968, 788-796.

Klapper, J. T. The Effects of Mass Communication. New York: The Free Press, 1960.

Lanzetta, J. T., and Driscoll, J. M. "Effects of Uncertainty and Importance on Information Search in Decision Making," Journal of Personality and Social Psychology, 1968, 10, 479-486.

Lazarsfeld, P., Berelson, B., and Gaudet, H. The People's Choice. New York: Columbia University Press, 1948.

Long, B. H., and Ziller, R. C. "Dogmatism and Predecisional Information Search," Journal of Applied Psychology, 1965, 49, 376-378.

McComb, M. "Mass Communication in Political Campaigns: Information, Gratification and Persuasion," in F. G. Kline and P. J. Tichenor (Eds.), Current Perspectives in Mass Communication Research. Beverley Hills: Sage Publications, 1972, 169-194.

Meyer, A. S. "The Independent Voter," in W. N. McPhee and W. Glaser (Eds.), Public Opinion and Congressional Elections. New York: The Free Press, 1962.

Miller, G. R., and Rokeach, M. "Individual Differences and Tolerance for Inconsistency," in R. P. Abelson, E. Aronson, W. J. McGuire, T. M. Newcomb, M. J. Rosenberg, and P. H. Tannenbaum (Eds.), Theories of Cognitive Consistency: A Sourcebook. Chicago: Rand McNally, 1968, 624-632.

Rokeach, M. "The Nature and Meaning of Dogmatism," Psychological Review, 1954, 61, 194-204.

Rokeach, M. The Open and Closed Mind. New York: Basic Books, 1960.

Schoen, S. J. Individual Differences in Conflict Tolerance and Their Relationship to Decision-Making Performance. Unpublished doctoral dissertation, The Catholic University of America, 1963.

Sheinkoph, K., Atkin, C. K., and Bowen, L. "The Functions of Political Advertising for Campaigning Organizations," Journal of Marketing Research, 1972, 9, 401-405.

Siegel, S. Nonparametric Statistics for the Behavioral Sciences. New York: McGraw Hill, 1956.

Tichenor, P. J., Donohue, G. A., and Olien, C. N. "Mass Media Flow and Differential Growth in Knowledge," Public Opinion Quarterly, 1970, 34, 159-170.

APPENDICES

APPENDIX A

Mean Correlations of Item Scores with the Total Scores of the Eight Budner Items Used in this Study (Based on Three Pretest Samples Reported in Budner, 1960, pp. 100-101).

Item	Correlation
1. A good job is one where what is to be done and how it is to be done are always clear	.55
2. I would like to live in a foreign country for awhile	.66
3. Often the most interesting and stimulating people are those who don't mind being different and original	.48
4. What we are used to is always preferable to what is unfamiliar	.52
5. A person who leads an even regular life in which few surprises or unexpected happenings arise, really has a lot to be grateful for	.51
6. It is more fun to tackle a complicated problem than to solve a simple one	.45
7. I like parties where I know most of the people than ones where all or most of the people are complete strangers	.42
8. People who insist upon a yes or no answer just don't know how complicated things really are	.51

APPENDIX B

Zero-Order Correlations of the Discarded Items (6 and 10) with the Sum and Index Scores

	Item 6	Item 10
Item 1	-.13	-.02
Item 2	.03	.02
Item 3	-.05	-.02
Item 4	.17	.11
Item 5	.00	-.09
Item 6	1.00	.18
Item 7	.04	-.09
Item 8	.18	.11
Item 9	-.04	-.19
Item 10	.18	1.00
Sum	.27	.21
Index	.26	.18

APPENDIX C

Zero-Order Correlations Between Education and the Main Summary Measures

	Education
CWUS	.31
Total Familiarity	.30
Total Mass Media	.11
Selective Total Familiarity	-.15
Selective Total Mass Media	-.13