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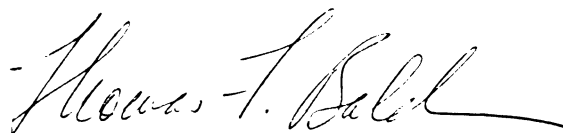
A SET THEORY INVESTIGATION OF THE
SELECTIVE EXPOSURE HYPOTHESIS

presented by

Lawrence C. Soley

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Mass Media

A handwritten signature in cursive script, reading "Thomas T. Ball", written over a horizontal line.

Major professor

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A SET THEORY INVESTIGATION
OF THE SELECTIVE EXPOSURE HYPOTHESIS

By

Lawrence Charles Soley

A DISSERTATION

Submitted to
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in partial fulfillment of the requirements
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ABSTRACT

A SET THEORY INVESTIGATION OF THE SELECTIVE EXPOSURE HYPOTHESIS

By

Lawrence Charles Soley

Although numerous critical reviews of the selective exposure hypothesis have been conducted, this dissertation suggests that all of the previous reviews have failed to distinguish between two distinct definitions of selective exposure which have been used in laboratory research. One definition predicts that information will be selected which is consistent with a decision that subjects make during an experiment. The second definition suggests that exposure to information is predicated on the subject's predispositions or attitudes. Because attitudes and decisions are not synonymous, the two definitions suggest different behaviors and different motivations underlying these behaviors.

The dissertation examined previous selective exposure research and concluded that the distinct definitions use distinct methodologies when testing the selective exposure hypotheses. Studies of decision-consistent selective exposure use experimental designs exclusively, while laboratory studies which assess the effects of attitude variables on information selectivity rely upon investigational methodology. The dissertation examined the results of studies using both methods of research and concluded that little or no evidence has been presented which supports the theory of decision-consistent selectivity, although many investigations have found that

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information selectivity is affected by subject's attitudes or predispositions.

The dissertation concluded that the inconsistency of the definitions and findings is attributable to addressing the selective exposure hypothesis in the context of dissonance theory. The dissertation suggests that an alternative theoretical explanation of selective exposure is found in perceptual set theory. A perceptual set theory explanation of selective exposure suggests that a perceptual heightening to certain informational elements in the environment occur. This perceptual heightening leads to the selection of the heightened information over all other competing informational stimuli. The theory suggests that three predispositional variables can lead to perceptual heightening and selective exposure: familiarity, salience and homophily.

To test the applicability of these variables to the set theory explanation of selective exposure, a series of laboratory investigations was conducted. The first laboratory investigation consisted of a replication of the studies conducted by Bruner, Postman and McGinnies (1948), Solomon and Howes (1951) and Postman and Schneider (1951). The purpose of the investigation was to determine the effects of familiarity, salience and homophily on perceptual threshold. A least squares regression analysis showed that familiarity and the interaction of familiarity and salience affect the rapidity with which subjects are able to recognize source names. The results were interpreted as the previous research results were interpreted: familiarity and salience affect the threshold of recognition for stimuli.

A second investigation attempted to generalize these findings to information exposure. Measures of subject's familiarity, salience and homophily with political sources and politics were measured two weeks before a laboratory investigation was conducted. During the laboratory investigation, subjects were seated in an otherwise empty room, which contained books attributed to the political sources on whom the attitudinal measures were obtained. In the room, subjects were free to choose or not to choose a book from among those available. The selections made by subjects were analyzed using ordinary least squares regression techniques with familiarity, salience and homophily as predictor variables. Two regression analyses of the selections were performed. One operationally defined the dependent variable of selection in relation to homophily, while the other operationally defined the selection in relation to familiarity. The first regression produced only marginally significant findings, while the second regression explained over fifty percent of the variance in the subjects' selections.

An analysis and comparison of the predictor variable coefficients obtained from the perceptual threshold and selection investigation analyses revealed that familiarity and the interaction of the salience and familiarity measures had a similar effect on both responses. The results were interpreted as supporting the perceptual set hypothesis that perception of and exposure to information are related responses.

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CHAPTER I

INTRODUCTION

Sears and Freedman (1965, 1967, 1971) published several critical reviews of the research on selective exposure. Of the fourteen published laboratory studies that they examined, only three were found to support the selective exposure hypothesis (1965: 68). The remaining eleven laboratory studies indicated no preference, equivocal results, or a preference for non-supportive information. As a result, they concluded that "laboratory evidence does not support the hypothesis that people prefer to be exposed to supportive as opposed to non-supportive information" (1965: 94).

Even the field findings of selective exposure (Schramm and Carter, 1959; Lazarsfeld, Berelson and Gaudet, 1948; Star and Hughes, 1950) were questioned by Sears and Freedman. The field findings were suggested to be the result of alternative predictors such as race, education and religion (1967: 201), which led Sears and Freedman to conclude that the findings could be termed "de facto selectivity." They suggested that the alternative predictors offer a more parsimonious explanation than does a theory which states that people prefer supportive to non-supportive information.

Over a decade has passed since Sears and Freedman suggested that research "turn away from questions dealing primarily with the selective exposure hypothesis" (1965: 94), yet the debate has not abated. Since

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the original reviews, others have appeared (Mills, 1968; Sears, 1968; Katz, 1968; Atkin, 1970; and Atkin, 1973). The latter study (Atkin, 1973), while focusing primarily on determinants of information choice and not the selective exposure hypothesis, reiterated the feelings of Sears and Freedman: "The selective exposure issue has distracted research attention" from other (presumably more important) issues (1973: 235). The implication of this conclusion is that the selective exposure hypothesis does not warrant additional examination. The continuing research on selective exposure (Rosenbaum, et al., 1974; Surlin and Gordon, 1974; Schultz, 1974; Kleinhesselink and Edwards, 1975; McGinnies, et al., 1978) indicates that many researchers believe that continued examination is warranted, despite the feelings that "the factors that control selective exposure to information are yet poorly understood" (McGinnies, et al., 1978: 240).

Additional examination of the selective exposure hypothesis seems warranted for several other reasons. The "definitive" reviews of Sears and Freedman, while highly important as theoretical pieces in the area, contain several deficiencies: 1) studies which were included in the reviews as evidence against the selective exposure hypothesis may not have been empirical tests of selective exposure, but of some other phenomena (Mills, 1968: 772) and 2) their review, while comprehensive, did not include many contemporaneous studies such as Stempel (1961), Brock and Balloun (1963), Brock (1965) and Diab (1965), although several of the studies were included in a later review by Sears (1968).

Also, a consistent definition of selective exposure has yet to be proposed. Sears and Freedman offered three definitions of selective

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exposure: A) any systematic bias in audience composition; B) unusual agreement about a matter or opinion; and C) preference for supportive rather than non-supportive information (1967: 195-197). In reference to definitions A and B, the researchers seem justified to conclude that the propositions are "too general to be of much use" and that they offer the possibility of explanation by alternative predictors (1967: 196). Definition C, the preference for supportive rather than non-supportive information, has been the most frequently accepted definition of selective exposure (Abelson, 1968: 769; Katz, 1968: 788). While frequently accepted, the meaning of "supportive" and "non-supportive" has been used in often confusing and contradictory ways. "Supportive" information and its antonym have been used to refer to predisposition or attitude-consistent information (Atkin, Greenberg, Korzenny and McDermott, 1979; Atkin, 1970); information which is decision, but not predispositionally, consistent (Sears, 1966; Freedman, 1965); information which is predisposition-consistent, but of low priority (Miller, 1978); and neutral information which has been presented with positive or negative reinforcements (McGinnies, et al., 1978). A possible explanation for the different definitions is historically rooted. The selective exposure hypothesis and related constructs of selective perception, attention and retention, developed prior to the consistency theories of Heider (1946) and Festinger (1957), according to Abelson (1968: 769). The early studies concerning selective exposure primarily used field methods (Lazarsfeld, Berelson and Gaudet, 1948; Starr and Hughes, 1950) and were concerned with attitude-consistent selectivity. The early studies observed the tendencies of people to expose themselves to information which agreed with their attitudes.

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Dissonance theorists incorporated these observations into the theory, which included propositions concerning counterattitudinal advocacy and decision-making. The decision-consistency definition is derived from dissonance theory. Dissonance theory suggests that bits of knowledge are relevant or irrelevant to each other. If the knowledge bits are relevant to each other, they should exist in either a consonant or dissonant state. When, from the viewpoint of the perceiver, one element does not fit logically with another, dissonance exists. Dissonance is a form of tension that organisms seek to reduce. Dissonance can be reduced by changing one's perception, adding consonant elements or making dissonant elements irrelevant to each other. Festinger argues that when an individual is forced to decide among a number of alternatives, conflict is faced before the decision and dissonance after it. Dissonance is created by the possibility that the non-chosen alternative could be preferable to the chosen alternative. In the face of such dissonance, it is argued that decision-discrepant information is avoided, unless dissonance reaches a maximum level. When dissonance reaches maximum, discrepant information will be sought in an attempt to alter the importance of the elements for the perceiver.

Although the attitude-consistent definition of selective exposure has been incorporated into dissonance theory, it need not be observed exclusively in dissonance terms. Evidence which supports attitude-consistent selectivity may also support other theoretical explanations. As Kelley (1955) has noted:

When a theory produces a hypothesis which turn out to be verifiable, it is in a strict sense the hypothesis only which is substantiated and not the theory...But who knows; the same

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hypotheses might have been produced by other theories. In that case the other theories are at least as valid as the first one (Kelley, 1955: 25).

Findings of attitude-consistent selectivity can be explained by other cognitive theories. For example, Postman, Bruner and McGinnies (1948) demonstrated that people recognize words related to attitudes that they value highly more easily than words with low value orientations. This recognition phenomenon is frequently termed perceptual set. Selective exposure may be an artifact of a person's perceptual set rather than an attempt to reduce dissonance. That is, people approach highly valued, attitude-consistent information because it is readily recognized. Attitude-discrepant information is not avoided, it is not approached. Failure to find subjects approaching a message may be interpreted as avoidance, which dissonance theory proposes, even though approach and avoidance are different activities (Rhine, 1967).

Perceptual set theory has existed in unrefined form since the turn of the century (Gibson, 1941). In the early part of the twentieth century, the term "set" was indiscriminately applied by psychologists to numerous diverse but related phenomena. No attempt was made to synthesize the literature and research until 1940, when Dashiell listed fifteen seemingly dissimilar set phenomena and formulated general principles applicable to them. Subsequent reviews have refined the theory (Gibson, 1941; Bruner, 1958).

Kulpe (1904) conducted an experiment on set and found that subjects were unable to recall the colors of letters in a presentation when they had been set to count the frequency of appearance of the letters or to note their spatial arrangement. Chapman (1932) replicated the experiment

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and obtained similar results. Gibson (1941) has noted that this phenomenon is a case of "selective perception" (1941: 793). In his review of the literature, Bruner (1958) concluded that "selective registration" and "selectivity of attention" are consequences of perceptual set (1958: 85). Although selective perception, selective attention and selective exposure are recognized as related constructs (Abelson, 1968), the phenomenon of selective exposure has surprisingly never been examined in the context of perceptual set theory. An explanation for this research and theoretical void lies in the confusing, differing definitions of selective exposure. As previously noted, selective exposure has been used to refer to predisposition or attitude-consistent selectivity; decision-consistent selectivity; and the selection of reinforced neutral information (among other definitions).

Because the previous reviews and research on selective exposure have been conducted within the theoretical context of dissonance theory, it is not surprising that a perceptual set explanation of the phenomenon has never been proffered. As Kuhn (1970) has observed, theoretical and paradigmatic assumptions create a world view which limits the alternative explanations that can be developed. Failure to limit the explanations can bring down the reigning theory. If Kuhn's observations are correct, and if dissonance theory can be termed the reigning theory, the previous discussions of selective exposure would necessarily have to exclude the set approach to selectivity, because set explanations are rivals to dissonance explanations. The two explanations are contradictory.

It seems logical to call dissonance theory the reigning theory because it has dominated the discussion of selective exposure. Dissonance

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theory can also be said to be responsible for the existence of the different, confusing definitions of selective exposure because it claims to be capable of explaining all of them. Because it can explain all of the occurrences termed selective exposure, it has not been necessary to distinguish among them. Relevant knowledge bits, regardless of whether induced by a decision or reinforcement or resulting from an attitude, are viewed as interchangeable concepts.

On the other hand, the rival theory of sets claims only to explain one of the occurrences: attitude-consistent selectivity. Previous research conducted within the framework of set theory suggests that sets develop from attitudes or predispositions, not decisions or reinforcement. As a result, set theory suggests a perceptual heightening to attitudinally-related stimuli, not stimuli related to a recently made decision.

Because the previous reviews of selective exposure have been dominated by Festinger's theory of cognitive dissonance and have therefore failed to distinguish among the different definitions of selective exposure, it is necessary to again review previous research. Unlike the previous research reviews, this review will begin by distinguishing among the diverse phenomenon that have been called selective exposure. It will begin with theoretical reservations concerning dissonance theory rather than theoretical assumptions. While it is suggested that theoretical reservations concerning dissonance theory are necessary, theoretical reservations do not imply theoretical detachment. Theoretical detachment is impossible because science cannot be theory free. Science, by definition, consists of theories which are tested empirically.

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To merely argue against an existing theory, as Sears (1968) has done, is not sufficient to create a rejection of the theory. While arguing against the theory, it is also necessary to offer an alternative theoretical explanation, as Kuhn (1970) has observed:

Probably the single most prevalent claim advanced by the proponents of a new paradigm is that they can solve the problems that have led the old one to crisis. When it can legitimately be made, this claim is often the most effective one possible. In the area for which it is advanced the existing paradigm is known to be in trouble (1970: 153).

This review will, hopefully, contribute to the development of a theory which will solve the problems that have previously been unresolved.

The purpose of this thesis is to theoretically examine and review the previous research which has been conducted on selective exposure. The review will be conducted critically, examining the explanations offered by both the reigning theory (dissonance theory) and the rival theory (perceptual set theory). While it has already been suggested that dissonance theory explanations will be approached with reservations, it should also be stated that perceptual set theory explanations will also be approached with reservations. Should the rival explanation prove to be parsimonious with the research findings reviewed, research questions or hypotheses derived from that theory will be developed and explored. Because the rival theory can be said to be in an early stage of development, research derived from it can, at best, be exploratory.

Should neither the reigning nor rival theory prove to be a useful explainer of the research findings, other theoretical approaches will be examined. If social science exists, it must have a theory (or theories) which can explain observed behavioral occurrences and research findings.

Should no theory be capable of explaining research findings, social science has failed.

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CHAPTER II

AN OVERVIEW OF THE RESEARCH AND THEORY OF SELECTIVE EXPOSURE

As noted in the introduction, a number of research studies contemporaneous with the writings on selective exposure by Sears and Freedman were not included in their reviews. The number of contemporaneous studies cited here (16) represents slightly less than half of the studies available when Sears and Freedman reviewed the literature (See Table 1). An examination of this contemporaneous research shows that a majority were field studies, which is the method producing the most consistent findings of selective exposure (Sears and Freedman, 1965). Field studies have almost exclusively been concerned with attitude or predisposition-consistent selectivity. While Sears and Freedman contend that the field findings can be dismissed as the result of alternative predictors such as education, which experimental research cannot, their conclusions about the primacy of such variables may have been more reluctantly presented had they been exposed to the other research, such as that of Stempel (1961). Stempel controlled education by selecting a sample of equally educated individuals.

As can also be observed from Table 1, more studies have appeared subsequent to the reviews of Sears and Freedman than the total number they reviewed. In total, the studies reviewed by Sears and Freedman constitute less than one-third of the research depicted by the table.

TABLE 1
Selective Exposure Studies
Published by Time Period

Method	Time Period			Total
	A	B	C	
LAB STUDY	14	7	12	33
FIELD STUDY	6	9	13	28
	20	16	25	61

A = Reviewed by Sears and Freedman (1965, 1967, 1971).

B = Contemporary with but not reviewed by Sears and Freedman.

C = Studies conducted since last review of Sears and Freedman (1967, 1971).

NOTE: See Appendix A for documentation.

Of the thirty-three laboratory studies shown in Table 1, almost one-half consists of experiments. Experiments represent a specific type of laboratory study, where the investigator manipulates the independent variable. Other laboratory studies include investigations, where attribute (or organismic) variables are measured, not manipulated; and mixed models, which combine attribute measurement and variable manipulation (Miller, 1970).

Since experimental research by definition requires the manipulation of variables, its use generally precludes studying attitude-consistent selectivity, since attitudes cannot be manipulated. Attitudes can be defined as "a learned predisposition to respond in a consistently favorable or unfavorable manner with respect to a given referent" (Fishbein and Ajzen, 1975). An observation of the documentation for Table 2 (presented as Appendix B) shows that decision-related selectivity variables were manipulated in virtually all of the experiments reviewed by Sears and Freedman. Two laboratory investigations (Feather, 1962, 1963) were not related to the decision-consistent definition of selective exposure. They reviewed two mixed designs.

The majority of recent studies consist of investigations and mixed designs. Three of the recent experimental studies (McGinnies, et al., 1978; Miller, 1978; and Tan, 1973) strongly depart from the traditional definitions of selective exposure, defined as attitude-consistent and decision-consistent selectivity.

Because the two major definitions of selective exposure rely on different constructs in their designs, one could with a high degree of accuracy discriminate between attitude-consistent and decision-consistent

TABLE 2
Laboratory Studies
by Time Period

	Time Period			Total
	A	B	C	
EXPERIMENTS	10	1	4	15
INVESTIGATIONS	2	0	4	6
MIXED DESIGNS	2	6	4	12
	14	7	12	33

A = Reviewed by Sears and Freedman (1965, 1967, 1971).

B = Contemporary with but not reviewed by Sears and Freedman.

C = Studies conducted since last review by Sears and Freedman (1967, 1971).

NOTE: See Appendix B for documentation.

selectivity studies by using method (experiment vs. investigation or mixed design) as the discriminating variable. While possible, the approach of this review is to examine the studies according to method used (experiment, investigation, etc.); classify the studies according to the definition of selective exposure used; examine methodological problems; note possible theoretical and validity issues arising from each design; and to summarize the findings.

Experimental Research

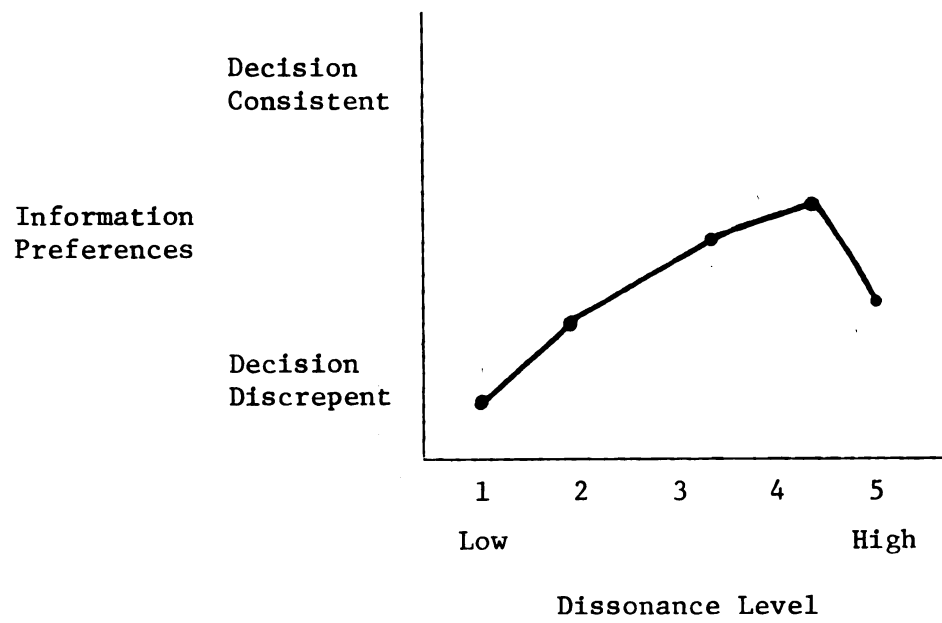
Although some methodologists (Campbell and Stanley, 1963) consider experiments to be the only truly scientific method of social science research, experiments are limited to the study of effects of manipulations on specific dependent variables. Although several experimental designs exist, each with varying degrees of control over the effects of history, maturation, regression, etc., all true experiments require the randomization of subjects to control for pre-existing subject factors which may affect (or confound) an outcome resulting from a manipulation. Randomization serves to eliminate rather than explain precedent subject conditions, such as attitudes. Experiments can explain how organismic or subject conditions develop or change, but are limited in their powers to produce specific responses. For this reason, the external validity (or generalizability of experimental findings to real world conditions) is questioned by some methodologists (Bickman and Henchy, 1972 and Cook and Diamond, 1976). Aside from methodological and theoretical shortcomings, experimental research is perpetually subject to the criticism of "un-generalizability." The following literature review does not emphasize the issue of external validity in experimental research (because it is a constant in all experiments), emphasizing instead the methodological and theoretical shortcomings of previous selective exposure experiments.

Experimental Research Reviewed by Sears and Freedman

As previously noted, all of the experimental studies reviewed by Sears and Freedman employed a decision-consistency definition of selective exposure. The decision-consistency definition was used to test Festinger's theory of cognitive dissonance.

Cohen, Brehm and Latane (1959) replicated Festinger's gambling experiment (1964: 162) in an attempt to create varying levels of dissonance. Festinger hypothesized that seeking and avoiding behavior will follow an inverted U curve (See Figure 1) with decision-consistent preferences being expressed during low and medium levels of dissonance and decision-discrepant preferences being expressed when dissonance is at maximum. Their results replicated those of Festinger, and found seeking-avoiding behavior as predicted by the curve. With the exception of these experiments and two later studies (Rhine, 1967; Berkowitz, 1965), no other attempts have been made to vary dissonance levels. As a consequence, it is questionable whether the other decision-consistent experiments on selective exposure were truly tests of dissonance theory. In addition to this criticism of the remaining experiments, another criticism, which is also applicable to the studies that did vary dissonance level, is that dissonance is always assumed to exist as a result of the manipulation, although it has never been shown to exist (Donohew and Palmgreen, 1971; Rhine, 1967a). The criticism indicates a problem with dissonance-based tests of decision-consistent selective exposure--dissonance is an elusive concept. Attempts have been made to measure dissonance using galvanic skin response (GSR) (Donohew, Parker and McDermott, 1972) and the Greenberg Stress Scale (Donohew and Palmgreen, 1971a), but the results are questionable. It is an assumption that arousal (which is measured by GSR) and stress are dissonance equivalents.

Mills, Aronson and Robinson (1959) offered student subjects the choice of taking an objective or essay exam in a test of the decision-consistent selective exposure hypothesis. Importance was also manipulated



Source: Festinger (1957: 130)

FIGURE 1
Inverted U-Curve of Dissonance

by telling or not telling the subjects that their choice would be the type of exam that would be given in the course. The subjects were then asked to rank their interest in six fictitious articles about the topic. The fictitious article titles described positive and negative information about their choice. The researchers found that importance had no effect on the rankings and that no selectivity was found when negatively-phrased information was presented. People ranked articles that opposed their choice as high as articles that opposed the exam-type that they did not choose. With positively phrased articles, decision-consistent selectivity was found. The contradictory results can be explained by methodological deficiencies or by modifying dissonance theory. First, when rankings are used as a proxy measure for actual information selection, the rankings act as an intervening random variate. The use of rankings and preference ratings has been criticized by Rhine (1967). Second, the ranking of interest in information which is not actually available to the subjects lowers commitment to the decision. Brock (1965) has shown that the presence or absence of the information can affect choice. He found that subjects did not believe that they would have to read the ranked articles unless the articles were actually present. Third, evidence exists that negatively-phrased materials are consistently avoided. Rosen (1961) replicated this experiment but manipulated positive and negative wordings. He found that negatively-phrased articles are avoided whether decision-consistent or decision-discrepant. Canon (1964), in commenting on this experiment, suggested that negatively-phrased material offers criticism, not utility and is therefore avoided. In suggesting a utility explanation, Canon added a

component to dissonance theory which previously did not exist and which, in many ways, contradicts the original formulations. The utility modification is contradictory because dissonance is a post-decision phenomenon. Utility should be an important component of selection in a pre-decision situation, when selectivity is "objective and impartial" (Festinger, 1964, p. 94-95), but useless after the decision has been made, especially when the decision is irreversible, as in this case. Fourth, the student subjects may have experienced no dissonance from their decision because they presumably chose their favorite exam type. It can be argued that the choice was probably attitude consistent. Fifth, refutability can act as a determinant of decision-consistent selectivity. If the subjects, due to their experiences, believed that they could refute the choice-discrepant information, avoidance of the discrepant information could not be expected. Lowin (1967) has shown that weak discrepant messages are frequently approached since they are easily refuted. In making this discovery, he also proposed a modification of dissonance theory.

The Mills, Aronson and Robinson (1959) experiment was replicated by Rosen (1961), who again found that decision importance had no effect on selectivity. The findings were later supported by Lowe and Steiner (1968). Rosen's overall results favored the proposition that people prefer decision-consistent information, but he also found that people preferred articles that advised changing from the chosen to the non-chosen exam type over the opposite of this. The results make interpretation difficult. The interpretation difficulty may be an artifact of the

rankings. As Rhine (1967) noted, rankings do not distinguish avoidance from seeking behavior. In reference to an investigational study which used rankings (Feather, 1962), Rhine stated:

When the title "Smoking Does Not Lead to Lung Cancer" was ranked for its interest value, the smokers gave it an average rank of 3.44 and the non-smokers 8.72. Does that prove the smokers sought the article more, or does it show that the non-smokers avoided it more? Or does it mean that smokers avoided it less than non-smokers, or smokers sought it more than non-smokers? There is no way of knowing. (Rhine, 1967: 24)

In addition to this problem, Rosen's study must be evaluated in light of the criticisms directed at the experiment that it replicated (Mills, Aronson and Robinson, 1959).

Canon (1964) manipulated self-confidence and information usefulness. In this experiment, subjects were given a series of four case studies to read and were asked to answer a one question "quiz" following each of the readings. Confidence was manipulated by telling subjects that their answers were right or wrong. Following completion of the fourth reading, subjects were told that they were to defend their final answer in either a debate (high useful condition) or by writing a simple paragraph (low usefulness condition). Following the manipulation, subjects were offered the choice of reading information supporting their chosen answer or opposing their choice. The results indicated that the high useful/high confidence subjects preferred decision-discrepant information, while the low useful/low confidence subjects sought decision-consistent information. The other two conditions showed only slight preferences for decision-consistent information.

The results are perplexing because a study conducted concurrently with Canon's obtained somewhat contradictory findings. Mills and Ross

(1964) manipulated a variable that they termed "certainty" in a manner similar to the manipulation of "confidence" in Canon's experiment. Subjects were informed that 80 percent of people surveyed disagreed with their decision concerning a neutral topic in the low certainty condition, while subjects in the high certainty condition were told that 80 percent of surveyed people agreed with their choice. Rather than manipulating usefulness, as Canon did, Mills and Ross manipulated commitment. Commitment levels were varied by informing the subjects that their responses would or would not be made public. Mills and Ross found that in the low commitment condition, the greater the certainty the greater the interest in decision-consistent information.

The two studies exemplify the difficulties of conducting experiments that are based on dissonance theory. Each raise more questions than are answered. Do the experiments have any base in dissonance theory if they manipulate variables (e.g., certainty, etc.) which are not components of the theory? Did the subjects experience dissonance or a loss of certainty or confidence? If subjects did experience dissonance, at one level? Without knowing the answers to the questions, the results are uninterpretable. For example, in Canon's experiment, high confident subjects may have experienced greater dissonance than low confident subjects, having a greater stake in being correct. If experiencing maximum dissonance, dissonance could be reduced by seeking decision-discrepant information.

The results, however, were interpreted differently by the experimenter. Each researcher suggested that their variables be added as components to dissonance theory.

In three similar experiments, Sears and Freedman (1965), Sears (1965) and Sears (1966) gave subjects biased synopses of a murder trial. Subjects were requested to read the synopses, and based on the facts presented, reach a verdict of guilt or innocence. Following this, subjects were asked to rank their interest in decision-consistent or decision-discrepant information. In two instances (Sears and Freedman, 1965; Sears, 1965), the offered information was manipulated by adding new (or novel) arguments or previously used arguments. In the Sears and Freedman experiment, commitment to the verdict was also manipulated by having subjects publicly or not publicly state their verdict.

In all three experiments the rankings indicated preferences for decision-discrepant information. In the main effects analysis for novelty or information newness, the findings were not straightforward. Acquitors preferred new decision-consistent information in one experiment (Sears, 1965), while Sears and Freedman (1965) found that old arguments that were decision-discrepant were preferred.

While these experiments are subject to the same criticisms as previous research (a failure to manipulate dissonance level; using preference rankings; not determining the success of the manipulations, etc.), the research can additionally be criticized for the choice of stimuli used to manipulate decision. The synopses were biased by presenting only the prosecutor or defense attorney's argument. The experiments may not be tests of dissonance-related selective exposure, but of the expected behavior of jurors in American society, where law, history and tradition dictate that both sides be heard. In addition, the post-decision character of the decision is highly questionable, since most Americans are aware that our legal system includes numerous appeal procedures.

In an experiment by Freedman (1965), subjects were exposed to a taped interview of a student and were, based on what they heard, to decide whether the student should be accepted into college. Two conditions were created by the manipulation of the interview: favorable and unfavorable. The subjects' ratings of the student corresponded to the manipulation of the interview, indicating a successful manipulation. Subjects were then offered decision-consistent or decision-discrepant information. All of the subjects requested information contrary to their decision.

Freedman, in a departure from traditional dissonance theory, suggested that information novelty, usefulness and subject confidence may be determinants of decision-related information choices, not the decision-consistency of the information. The variables were not proposed to modify dissonance theory, as previous approaches had suggested (Canon, 1964; Mills and Ross, 1964), but to move decision-related studies from beneath the theoretical framework of decision-consistency theory. Atkin (1973) has elaborated on this approach. It can be argued, and will be later, that this suggestion is not applicable to attitude-consistent selectivity.

Jecker (1964) manipulated information usefulness in the context of a decision-consistency test of dissonance theory. Male college students were told that they were going to play a game that required a partner. Two partners were suggested and positive and negative information about the partners was made available. To create pre, post and controlled dissonance conditions, subjects were told 1) they were to study the information and then choose a partner (pre); 2) they were to choose a partner and then study the information (post); and 3) they would

be assigned a partner but could look at the information on the potential partners anyway. The time spent reading the information was the dependent variable.

Subjects in the pre-decision condition spent less time reading the information than the control or post-decision conditions, indicating overall greater interest in the latter conditions. No significant preference for decision-consistent information was found in the dissonant (post-decision) condition. In fact, after recalculating the data available, it can be shown that, after the initial scanning period, time spent with the decision-discrepant information was greater than with the decision-consistent information. Jecker also performed a chi-square test on the number of subjects who preferred decision-consistent information to decision-discrepant information. While the results were significant, they are uninterpretable because of the ex post facto alteration in the dependent variable and the likelihood that the two tests lack statistical independence. The findings fail to support a decision-consistency theory of information selection.

The early experiments on a dissonance-based theory of decision-consistent selective exposure demonstrate methodological problems which seem to be inherent in operationalizing constructs central to the theory. While different levels of dissonance have been hypothesized, experimental research cannot demonstrate variability in the levels. The existence of dissonance itself has never been demonstrated. In most cases the existence of dissonance is concluded from the dependent variables (the seeking and avoiding of decision-related information). In this sense dissonance

theory is tautological: dissonance is the construct underlying the independent variable, but can only be demonstrated by the dependent variable of selectivity. Failure to find decision-consistent selectivity can mean that dissonance was not induced.

For practical purposes, the early experiments have suggested that the theory is untestable unless one assumes that decisions per se create dissonance. If this is one's interpretation of the theory, the experimental research fails to support a decision-consistent theory of selective exposure.

In addition, dissonance theorists have proposed modification or alterations which are contradictory to the theory. For example, information utility should not explain post-decision selectivity because utility is not a component of post-decision situations. Utility and objective information seeking should be pre-decisional variables.

Contemporaneous Experiments

Lowe and Steiner (1968), recognizing the difficulty of placing all decisions in the same set, predicted that reversible decisions would have a different effect on subjects than irreversible decisions. In so doing, Lowe and Steiner predicted that the inverted U curve of selectivity would be applicable only to irreversible decisions. What curve, if any, existed for reversible decisions was not stated.

Female subjects were given photos of two men and asked which one they prefer to date. By adding a variable of "consequences," four conditions were created: 1) reversible-consequences; 2) reversible-no consequences; 3) irreversible-consequences; and 4) irreversible-no consequences. The consequences were manipulated by stating that dates

would or would not be arranged for the girls, while reversibility was manipulated by stating that their decision could or could not be changed. After reaching a decision, the subjects were told that they could choose to read favorable or unfavorable comments about either of the two men. Subjects were asked to rate their interest in the information. The results did not support the hypothesis. Reversibility was found to be a significant predictor of information seeking; however, the only condition where consonant information was preferred was in the irreversible-no consequence condition. In the irreversible-consequences condition, which should have created the greatest dissonance, slight preferences for decision-discrepant information were found.

Recent Experiments

Lowin (1969) modified Canon's design (1964), manipulating ease-of-refutation and confidence rather than confidence and information usefulness. Using a design similar to Canon's, confidence was manipulated by telling subjects that their answers to questions on materials that they had read were right or wrong. Ease-of-refutation was manipulated by assigning subjects to conditions where weak decision-discrepant; weak decision-consistent; strong decision-discrepant; and strong decision-consistent information was offered. Source identifications were used to alter message strength. Strong messages were credited to a panel of business experts; weak ones to high school sophomores.

The results indicated that ease-of-refutation shapes decision-consistency information choices, but not in a straightforward manner. Confidence was found to have no effect on information preferences. This finding failed to support either those of Canon or Mills and Ross (1964).

Canon found that high confident subjects are willing to approach decision-discrepant information, while Mills and Ross found that, at least in the case where commitment was low, high certainty subjects preferred decision-consistent information.

When strong messages were presented, decision-consistent information was preferred. When weak messages were presented, decision-discrepant information was slightly preferred. No interaction was found between confidence and message strength. The results fail to support a theory which predicts avoidance of decision-discrepant information. The study indicates, as do others, that avoidance of decision-discrepant information is not straightforward as predicted by dissonance theory, but may be mediated by numerous variables. The results, however, of this and other studies, must be qualified by the statement that the designs have been of insufficient strength, from a dissonance theory perspective, to be truly conclusive. In this, as others, the information was not truly available to the subjects; ratings and rankings of preferences were measured, resulting in interpretation difficulty; dissonance was not shown to exist; and only one dissonance level was used. The latter difficulties, however, may be unavoidable, at least when dealing with a decision-consistency definition of selective avoidance. Proponents of dissonance theory have suggested no methods for obviating the latter difficulties.

The remaining three experiments have deviated from the original definitions of selective exposure, possibly as a result of the difficulties encountered in previous research.

McGinnies, et al. (1978) tested the effects of token reinforcement on information selectivity. The study examined attitude-consistent,

rather than decision-consistent selectivity. Subjects were exposed to positive and negative statements concerning a neutral issue (the three-mile maritime limit). Subjects were given token reinforcements (five cents) for consistently selecting a pro or anti-three mile limit statement. Following the reinforcement, subjects were given the choice of listening to information which supported or opposed the position on which they were reinforced. All subjects, regardless of reinforcement condition, listened longer to the pro-three mile limit, giving indications that Rosen (1961) and Canon (1964) were correct about preferences for positively phrased information. No attitude change was found for any subjects.

The study reveals little about selective exposure, since the final attitude measure revealed that subject positions remained neutral. Subjects had no predispositions concerning the topic.

McGinnies, et al., however, cite an unpublished experiment which found that saturation with consonant information can result in discrepant information seeking. The findings bear on the hypothesis of Sears and Freedman (1964) that information "newness" may be a factor influencing selective exposure. It may also be that messages which present previously known or redundant arguments are viewed by subjects as weak, while messages containing new arguments are viewed as strong, if for no other reason than their novelty. In this sense, message strength, which Lowin (1969) examined, may be similar to information newness, which Sears and Freedman examined. Both hypotheses, however, tend to discredit dissonance theory's Prediction of decision-discrepant information avoidance.

Miller (1978) examined decision-discrepant selectivity using a single parent population of subjects who displayed strongly-held attitudes

during a political campaign. The attitude measure was exclusively behavioral--whether the subjects in a college dormitory displayed posters favoring a particular political candidate. Miller was concerned with the effect of time on selective exposure. He hypothesized that decision-consistent information will be slightly preferred immediately following a decision; several minutes later decision-discrepant information will be preferred; and after "regret time" passes, positive information will be preferred. Using a relatively complex, disguised method, the time manipulation was achieved and then subjects' information preferences were measured. The titles of the messages chosen by the three time-differentiated groups supported the hypothesis that post-decisional time affects information selection. Selective exposure or the seeking of decision-consistent information was found only after twelve minutes had elapsed between the decision and message choice.

The results of Miller's study raise questions about previous designs and interpretations of decision-consistent experiments. If the findings of this research can be generalized to previous studies, it can be said that the equivocal findings are an artifact of immediately testing post-decisional information preferences and not controlling the time elapsed between the decision and choice. One must note, however, that all of the previously reviewed experiments have in their literature searches and theory modifications suggested reasons why decision-consistent selectivity has not been found. Each subsequent study has attempted to explain why previous studies have failed to find evidence of decision-consistent preferences, which they later also fail to find. This may also be true of Miller's study.

In another alteration of dissonance theory, Tan (1973) suggested that situational variables may affect information choice. His study departs from traditional selective exposure tests in that an interactional variable of role complement was introduced. Tan, in effect, introduced role theory into a dissonance theory experiment, suggesting that role expectations will supercede the avoidance of discrepant information as predicted by dissonance theory. Tan thus began with the assumption that previous research has supported a dissonance theory interpretation of information seeking.

Tan combined attitude and decision-consistent definitions of selective exposure by asking female subjects to join a women's organization which they believed would reflect their own position on "women's liberation." The attitude element consisted of their predispositions toward feminism, while the decisional element was reflected in their choice of joining the organization. "Role complement" was manipulated by having the female subjects interact with either women "liberationists" or males, while dissonance level was manipulated by asking or not asking subjects to publicly endorse the selected organization. The dependent variable was rated interest in five articles which supported, opposed or were neutral about the beliefs endorsed by the chosen organization. Tan hypothesized that subjects interacting with males would seek decision-discrepant information, and that subjects in the high dissonance condition would prefer decision-consistent information. The results indicated that the subjects interacting with males expressed greater interest in decision-discrepant information than subjects interacting with feminists,

supporting hypothesis one. The subjects interacting with feminists exhibited only slight preferences for decision-consistent information, however. Main effects for dissonance levels failed to approach significance, although Tan noted that the results "may be due to the failure of the dissonance inductions" (Tan, 1973: 282). This conclusion reflects a previously observed problem with dissonance theory: it is impossible to determine whether dissonance has really been induced. No significant interaction was obtained.

The study failed to find support for decision-consistent selective exposure. As with previous studies, another variable was suggested as a mediating factor in decision-consistent selectivity, adding to the list which has created more exceptions than rules. Many of the previously noted problems with dissonance-based experiments are also visible here: expressions of interest in information rather than actual information selection and the use of ratings to determine interest.

Summary of Experimental Findings

The failure to find evidence of decision-consistent information selectivity in experimental research has resulted in numerous suggestions and experimental replications that attempt to identify other variables that may be affecting information selection. The proposals that other variables may affect information choices are based on two differing assumptions. One assumption is that other variables (such as information newness or utility) offer more parsimonious explanations of why people select certain messages than does a dissonance-based theory of information avoidance. Proponents of this idea suggest that dissonance arousal and the related idea of decision-discrepant information avoidance have not

been empirically supported and should be dismissed. These researchers (Freedman, 1965; Atkin, 1973) suggest that information utility, novelty, and situation be examined as functions in information selectivity and recommend departure from the explanations offered by the selective exposure hypothesis. This proposal can be termed a "functionalist" approach to information selection. "Uses and Gratifications" theory is an outgrowth of the functionalist approach (Blumler and Katz, 1974). The functionalist approach argues that the other variables can explain information selectivity while dissonance cannot. The argument opposing this functionalist approach is that the other variables (information newness, utility, the positive or negative wordings of information alternatives) "mask" the findings predicted by dissonance theory in a manner similar to the way that air pressure can mask physical laws. By controlling air pressure in a vacuum, the true relationships can be uncovered. Similarly, controlling the variables which may intervene in the dissonance-reduction process by experimental control can demonstrate the real relationships.

From a practical perspective, both arguments seem weak. The functionalist argument has not been supported by experimental research. For example, information usefulness was found to affect selectivity, although not in a straight-forward manner, by Canon but not by Jecker. Actor self-confidence or certainty was found to have different effects by Canon, Lowin, and Mills and Ross. Mills and Ross found that in certain cases commitment can affect information choice, while Sears and Freedman found that it had no effect. In terms of decision-related selectivity, most variables were found to have little explanatory power.

From a purely pragmatic perspective, dissonance theory also offers little explanatory power, even if the argument that intervening variables mask decision-consistent selectivity is accepted. In the real world, the hypothesized masking variables would be of sufficient magnitude to obfuscate any occurrences of decision-consistent selective exposure, even moreso than in the laboratory.

Dissonance theory explanations do, however, offer scientific comfort. If one could control the variables which mask decision-consistent selectivity and, if only in the laboratory, find evidence of selective exposure, it would be an assurance to social science that it is headed in the right direction. Even if the findings could not be generalized from the laboratory to the real world, the findings would be important because they would explain a cognitive process. Perhaps this is why abandonment of the decision-consistent selective exposure hypothesis has been slow in coming.

The laboratory evidence has produced no evidence of decision-consistent information selectivity. Each experiment has produced equivocal or contrary findings and, upon replication and added control, have given even less support to the hypothesis. Only two experiments (Miller, 1978; Cohen, et al., 1959) have found selective exposure as proposed by the modified theory of dissonance, but the results can only be accepted with scepticism because they lack sufficient confirmation by replication. Replications have tended to disconfirm rather than confirm prior findings. In the face of existing laboratory evidence, decision-consistent selectivity theory should be dismissed, if for no other reason than the inapplicability of the theory to the real world. Other reasons for

discarding the hypothesis are that the inability to operationalize dissonance-related constructs has been consistently demonstrated; the number of variables requiring control in the laboratory are too numerous to be practical; and, as suggested by others (Sears and Freedman, 1965; Atkin, 1973), to free resources which could be used in more productive research.

Non-Experimental Laboratory Studies

The dismissal of a decision-consistent selective exposure hypothesis, based on experimental findings, need not be generalized to an attitude-consistent selective exposure hypothesis. It can be argued that decisions concerning matters not related to attitudes are not dissonance-arousing, while exposure to counter-attitudinal messages are. This argument constitutes a modification of dissonance theory. It can also be argued, as noted earlier, that dissonance explanations of attitude-consistent selectivity are not the only theoretical explanations which exist. Attitude-consistent selective exposure can be explained by cognitive processes other than dissonance.

In the introduction it was stated that laboratory investigations and mixed model designs usually examine attitude-consistent selectivity, whereas experiments primarily study decision-consistent selectivity. Several of the mixed models have manipulated decisional variables and measured attitude variables. Many such studies have examined selective exposure from a dissonance theory perspective. Obtaining results as predicted by dissonance theory, however, may not validate that theory exclusively. The results may also support other theories which predict attitude-consistent selectivity.

Another problem arising with non-experimental laboratory studies is that the results are confounded. Investigations, even when obtaining results suggested by theory, lack explanatory power because possible sources of extraneous variance and alternative predictors remain uncontrolled (Miller, 1970). While investigational paradigms can demonstrate a relationship between variables, the reasons for the relationships cannot be explained. For example, even if one can show that high dogmatics (Rokeach, 1960) are less likely to avoid attitude-discrepant information than low dogmatics, it is impossible to determine the reasons behind this difference. Dogmatism level may be determined by numerous social or psychological variables which it merely reflects. This problem also exists with mixed designs, although the manipulation is usually designed to control some sources of extraneous variance.

Investigational Research

The two investigations reviewed by Sears and Freedman were both conducted by Feather (1962, 1963) and of similar design. While developed as an investigation of dissonance theory, the studies were concerned with attitude-consistent selectivity. Decisions were not required or manipulated in the investigational designs. Feather hypothesized that smokers would avoid information linking smoking with cancer, while non-smokers would not. Feather measured smoking habits and asked the subjects to rank their interest in several article titles which included "Sex and the Beatniks," "Cure of Illness by Hypnotism," "Smoking Leads to Lung Cancer," and "Smoking Does Not Lead to Lung Cancer." The results of both studies indicated that smokers expressed more interest in articles on smoking than non-smokers, regardless of whether the link between smoking and lung cancer was discounted or promoted.

While the study has been defined as an attitude-consistent selectivity study, it is so only if one assumes that smoking and non-smoking are appropriate proxy measures for one's attitude toward smoking. Substantial evidence exists which demonstrates that behavior is frequently contradictory to expressed attitudes. After reviewing 33 studies on the subject, Wicker (1969) concluded that:

Taken as a whole, these studies suggest that it is considerably more likely that attitudes will be unrelated or only slightly related to overt behaviors than that attitudes will be closely related to actions. (Wicker, 1969: 65)

While one might hastily conclude that this statement is contradictory to the selective exposure hypothesis, the studies reviewed did not concern information selectivity. Typical of the studies reviewed by Wicker is the now classic study conducted by La Piere (1934), in which the attitudes of hotel and restaurant owners toward Chinese were contrasted with their actual behavior. It is conceivable that many smokers have attitudes which are consistent with the statement that "smoking leads to lung cancer." How smokers reconcile this attitude with smoking is only of peripheral interest to the selective exposure hypothesis.

The two studies by Feather, in addition to the above cited problem, are also subject to criticisms directed against several experiments: rankings were used to express interest in the articles (Rhine, 1967) and it is doubtful whether subjects believed that the ranked preferences actually required exposure (Brock, 1965). Using a face validity approach, it can be argued that the use of highly unusual titles concerning hypnosis and beatniks may have enhanced hypothesis-guessing by subjects or resulted in investigational disturbance. In addition, one can question

whether a dissonant message was even available to non-smokers. A dissonant message would be "non-smoking causes lung cancer," not "smoking does not cause lung cancer."

These criticisms of Feather's studies, which have been used as evidence against selective exposure by Sears and Freedman, seem so great as to warrant the rejection of the findings. The number of alternative hypotheses which can be generated from the research are of sufficient number to conclude that the study did not concern selective exposure.

Two recent investigations concerning exposure to counter-attitudinal messages, while not specifically addressing selective exposure, present modest support for a dissonance interpretation of counter-attitudinal message avoidance. Donahew and Palmgreen (1973) attempted to determine whether the organismic variables of dogmatism and attitude salience differentially affected behavioral responses during forced exposure to counter-attitudinal messages. Subject's attitudes toward subissues connected with the war in Vietnam (e.g., cost in U.S. lives) and their salience or importance were measured. Dogmatism was measured using the Rokeach scale. Following these attitude and personality measurements, subjects were exposed to counter-attitudinal and supportive messages. During the exposure, GSR measurements were obtained. Following the exposure, stress was measured on the Greenberg stress scale.

The results indicated that exposure to counter-attitudinal messages resulted in greater stress for low dogmatics than high dogmatics, although an analysis of variance test did not reach an acceptable level of significance ($p < .08$). There exists a high probability that the insignificant results were due to insufficient power in the test. Power is defined in relation to the number of subjects used, which only amounted to four per cell or a total of 36. It is quite possible that more subjects

would have resulted in an F which reached an acceptable rejection level (.05). An attribute salience x dogmatism interaction was obtained ($p < .05$). Low dogmatics exhibited greater stress when the messages were of high attitudinal salience than high dogmatics. While the findings appear perplexing, a subsequent investigation by Donahew, Parker and McDermott (1972) can explain the findings. Using GSR and a device for measuring eye movement, the investigators found that low dogmatics are more likely to attend to attitude-discrepant information under forced exposure situations than high dogmatics. The attention results in greater arousal, as measured by GSR. High dogmatics avoid the information by not attending to it, hence lower GSR and stress scores.

The two investigations give support to the theory that exposure to counter-attitudinal messages increases stress (possibly dissonance). Approaching the stress finding from a different theoretical perspective, it can be argued that exposure to unfamiliar (not just counter-attitudinal) messages creates stress. No control for familiarity with the messages was established in the investigation. Additionally, the first study suggests that attitude salience may be an important determinant of selective exposure, especially when interacting with other variables. Wheelless (1974a) examined the variable of attitude salience in a recent investigation. Attitude intensities toward fifteen topics and the credibility of 18 sources (including such diverse personalities as Angela Davis, Ted Kennedy and Johnny Carson) were measured among a student sample of 78. From the fifteen topics, "a single experimental message topic which best maximized variability" was selected. The topic was the space program.

Identical message titles about the topic were credited to the eighteen sources on whom credibility measures were obtained (e.g., Johnny Carson of the Tonight Show on the Space Program; Senator Edward Kennedy of Massachusetts on the Space Program, etc.). Two weeks after the original measurement, the subjects were exposed to pamphlets bearing the above titles and were allowed to select those which they were interested in reading. The results were analyzed using discriminant analysis, and no significant effect was observed.

The results of the investigation are difficult to interpret and appear to be confounded. The topic issue is unrelated to the sources used in the study. For example, the nobel prize winning physicist Jensen may be respected for his scientific contributions to physical science, but disdained for his theories of racial inequality. Einstein's work in physics may be awe-inspiring to physicists who are conservative and liberal politically, while his socialist views may be anathema. "Opinion leader" theory suggests that a person can be respected for ideas concerning certain subjects and not for others. Thus, Angela Davis may be respected for her outspoken views on racial equality, while appearing as a noncredible source on other topics such as the space program. To find that a subject who views Angela Davis as a highly credible source on race issues but avoids a message by her on the space program contributes little to an understanding of selective exposure.

In another investigation, Wheelless (1974) asked 300 subjects in a basic communication course to complete a questionnaire on fifteen public sources (Richard Nixon, Ted Kennedy, Angela Davis, etc.), which included measures of competence, homophily and attractiveness. Included

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in the questionnaire were attitude measures on fifteen topics and a measure of salience for each topic. The subjects were then given a list of twenty-five booklets, randomly developed from the topic and source list, and were asked to indicate items they would like to read; would not read; and to which they were indifferent or neutral. The results, despite the possible confounding of topics and sources noted in the previous study, found strong evidence of selective exposure. (It is possible that the results were not confounded in this study since numerous political issues were listed: the draft, women's liberation, etc.) The results indicated: 1) subjects selected materials primarily on the basis of three variables--source homophily, competence and involvement; and 2) a high degree of similarity between the source and the subject is not necessary for exposure, but subjects will reject messages from highly dissimilar sources. Attitude salience did not explain as much variance in selective exposure as certain source variables, but the stepwise-regression analysis did indicate that it was, nonetheless, a significant predictor.

Summary of Investigational Findings

Three of the examined investigations (Wheless, 1974a; Feather, 1962; Feather, 1963) which found no evidence of attitude-consistent selective exposure utilized designs of insufficient rigor to be conclusive. Two of the investigations did not examine selective exposure per se, but constructs related to the selective exposure hypothesis. Their results support the idea that exposure to counter-attitudinal messages increases "stress," as hypothesized by dissonance theory. The studies did not demonstrate active avoidance of attitude-discrepant

messages, but found that high dogmatics, even under forced exposure conditions, tend not to focus on attitude-discrepant materials. An alternative hypothesis can also be suggested from the findings: messages containing unfamiliar arguments increase stress under forced exposure situations. Only one study found evidence of selective exposure (Wheelless, 1974), but from the single results, generalization is impossible.

Mixed Model Studies Reviewed by Sears and Freedman

One of the earliest laboratory studies was conducted by Brodbeck (1956), whose research was derived from dissonance theory. Brodbeck hypothesized that persons exposed to counter-attitudinal messages would have their confidence shaken and, following the confidence manipulation, would seek attitude-consistent information. One hundred and sixty student volunteers were used. The subjects stated their interest in the issue of "wiretapping" and their opinion and confidence concerning the topic. The subjects were exposed to attitude-discrepant speeches in groups of 12 to 15, publicly restated their position and were asked to choose between listening to an attitude-consistent and discrepant message. While Brodbeck's primary hypotheses concerned subjects whose confidence was shaken, she nonetheless reported findings that indicated that more subjects preferred to listen to opinion-consistent messages than would occur by chance. Brodbeck's conclusions were challenged by Steiner (1962), who recalculated the data tabled in the research report. Steiner concluded that subjects whose confidence was shaken did not choose attitude-consistent messages more so than would occur by chance, but the opposite. He concluded that the subjects preferred attitude-discrepant

information. While Steiner did not address the subsample of subjects whose confidence was not shaken, a recalculation of the data available for these subjects shows that the subjects preferred attitude-discrepant over attitude-consistent information by a wide margin.

Regardless of the problems with interpreting the results, a number of design criticisms can be made. Rosenthal and Rosnall (1969) suggest that subjects who volunteer as research subjects represent a different parent population than those whose participation is mandatory. The variable of interest, while measured by Brodbeck, was not utilized in the design. It was used merely to eliminate subjects who had no interest in the topic. Subjects whose interest in the topic was low were grouped with subjects whose interest was high. The persons whose confidence was shaken or who changed position could conceivably have been subjects whose interest in the topic was low. It is impossible to know. Finally, since Tan (1973) has shown that situational variables can affect information selection, the group situation, when combined with the public declaration, could have affected subjects' responses. In most media use situations, public declarations are rare, restricting the generalizability of the findings.

Adams (1961) studied exposure to child development information among a sample of mothers. The subjects were asked their "opinion" on the importance of heredity vs. environment in child rearing and were then exposed to either an attitude-consistent or discrepant message. After this exposure, the subjects were offered the opportunity to hear another speech on the topic. The subjects were also allowed to decline the invitation. The experimental subjects (who were exposed to a

previous message) sought more information than the control subjects (who were not exposed to a previous message). Among the experimental subjects, 22 of 30 sought attitude-consistent information, as opposed to 19 of 24 control subjects. Only four of the original subjects expressed an opinion consistent with hereditary determinism, so no analysis was performed on the data obtained from these subjects.

Examining the data, it can be seen that 73% of the experimental subjects, as opposed to 79% of the control subjects, sought opinion-consistent information. The slightly smaller proportion of subjects in the experimental condition seeking opinion-consistent information raises doubts about a dissonance interpretation of attitude-consistent selective exposure. Exposure to the discrepant message should, in theory, have increased dissonance and resulted in an increase of consonant information seeking. However, no significant difference between the experimental and control subjects was found, despite the findings of selective exposure.

Sears and Freedman have argued that the results of this mixed model study are misleading because the utility of the environmental information exceeds the utility of the heredity information. They have argued that information concerning hereditary determinism offers little advice on child rearing, even to those persons who believe that hereditary factors are the primary determinants of success or failure in life. In fairness to Brodbeck, it can be argued that Sears and Freedman's argument is convoluted: persons who hold a hereditary determinism viewpoint should find little utility in environmental discussions.

Of two mixed model studies, only one found evidence of selective exposure. Brodbeck, based on data recalculations, found no evidence of selective exposure. However, the possibility that Brodbeck's findings were confounded by not controlling the interest measure is of sufficient magnitude to question the results.

Contemporaneous Mixed Model Research

In a study alluded to earlier, Brock (1965) manipulated the visibility of articles containing attitude-consistent and discrepant information, while replicating the study of Feather (1963). The theory was drawn from the equivocal findings of Mills and Ross, which suggested that commitment may be a determinant of exposure. Commitment level was manipulated by having subjects rank order interest in magazine articles that were or were not visible. Brock found that subjects in the no exposure situation did not believe that they would have to read the ranked articles, while the subjects in the exposed condition believed that they would. An analysis of variance test for the combined exposure-no exposure groups found no significant difference in information preferences, but when the exposure-no exposure groups were separated, it was found that smokers preferred the articles which stated that there was no link between smoking and lung cancer (in the exposure condition). Overall, smokers and non-smokers expressed equal interest in the articles linking smoking and lung cancer.

The mixed model study used rankings of "interest" in two different articles on a single topic (smoking and lung cancer) as dependent variables. The rankings of subjects representing two different parent populations (smokers and non-smokers) were compared. As indicated earlier, the

meaning of the rankings in this as in Feather's study can be disputed. Do the different rankings represent overall interest in the topic (of smoking and lung cancer) for the two different samples or do they represent interest in consonant and dissonant messages? When the rankings of the link and no-link articles are combined for the non-smoking sample, the average rank is 7.6. For smokers, the average rank is 6.1. The difference indicates greater interest in the topic of "smoking and lung cancer" among smokers, regardless of whether the messages are viewed as consonant or discrepant. The results suggest that the salience of the topic for the two groups differs.

Do the articles actually represent discrepant and consonant messages? Why would an article that argues that there is no link between smoking and lung cancer be dissonant to non-smokers? To assume that it is assumes that non-smokers avoid smoking because of its health hazards. Even if no link existed between smoking and lung cancer, there is no proof that non-smokers would become smokers. A dissonant message to non-smokers would be "non-smoking causes lung cancer" or "smoking cures lung cancer and other diseases." Thus for non-smokers, it is doubtful whether a dissonant message was even available. Given this, there is no basis for comparing the two groups.

An alternative hypothesis, notwithstanding the previous criticism, is that the ranked interest in the articles is explained by the interest in the topic, not the dissonant or consonant content of the messages in particular. Given this interest (or salience) difference, smoking messages should be preferred to non-smoking messages by smokers.

Berkowitz (1965), in a study derived from dissonance theory, hypothesized that dissonance levels will predict communication preference. People with little dissonance were predicted to prefer to communicate with group members holding positions farther from their own, while subjects with high dissonance would seek to communicate with persons sharing attitudes similar to theirs. Subjects were asked their opinion on "mercykilling" and how certain they were of their position using a 7 point likert scale. Subjects were then exposed to either a consonant, mildly discrepant or highly discrepant message, resulting in three levels of dissonance. Subjects in the consonant group necessarily "occupied either one of the two most extreme attitudinal positions on the seven-step" likert continuum, as did subjects in the high dissonance group. Subjects in the high dissonance group were found to have either moved their attitude closer to that of the speaker or indicated a decrease in certainty, as shown by a measurement taken immediately after the exposure. The results were as predicted, but only for the male subjects. No difference was found in the communication preferences expressed by women in the consonant and moderately dissonant conditions.

While the study presents evidence that ordinal dissonance levels, achieved by manipulating exposure to counter-attitudinal messages, can affect the seeking of attitude-consistent information, the results are difficult to interpret. Resembling many dissonance experiments, this study assumed that exposure to attitude-discrepant messages a priori resulted in dissonance, even if the attitudes were of low salience. Certainty was used to measure the success of the manipulation and is a consequence of the manipulation. Certainty was increased or decreased by

exposure to either consonant or discrepant messages. Certainty, as was shown by Canon (1964) in a decision-consistent experiment, while not synonymous dissonance, can affect approach and avoidance behavior. Similarly, the other measure of the success of the manipulation was shift in attitude. A shift in attitude was assumed to imply dissonance arousal, even though it may not. Shifts in attitude are more likely to result when the attitude is not salient (or in Rokeach's terminology, in a peripheral region). That is, the changed attitude does not affect other attitudes. Resistance to change "occurs because elements (attitudes) are intertwined with many other elements so that change in one element may create other dissonant relationships in the cognitive system" (Himmelford and Eagley, 1974: 18). If the attitude is not salient to the person, that is, not connected with other attitudes, attitude change is likely to occur easily, even if dissonance levels are low. In other words, "the greater the isolation" or the lower the salience of the attitude, "the less direct effect will a change in one part of the peripheral region have upon adjacent parts" (Rokeach, 1960: 49). This argument does not discredit the results of Berkowitz's study, it only indicates that we do not know whether the findings are generalizable to issues of high attitudinal salience. Furthermore, the applicability of the findings to situations where subjects were not exposed previously to counter-attitudinal messages is in question. Thus one can question whether the study actually examined the effect of dissonance on selectivity as well as the generalizability to "real world" information seeking and avoiding situations.

The results, however, cannot be easily dismissed because Rhine (1967) also found evidence that different levels of exposure to attitude-

discrepant information can affect subsequent exposure to information. Rhine argued that previous studies had not found evidence of selective exposure because only two levels of dissonance were used. The criticism was applied to both attitude and decision studies. Rhine devised a study to manipulate dissonance level based on exposure to counter-attitudinal messages. Using 161 undergraduate students, he obtained measures of anti-Semitism, preference in the 1964 presidential election between Johnson and Goldwater; conservatism; belief in reports on Goldwater's being Jewish; and 6 other variables. Dissonance levels were varied by first having the subjects state their beliefs about how their candidate would vote on a given issue and were told either 1) they were correct or 2) they were wrong. By altering the number of times the subjects were told they were wrong, "dissonance level" was manipulated. Subjects were then given a list of 12 political pamphlets and asked to choose three to read and to reject three. The pamphlets included consistent and discrepant titles. Two separate analyses were conducted--one for the seek scores (3 titles requested) and one for avoid scores (3 titles rejected). Rhine found that avoid scores for dissonance level differed ($p < .05$), while the difference for seek scores was not significant.

Rhine found the inverted U for the curve of information avoidance, but not information seeking. Subjects in all but the highest dissonance level avoided attitude-discrepant information, while the highest dissonance condition exhibited little discrepant information avoidance. Persons in the lowest dissonance condition did not actively seek or avoid either information type, although avoidance behavior was more pronounced than seeking behavior.

The results indicate that seeking behavior, frequently the dependent variable in selective exposure research, is distinguishable from avoidance. Avoidance behavior, as predicted by selective exposure, is easily accomplished as a passive act. Seeking behavior requires direct action, which, as evidence so far has shown, is difficult to predict. Since dissonance theory predicts both seeking and avoiding curves, the results of Rhine's study cannot be taken as support for the theory.

As earlier noted, a possible explanation for selective exposure is based on the theory of "perceptual sets." Postman, Bruner and McGinnies (1948) found that recognition of words is easy when the words are related to attitudinally salient concepts, but difficult otherwise. This theory would suggest that discrepant information is avoided because it is difficult to visualize or understand. The theory predicts avoidance behavior, but does not predict that attitude-consistent information will be sought. It may be sought, but not because it will be used to reduce dissonance, as Festinger suggests. This theory, then, is not incompatible with other theories, such as "uses and gratifications" theory. That is, information may be sought for numerous reasons--surveillance, relief of boredom, etc., as predicted by Atkin (1973) and Blumber and Katz (1968).

Returning to the study by Berkowitz (1965), it can be said that the results are contradictory to those of Rhine. Rhine found that attitude-discrepant information was avoided, although not strongly, by the low dissonance condition, while Berkowitz found that subjects in the low dissonance condition sought belief discrepant information.

For the highest dissonance condition, Rhine found that discrepant information was sought, while Berkowitz found that attitude-consistent information was sought. The differences can be explained in three possible ways: 1) the high dissonance levels in the two studies, while ordinarily similar, were quantitatively different; 2) one study controlled salience (Rhine) while the other didn't; and 3) Berkowitz's results are an artifact of the certainty variable and manipulation. The first explanation can account only for the difference in the high dissonance group, but not the low dissonance group. The second explanation suggests that different avoidance curves will exist for attitudinally high and low salient information. The third explanation suggests that the shift in attitude observed in the post-exposure situation confounded the definition of consonant and discrepant.

In another mixed model design, Brock and Balloun (1963) differentiated between seeking and avoiding behavior by requiring subjects to either take an active seeking role (button-pushing) or a passive avoidance role (doing nothing). In effect, they conducted four mixed model studies, with the two principle measured variables being cigarette smoking and church attendance. The subjects' habits (cigarette smoking vs. non-smoking; church attendance vs. non-attendance) were first measured, then the subjects were exposed to audio messages overlaid with static, which were either behavior-consistent or discrepant. By pressing a button, the static in the message could momentarily be removed. The dependent variable was the number of times the subjects pressed the button. The results of all four studies indicated that the buttons were pressed more times to clear the static from consonant than

discrepant messages. Additionally, two of the studies tested the utility hypothesis of Sears and Freedman--that discrepant information will be sought if useful. The usefulness of the discrepant information was manipulated by telling subjects that they would be tested about the message after exposure. The manipulation did not result in an increase of button pushing.

While behavior was used as a proxy measure for attitude, it can be assumed that at least one of the behaviors (church attendance) was reflective of an attitude and was salient. For this variable, the findings were stronger than for the cigarette smoking.

Kleck and Wheaton (1967) predicted that 1) subjects would show a greater interest in attitude-consistent than discrepant information; 2) open-minded subjects would prefer consistent information less than close-minded subjects; and 3) public commitment would increase the seeking of attitude-consistent information.

Attitudes toward five issues "relevant to teenage culture" (rock music, minimum driving age, etc.) were measured among a teenage sample, as was dogmatism (Rokeach, 1960). One week following the measurement, the subjects were invited to participate in an "experiment," where median split procedures were used to divide the subjects on the dogmatism measure. The high and low scoring subjects were then randomly assigned to one of two commitment levels, created by asking or not asking the subjects to publicly state their attitudes toward the issues. Subjects were then offered the choice of reading attitude-discrepant or consistent information. The 2x2 design found no significant differences in information preferences as a result of dogmatism. While the results indicated

that high dogmatics had a greater tendency than low dogmatics to seek attitude-consistent information, the results were not significant. Overall interest in attitude-consistent information was found. Public commitment had no effect on information selection.

In another study, Clarke and James (1967) also examined the effect of dogmatism on selective exposure. Their mixed model design also indicates some of the weaknesses inherent in non-experimental laboratory studies. They hypothesized that 1) support-seeking behavior is greater in "social" than private situations; 2) in a social situation, preferences for supportive information are greater for extremely-held beliefs than for moderately-held beliefs; and 3) dogmatism is a positive correlate of selectivity in private conditions, whereas self-esteem is a negative correlate under public conditions. Public and social situations are used synonymously by the researchers. The first hypothesis resembles previous studies concerning information "usefulness," because the social situation was created by asserting that the information would be used for an impending debate or discussion (the same manipulation used by Canon). The second hypothesis shows the difficulties of using measured variables in a laboratory study. Factor analysis has shown that an underlying factor of the dogmatism scale is "insecurity and anxiety over inadequacy" (Vacchiano, Shiffman and Strauss, 1967), which should be similar to the construct of self esteem. While multivariate procedures such as partial correlation or regression could correct this difficulty statistically, the researchers calculated zero-order correlations between the seek scores and the variables. A multivariate approach was not used.

Subject attitudes concerning fifty topics were measured and dogmatism and self-esteem scores obtained. Subjects were then told that they were to participate in a debate, discussion or neither of the two, creating one private and two public conditions. Subjects were then asked to select among consistent or discrepant titles for all fifty topics.

While subjects in the two "public" conditions significantly preferred supportive information, subjects in the private situation were found to show a slight preference for attitude-discrepant information. The results for the private condition may be explained as an interaction of the large number of topics (50) addressed in the study and the characteristics of the private condition. Since the variable manipulated to obtain the three conditions were the same as for "usefulness" in Canon's experiment, the private condition was a low usefulness condition. In the low usefulness condition, attentiveness should be low. With fifty topics, attentiveness should be very low. If subjects were not attentive, one would expect that fifty percent of their choices would be supportive and fifty percent discrepant due to chance alone. The results of the study indicate that 43 percent of the articles were supportive, which is not significantly different from chance (50 percent, $z=.93$) using a significance of proportions test with $N = 27$. Without attention to the titles in the low usefulness condition, the subjects could have selected what they did. Hypothesis 2 was supported in part--extreme beliefs evoked more support seeking than moderately-held beliefs, at least in two of the conditions. Hypothesis 3 found that dogmatism was positively correlated with support seeking in the low useful, but

not in the high useful conditions. Self-esteem was positively correlated with support seeking in one high useful condition, but negatively related in the other. The findings concerning the third hypothesis tend to confirm the finding of Kleck and Wheaton (1967) that dogmatism is a weak predictor of information selectivity, although it can be argued that the observed weakness is the result of reducing the interval level measurement of dogmatism to that of a binary or nominal measurement.

Of the mixed model designs termed contemporaneous research three found unequivocal evidence of selective exposure (Brock; Brock and Balloun; and Kleck and Wheaton). The three remaining studies found evidence of selective exposure in at least the majority of conditions developed (two of three by Berkowitz; five of six by Rhine; and two of three by Clarke and James).

Two of the studies found that "dissonance level" affected information selectivity, although the findings were contradictory. The findings can be explained by the differences in the attitude salience of the topics studied. If the results of the studies are accepted, it can be suggested that low dissonance would not result in the avoidance of attitude-discrepant information when the topic is of low salience, while avoidance will occur if the topic is of high salience. Acceptance of the results would require a modification of dissonance theory. The modification would suggest different curves for different salience levels. The modification would apply only to situations where counter-attitudinal exposure occurred prior to information choices.

The other four studies did not expose subjects to counter-attitudinal messages prior to measuring information selectivity. In three of these

studies, direct findings of selective exposure were obtained. One study, which manipulated information usefulness, suggests that in low usefulness conditions, where topic salience is a random variate, information selectivity will be random.

Recent Mixed Model Research

Schultz (1974), in a study resembling earlier dissonance theory research, measured subjects attitudes on the topic of "opinion change;" obtained self-reports of the interest in the topic; and measured dogmatism. Following these measures, the subjects were given a series of questions to answer on the topic and were told their answers were wrong or right, thereby manipulating the variable of confidence in a manner similar to that reported by Canon (1964). Subjects were then shown two slides simultaneously, one consistent and one discrepant with their attitudes. They were asked to "turn off the less interesting slide and were to examine the remaining slides." The time spent examining the discrepant and consistent slides was the dependent variable. An analysis of variance test indicated that "confidence was unrelated to all measures of selective exposure." A regression analysis revealed that dogmatism had no significant effect, either.

Although this study differed from previous studies by using (or apparently using) dogmatism as an interval variable, it nonetheless still found dogmatism to be a poor predictor of information selectivity. Previous studies used median split procedures, which reduced the variable to a binary. The study also confirms previous findings that confidence is a poor predictor of selectivity.

In a study obtaining contrary findings, Innes (1978) hypothesized that high dogmatics would avoid discrepant information more than low dogmatics. He also hypothesized that discrepant information would be sought under conditions of high usefulness.

The method involved in the study was 1) to measure subjects attitudes toward "liberal arts programs" in college; 2) obtain the subjects' dogmatism scores using the Rokeach scale; and 3) manipulating information usefulness by stating that subjects would or would not have to defend their position. The manipulation and measurement created a 2x2 design (Dogmatism x usefulness). The subjects were finally requested to rate their interest in the titles to seven fictitious articles representing attitude-consistent and discrepant information. The results, contrary to other studies, showed that dogmatism was a significant predictor of information selectivity, with low dogmatics seeking attitude-discrepant information and high dogmatics seeking attitude-consistent information. There was no significant effect for information usefulness nor for the dogmatism-usefulness interaction.

The study contains sufficient design, decision and measurement problems to explain away the findings. Over ten years before this study was conducted, Brock (1965) demonstrated the problems of using article titles when the articles were not visible or available to the subjects. The use of rankings and preference ratings has been criticized by Rhine (1967). Finally, upon re-examination of the data in Innes' report, it can be seen that the scores of eight subjects were discarded because they were not consistent with the scores of the other 48 subjects. Discarding subjects based on this rationale is, by most standards, considered

unacceptable. If the eight subject scores had remained in the analysis, the results may have been very different.

Kleinhesselink and Edwards (1975) hypothesized that subjects would be more attracted to supportive messages that are hard to refute than to easily-refuted, supportive messages. After administering a sixteen item attitude survey to an introductory psychology class, sixty subjects were selected who strongly opposed or strongly supported the legalization of marijuana. Fifteen subjects were assigned to each of four experimental treatments: supportive-difficult to refute; supportive-easily refuted; discrepant-difficult to refute; and discrepant-easily refuted. Speeches were prepared on the topic to represent the four conditions and subjects were exposed to a tape of the speech along with a placebo tape on the topic of imprinting. With a technique similar to that used by Brock and Balloun, subjects were told that they could eliminate static from the tape by pressing a button. The number of times the button was pressed was the dependent variable in a 2x2 factorial design. The subjects attended more to the supportive, difficult-to-refute message and easily refuted discrepant messages more than to the other two conditions, indicating a significant interaction. The main effects were not significant, but an observation of the marginals indicates that an overall preference was observed for the consonant messages ($\bar{x}_C = 10.08$ vs. $\bar{x}_D = 8.76$).

One problem with the research, as it applies to selective exposure, is that findings are generalizable only to situations where the subjects know (or are familiar with) the refutability of the message. In most situations this would require exposure to at least part of the message

(which occurred in the experiment) or having knowledge about the source. As has been previously demonstrated by Wheelless (1974), the source of the message is a good predictor of approach-avoidance behavior. This being so, source is probably an overall better variable than refutability for use in research because it can act as a proxy measure for refutability as well as homophily.

In a cleverly devised study, Atkin (1971) measured the strength, position and direction of attitudes concerning several controversial and electoral topics. "Dummy composite front pages" from a newspaper were prepared, manipulating the amount of space devoted to consonant and discrepant messages about the topics. The results showed that "subjects chose supportive items regardless of their location and length." The finding was that neutral topic articles were selected more often when highly available than when in a low availability position.

Summary of the Mixed Model Research Findings

Of the mixed model studies reviewed, only one (Brodbeck) did not find evidence of selective exposure to attitude-related information. The study by Brodbeck, however, was designed to study the effect of messages on subjects whose confidence was shaken, not selective exposure. The failure to find evidence of selective exposure must be assessed in light of 1) a failure to utilize a measure incorporated into the design (interest); and 2) the fact that no hypothesis concerning selective exposure was tested. The relationship of the study to selective exposure is purely ex post facto.

Seven of the studies have found support for the hypothesis of attitude-consistent selectivity (Adams; Brock and Balloun; Kleck and

Wheaton; Schultz; Innes; Kleinhesselink and Edwards; and Atkin). While criticisms of each study design can be made, the consistency of the findings indicate support for the selective exposure hypothesis. One study (Clarke and James) of attitude-consistent selectivity produced equivocal findings, although the overall results do favor the selective exposure hypothesis.

Two studies which were concerned with the effect of dissonance level on selective exposure also produced equivocal results. The equivocality may be the result of using topics of different salience levels. The importance of the studies must also be weighed in terms of their generalizability. Both studies exposed subjects to counter-attitudinal information prior to measuring message preference. The generalizability of the studies is questioned because cognitive (or mental) set theory would suggest that subjects would, in the real world, not be cognizant of the counter-attitudinal messages. The experimental manipulation results in a "heightened" awareness of the existence of counter-attitudinal information and increases familiarity with the message content. Such exposure, according to the theory, would overcome one of the major obstacles which creates selective exposure--unfamiliarity with discrepant information.

Field Research

Most field studies have found evidence of selective exposure. By the nature of the method, the studies have primarily focused on attitude-consistent selectivity, although a few (e.g., Ehrlick, et al., 1957) have purportedly examined post-decision selectivity. The attitude-consistent studies have focused on topics which have been demonstrated

to be of high salience or high importance, such as presidential and gubernatorial campaigns, televised presidential addresses and political issues like the "War in Vietnam." The importance or salience level has been demonstrated by using samples of political activists, voting intentions and voter turnout. For example, Grupp (1970) studied the information preferences of political activists; Diab (1965) studied media usage among "Pan-Arabic" students; while McCroskey and Prichard (1967) examined exposure patterns to a presidential address on the War in Vietnam among a sample of student "doves" and "hawks." Few of the studies have not found evidence of selective exposure.

Sears and Freedman have suggested that the field findings can be explained as the result of alternative predictors, such as education, race and religion. For example, they suggested that the Schramm and Carter (1959) results, which found that Republicans were twice as likely as Democrats to view a pre-election Republican telethon, can be due to the fact "that Republicans are generally better educated than Democrats, and thus more likely to be in any public affairs audience." They also suggested that information availability may affect exposure patterns.

Atkin (1971) addressed the availability issue in a mixed model study and found that information availability did not affect selectivity. People who were predisposed toward a candidate read articles favoring the candidate regardless of the size or location in a newspaper. Furthermore, Atkin (1970: 8) adjusted for the effect of availability in a number of field studies such as that of Lazarsfeld, Berelson and Gaudet (1948) and showed that even after adjusting for patterns of information availability, selective exposure was found. The results directly contradict the calculations of Sears and Freedman, whose calculations

"were based on marginals from an inappropriate table" (1970: 9). In another re-evaluation, Atkin (1970) demonstrated that Republicans do not attend to more public affairs programs than Democrats, although it is questionable whether the calculations, based on data collected in 1968, can be retroactively applied to the 1958 Knowland telethon studied by Schramm and Carter (1959).

While field studies are frequently correlational, meaning that the directionality of the observed phenomena is unknown, one field method, "the field experiment," establishes controls which allow researchers to infer casual relationships by controlling possible sources of extraneous variance. One of the field experiments on selective exposure was conducted by Stempel (1961), who controlled the education of the sample by drawing from a college student population and manipulated information availability by arranging for equivalent presentations about opposing student government candidates in the campus newspaper. Stempel found that 31 percent of the students preferring a candidate read more information about their candidate, while 1 percent read more about the opponent. The others were exposed to equal amounts for both candidates. The remaining field studies are reviewed below.

Field Research Reviewed by Sears and Freedman

Because these field studies have been reviewed not only by Sears and Freedman (1965, 1967, 1971) but also by Atkin (1970), an extensive review will not be conducted here. The studies are quite familiar to most researchers. Schramm and Carter (1959) observed attendance to the telethon of Senator Knowland. Star and Hughes (1958) studied the dissemination of pro-United Nations propaganda in Cincinnati. Lazarsfeld,

Berelson and Gaudet (1948) studied the usage of campaign information during the 1940 presidential election in Erie County, Ohio. Berelson, Lazarsfeld and McPhee (1954) conducted a similar study in Elmira, New York during the 1948 election. Freedman and Sears (1963) examined preferences for campaign information during the Brown-Nixon gubernatorial campaign in California. All found evidence of selective exposure.

One study (Ehrlich, Guttman, Schonbach and Mills, 1957) merits further examination. The theory underlying the study was dissonance theory. The researchers hypothesized that the purchase of a new car would result in post-decision dissonance, resulting in the avoidance of ads for automobiles other than for the one that was purchased. To test the hypothesis, 125 male residents of Minneapolis were surveyed. Sixty-five of the respondents were new car owners. The subjects were asked to recall recent automobile ads that they had seen using aided recall techniques. The method was similar to "Starching," giving "read all," "read some" or "glanced at" scores. The results showed that new car owners observed ads consonant with their product purchase, more so than did old car owners. Old car owners also showed a slight preference for ads which depicted the model of car that they owned.

While designed to study post-decision dissonance, the study is confounded. The actual purchase decision may have been the result of a pre-existing attitude toward particular makes of cars. The attitude, then, was the antecedent condition to the purchase. Although the researchers concluded that the findings support post-decision dissonance theory, this was not demonstrated. It does, however, present evidence of selective exposure.

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Contemporaneous Field Research

A majority of the nine field studies contemporaneous with the reviews of Sears and Freedman can be called "field experiments." While termed experiments, these studies are frequently faced with the possibility of being "contaminated by uncontrolled environmental variables" (Kerlinger, 1973), affecting history and maturation. Redding (1970) refers to them as quasi-experimental studies for this reason. The study by Stempel (1961), where information availability was manipulated, is an example of this type of field research. It is advantageous over laboratory studies in that it is conducted in the natural environment, but lacks the controls over extraneous sources of variance which experiments have.

Another field experiment was conducted by Lowin (1967). Lowin hypothesized that the inconsistency of selective exposure findings were the result of intervening variables which may shape the selective exposure process. He hypothesized that the successful refutation of a dissonant argument is as functional (from a dissonance theory perspective) as avoidance for belief stability.

Lists of campaign information were sent by mail to subjects whose predispositions concerning the 1964 presidential race had previously been measured. The list was sent with a return postcard listing the literature and a cover letter from a bogus public interest organization. The campaign literature was designed to offer the choice of weak consonant, strong consonant, weak dissonant, and strong dissonant messages. A significant effect for ease of refutation was found and an analysis of the marginals in the tables showed an overall preference for consonant information.

Mills (1965), Mills (1965a) and Mills and Jellison (1968), in three similarly designed studies, examined the relationship between product desirability, product choice and exposure to advertisements, all in the context of dissonance theory. All three studies were disguised as marketing research. Mills (1965) had female subjects rank-order interest in 20 products (shampoo, deodorant, etc.) according to desirability. After ranking the products, certainty was manipulated by offering subjects a choice between their two highest ranked products or the highest and lowest ranked products (creating low certainty and high certainty conditions). The subjects were then asked to rate their interest in reading ads about the products. The ratings showed that interest in consonant information was greater in the low certainty condition ($p < .05$). Interest in dissonant information was lower than in consonant information for both conditions.

While the study was designed to examine the effects of certainty on post-decision dissonance, the decision was defined by the rank-ordering of preferences for products. Since the rank-ordering was based on pre-dispositions to the products, it is better to define the study as being concerned with attitude-consistency, rather than decision-consistency. Using this definition, one can define the lower ranked product ads as being less salient than the higher ranked product ads. As predicted by a salience-based theory of selective exposure, avoidance of low salient materials will not be as marked as with materials of high salience. The results can be interpreted as being consistent with this hypothesis.

Mills (1965a) repeated the previous study using a sample of males. He gave subjects a choice between a high and low rated product or two

low rated products. Commitment was controlled by telling the subjects that they did not have to make up their minds about which product to select immediately. They were asked to read an ad for a low ranked product before deciding which product they wanted. The time spent reading the ad was recorded and used as the dependent variable. The results indicated that the time spent reading in the uncertain condition was greater than in the high certainty condition.

While the study is not on selective exposure per se, since subjects were not allowed to avoid or select a particular ad, the findings are relevant to theories concerning selective exposure. For example, Festinger suggests that information use in the predecisional stage is objective and impartial, not selective. Although information use in this study was called predecisional, it was not objective or equal for both conditions. That is, if the research is viewed as a test of predecision activity, it does not support Festinger's hypothesis. On the other hand, if the study is viewed as being predispositional (because the rank-ordered interest in the products was based on pre-existing attitudes), it can be viewed as supportive of dissonance theory, but only insofar as attitudinal or predispositional matters are concerned. Mills and Jellison (1967) replicated the study and obtained similar results.

The final four studies were correlational. McCroskey and Prichard (1967) measured attitudes toward the war in Vietnam and source attributes of President Johnson ("authoritativeness" and "character"). The student subjects were later asked if they had viewed President Johnson's State of the Union address. Initial attitudes toward the war in Vietnam discriminated between viewers and non-viewers ($p < .05$), while the source attribute variables had no relationship to exposure. The source

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dimensions (attributes) used in this study can be compared with those used by Wheelless (1974a). Wheelless found that certain source attribute variables were related to exposure patterns. Wheelless used several different source attribute variables. Three variables were found to be related to selectivity (homophily, involvement and competence), while three other source variables were found to be unrelated to selectivity (character, composure, and socialability). Both studies found "character" to be a poor predictor. If "authoritativeness" and "competence" are viewed as similar variables, the results for this dimension are contradictory in the two studies.

McGinnies and Rosenbaum (1965) found similar evidence of selective exposure to another Johnson speech. Attitude toward the war in Vietnam was again found to be a significant discriminator among viewers and non-viewers. Greenberg (1965) found that two salience measures, voting commitment and belief in the success of a political campaign, were predictors of selective exposure. Diab (1965) found that Arab students at American University of Beirut who supported "pan-Arabism" read pan-Arabic newspapers and listened to pan-Arabic radio stations. "Neutral" Arab students used neutral media, while "anti-Arab unity" students used anti-Arab unity media. The differences in usage were significant ($p < .001$).

Recent Field Research

All but one of the recent field studies used correlation techniques. Barlett, Drew, Fahle and Watts (1974) conducted a field experiment. Seven days before the 1972 presidential election, they mailed 202

envelopes to registered Democrats and Republicans. The return address on the envelopes read either "Voters for Nixon" or "Voters for McGovern." Each envelope contained a stamped postcard explaining that the purpose of the study was to "see who reads their mail." The subjects were requested to return the postcard. Four conditions were created: two consistent with political registration and two discrepant with registration, formed by the return address x party registration.

From 202 envelopes, 37 postcards (18 percent) were returned. The frequency of returns in the two consonant conditions (Democrats receiving McGovern envelopes and Republicans receiving Nixon envelopes) was almost twice as high as in the dissonant conditions. The difference was significant.

Although the findings are consistent with selective exposure, there was a significantly greater return rate among Republicans than Democrats. The difference can be explained by noting that party affiliation was used as a proxy measure for candidate preference. Since many Democrats did not prefer McGovern, envelopes that were assumed to be consonant may have been discrepant. The problem, which is indicative of the problems with field experiments, is that several alternative variables could explain the result: Democrats are more likely to move from one residence to another than Republicans (resulting in a disruption of mail) or simply that Republicans tend to be better educated than Democrats, and, therefore, tend to read more, including their mail.

Kaid and Hirsch (1973) examined the political composition of an audience attending a political rally for Senator Muskie. One hundred and ninety-eight of the persons attending the rally (approximately 20 percent of the total audience) were asked their party affiliation. The

responses indicated that 52.3 percent were Democrats and 47.7 percent indicated that they did not think of themselves as Democrats (12.2 percent were Republicans; 35.5 percent were independents). Based on these results, the researchers rejected the idea that selective exposure was operating at the rally.

Looking at it another way, significantly more Democrats attended the rally than Republicans (52.3 percent vs. 12.2 percent). The existence of selective exposure can be rejected only if: 1) the Republicans and independents have negative attitudes toward Muskie; or 2) the independents are assumed to be Republicans, whereby party affiliation becomes a proxy measure for candidate preference. In reference to assumption 1, attitudes toward Muskie were not used to assess selective exposure. It may be that independents and Republicans liked Muskie, while the Democrats did not (or any other combination). Second, as Backstrom and Hirsch (1963: 103) have shown, many independents actually have party preferences. Independents consistently support and vote for only one party while never declaring party affiliation. Thus, the independents may have been "closet" Democrats. Needless to say, the conclusions reached by Kaid and Hirsch can be accepted only with extreme reservations.

Another field study of selective exposure at a public event was conducted by Rosenbaum and McGinnies (1973). Rosenbaum and McGinnies surveyed students who entered a room to hear either pro-Israel or pro-Arab lectures. The students were asked whether they sympathized with the Israelis, Arabs or neither side. The results showed that "a preponderance of students who were inclined to support Israel "attend the pro-Israel lecture," while "more pro-Arab students attended the pro-Arab" lecture. The differences were significant.

Rosenbaum, Rosenbaum and McGinnies (1974) replicated the study of McGinnies and Rosenbaum (1965). They found that predispositions toward the war in Vietnam significantly discriminated between viewers and non-viewers of a televised presidential address concerning the war in Vietnam.

The field studies which have not found selective exposure operating were concerned with broadcast advertising and televised political conventions. Surlin and Gordon (1974) examined exposure patterns to televised political ads and found no exposure patterns due to candidate preference or party affiliation. Evidence of selective retention was obtained. Atkin, Bowen, et al. (1972) found that the major determinant of exposure to political ads among Wisconsin and Colorado voters in gubernatorial campaigns was the amount of time spent viewing television, not attitude or party affiliation. Most avoidance was found to be based on the perceived boredom of the ads. One-half of the respondents said they watched the televised political ads because "they can't avoid them."

The respondents' comments indicate that televised political advertising may create forced exposure situations. Unlike newspaper or magazine advertising, which allows people to select the ads or materials which they desire to read, television removes from the viewer the choice of selecting or avoiding the ads. Previous laboratory studies relevant to forced exposure situations were conducted by Donahew and Palmgreen (1971) and Donahew, Parker, et al. (1972), who found that arousal and stress increase under forced exposure situations. The increased stress and decrease of concentration (at least for high dogmatic subjects) during forced exposure situations can account for the findings of selective retention obtained by Surlin and Gordon.

Atkin and Herald (1976) examined exposure patterns to televised political advertising among 323 mid-Michigan voters. The correlation between Democratic partisanship and the number of Democratic TV ads viewed was only +.11. Persons preferring the Democratic candidate also had a +.09 correlation with viewing Republican ads. The correlations show that selective exposure was inoperative. Atkin (1970) examined the audience composition of persons viewing the 1968 Republican National Convention on television (N = 1293). Although the difference in viewing patterns between Democrats and Republicans was significant using a chi-square test (60% vs. 70%), the fact that over half of all registered Democrats viewed the convention suggests that the findings should be accepted as validation of the selective exposure hypothesis only with reservations.

One thing to note about the televised coverage of the Republican and Democratic National Conventions is its pervasiveness. All three national networks carry the conventions in prime-time, as does the Canadian Broadcasting Corporation. For example, in 1976 coverage of the Republican National Convention began on NBC at 7 p.m.; CBS at 7:30 p.m.; and ABC at 9 p.m. for several days straight. Since most markets have only three TV stations, avoidance of the convention would have required the complete avoidance of the television medium in prime-time (TV Guide, Aug. 14-20, 1976). Democratic viewers were faced with one of two possibilities: avoiding the medium for an extended period of time or being exposed to a dissonant message. To an extent, therefore, one could define the situation as one of forced exposure.

This can be contrasted with the findings of O'Keefe and Mendelson (1976). Using a panel of 2000 eligible voters in Ohio, they found that

McGovern voters were exposed to the televised Watergate hearings more than Nixon voters ($F = 11.1, p < .01$). They also found no exposure differences between low interest McGovern voters and low interest Nixon voters.

Exposure opportunities to the Watergate hearings and the Republican National Convention can be compared. The Watergate hearings were carried during daytime hours on the national networks and were replayed on public television stations in the evening. Shortly after the first Watergate hearings began, the networks began rotating coverage. Only one network carried the hearings at a time (Wotring and LeRoy, 1974). This gave viewers the choice of alternative programming, which allowed for information selectivity or selective exposure. Furthermore, exposure to the hearings required specific action on the part of viewers (tuning to a PBS station or being available during daytime "feed" hours), while exposure to the Convention coverage required only habitual (or passive) activity (such as turning on the TV in prime-time). The finding that low interest Nixon and McGovern voters had similar exposure patterns supports the theory of topic salience or importance in the selective exposure process.

These televised political events can be contrasted to televised political advertising. While the ads, like the Republican Convention, are ubiquitous, the amount of potentially dissonance-arousing content in the ads must be questioned. Nimmo (1970) and McGinniss (1969) have argued that political advertising contains little issue-oriented information and is designed to familiarize voters with the candidate's name, not his position on issues. Many candidates also "play down" party

affiliation. If candidates at the beginning of a campaign are unfamiliar to most voters, the attitudes of the voters toward the candidates should also be neutral. The extraneous variables which would initially influence the attitudes of voters should theoretically be the candidate's party affiliation and the candidate's position on issues. If both of these sources of dissonance are removed from the ads for the candidate, avoidance behavior should be minimal. This is an alternative explanation for the failure to find selective exposure to political advertising.

The above discussion raises the issue of familiarity. To know that a message will be counter-attitudinal requires familiarity with it. Familiarity requires exposure. Dissonance theory, to be operative, seems to suggest that people will have had previous contact with dissonant messages before avoidance would occur. But what of situations where prior exposure to dissonant sources or messages has not occurred? For example, how many people have been exposed to counter-attitudinal messages and sources concerning such topics as the space program, euthanasia, wire-tapping, and the heredity-environment debate, all of which have been used in previous studies?

A perceptual set approach to selective exposure would suggest that people are oblivious to counter-attitudinal (and probably even attitude-consistent) messages concerning such topics. Attitude salience and familiarity would be variables affecting the selection of one or more messages from the infinite number of messages on an infinite number of topics that are available. While a topic, such as a political campaign, may be of high salience, voters may be unfamiliar with one or more of the candidates in the race. Perceptual set theory would suggest

that familiarity with a candidate (or a candidate's existence) is necessary before any messages of the candidate would be selected from among competing messages. By overcoming the familiarity problem using a media blitz, candidates can overcome one of the major determinants of selective exposure to other campaign information.

Grupp (1970) hypothesized that attention to TV news by political activists is correlated with the activists' satisfaction with news events and that TV news is more likely to be avoided than radio news. The respondents in the study were all members of either the John Birch Society of Americans for Democratic Action, a conservative and liberal organization, respectively. The study found that attentiveness to TV news decreases as dissatisfaction with governmental policy increases. While this is true for both Birchers and ADAers, it was more pronounced among the conservatives. Attentiveness to radio does not decline, but increases. The dissatisfied activists use radio because politically consonant newscasters are found on that medium (i.e., avowedly conservative and liberal newscasters), unlike on television. Another study by Grupp (1969) found similar exposure patterns in magazine usage.

Chaffee and McLeod (1973) surveyed 240 Wisconsin voters, asking who the respondents were voting for in the gubernatorial and Senatorial election and how frequently the respondents discussed the campaign. Following completion of the survey, respondents were offered the choice of consonant, dissonant, or neutral (League of Women Voters) information. In all breakdowns, the respondents preferred consonant over dissonant information, although neutral information was preferred over all other types. While the researchers submit their findings as evidence of

selective exposure, they reject a dissonance interpretation. They suggest that the information preferences were a social artifact. That is, high discussion resulted in higher consonant information seeking. They argue that appearing knowledgeable and using information in peer interactions can be a determinant of selectivity. While this "uses and gratifications" approach can explain the findings, so can a salience interpretation. If the campaign topics are frequently discussed, they can be assumed to be of high salience. As previously stated, topics of high salience should result in the avoidance of discrepant information (not consonance seeking), which was found.

The final study to be reviewed is the first study to examine the selective exposure hypothesis in the context of the "television and aggressive behavior" debate. The panel study by Atkin, Greenberg, et al. (1979) found evidence of "selective exposure to television programming which is compatible with aggressive attitudinal predispositions" (p. 11). Using a cross-logged design, they found that children (N = 227) who had high aggressive predispositions tended to view programs with high aggressive content more than persons with low aggressive predispositions. The findings parallel previous research concerning aggressive behavior and television which has been widely reported (Comstock and Rubenstein, 1972).

While the findings can be used as support for the selective exposure hypothesis, the findings do not contribute substantially to any theory of selective exposure. The study did not examine exposure in the context of a specific cognitive theory and the researchers have themselves suggested numerous alternative explanations for the findings: intrinsic tastes for heavy action as an art form; role-modeling; entertainment value; as well as reinforcement.

Summary of Field Research Findings

No field research supports a decision-consistent theory of selective exposure. Where evidence has been presented in support of such a theory (Ehrlich, et al., 1957), it has been confounded with antecedent attitudes. Of evidence existing in support of selective exposure, it has been on attitude-consistent selectivity.

These findings tend to reject at least part of dissonance theory--the part that suggests that post-decisional situations result in the seeking of decision-consistent information. Three studies (Mills, 1965; Mills, 1965a; and Mills and Jellison, 1967) can be interpreted as supporting an attitude-consistent definition of selective exposure, while serving as disconfirmation of the prediction of dissonance theory.

The results of the remaining field studies on attitude-consistent selective exposure were as follows:

<u>A</u>	Time Period	<u>C</u>
<u>A</u>	<u>B</u>	<u>C</u>
	<u>Supportive Selective Exposure</u>	
Schramm and Carter Star and Hughes Lazarsfeld, Berelson and Gaudet Ehrlich, <u>et al.</u> Berelson, Lazarsfeld and McPhee Freedman and Sears	McCroskey & Prichard McGinnies & Rosenbaum Diab Greenberg Stempel	Rosenbaum, <u>et al.</u> (1974) Bartlett, <u>et al.</u> Grupp (1969) Grupp (1970) Rosenbaum and McGinnies Chaffee and McLeod Atkin, Greenberg, <u>et al.</u> O'Keefe and Mendelson
	<u>No Evidence of Selective Exposure</u>	
	<u>Equivocal</u>	Kaid and Hirsch Surlin and Gordon Atkin and Herald Atkin, Bowen, <u>et al.</u>
	Lowin	Atkin (1970)

Note: Time periods (A, B, C) are defined in Table 1.

Of the four studies which found no evidence of selective exposure, one (Kaid and Hirsch) severely lacks validity. "Independent" political registration was assumed to be synonymous with a negative attitude toward a Democratic candidate, although evidence has shown that it does not mean this. If actual or declared party affiliations are used as proxy measures for attitude, the results indicate that Democrats outnumbered Republicans at the Democratic rally by a 4-to-1 margin, giving support to the selective exposure hypothesis. The remaining three studies (Surlin and Gordon; Atkin and Herald; and Atkin, Bowen, et al.) found no selective exposure to broadcast political advertising. Two reasons why broadcast political advertising may not be subject to selective exposure are:

- 1) political advertising attempts to avoid the presentation of potentially discrepant information; and
- 2) broadcast political advertising creates forced exposure situations.

The equivocal findings of Atkin and Lowin give some support to the selective exposure hypothesis. Atkin found that significantly more Republicans viewed a televised Republican convention than Democrats, even though a majority of Democrats did attend to the convention. As with political advertising, the televised convention may be defined as a situation of forced exposure. Lowin found that ease-of-refutation can affect selective exposure, although overall preferences for consonant information were found. An evaluation of the tabled responses in Lowin's study (1967: 7) indicate that 85 subjects preferred consonant information while 36 subjects preferred discrepant information. The difference is significant ($\chi^2 = 19.8$, d.f. = 1, $p < .001$).

In summary: in all field studies where selective exposure could be expected to operate, it was found.

An Overall Summary of Selective Exposure Research

Attitudes are learned from other persons, sources or experience. Salient attitudes which are learned from particular sources would tend to create familiarity with that source. Familiarity with a source may be necessary to attract attention to (and finally the selection of) a message. Evidence that source homophily can predict exposure patterns exists (Wheless, 1974). Familiarity is a prerequisite to homophily. As Tannenbaum (1971: 315) has noted, a message must attract the attention of the audience before it is selected. That is, it must raise the threshold of attention to that message over all other competing messages in order for it to be selected. If the message fails to gain the attention of a potential recipient, it will not be selected. Messages on topics of low salience or which are unfamiliar will not be selected. In field research, failure to select a message will appear as avoidance behavior.

In laboratory studies, offering subjects the choice of only two stimuli calls attention to messages which in natural settings would go unnoticed. Furthermore, in the real world, it can be argued, avoidance of both messages (consistent and discrepant) would occur. Subjects would select a message concerning a topic of greater salience or of greater familiarity. In experiments and mixed model designs, where subjects are exposed to a discrepant message (in an attempt to manipulate "dissonance level"), the result is increased familiarity with the discrepant message. The increased familiarity could result in the subsequent selection of a similar message, even if the message is discrepant. Using this theoretical approach, it is little wonder that equivocal findings are obtained in such studies.

What is suggested by this is that perceptual set theory may be able to explain selective exposure. While previous studies of selective exposure have been based on dissonance theory, an alternative theoretical explanation can be proposed. Components of the theory would include the variables (or constructs) of attitude salience, familiarity, and homophily.

As has been previously shown, two different types of selective exposure have been studied: decision-consistent and attitude-consistent selectivity. No support was found for a theory of decision-consistent selective exposure.

Attitude-consistent selectivity has been studied in relation to topics of high and low attitudinal salience (importance). When laboratory studies have examined topics of low salience, inconsistent findings of selective exposure have been obtained. When topics of high attitudinal salience have been used in studies, findings of selective exposure have been consistently obtained.

Furthermore, evidence does suggest that exposure to counter-attitudinal messages concerning topics of high attitudinal salience results in stress (Donahew and Palmgreen, 1971) and selective perception (Surlin and Gordon, 1974). These results give some support to dissonance theory. While dissonance theory also suggests that post-decisional situations and topics of low attitudinal salience will result in consonant information seeking, no evidence has been obtained to support this portion of the theory. The results suggest that only high salience topics will result in avoidance behavior. Because topics of low attitudinal salience are not perceived as being closely related to attitudes which are of high salience, little dissonance would be produced by exposure to such

counter-attitudinal messages. That is, knowledge bits concerning topics of low attitudinal salience are not seen as relevant to other cognitions. Thus no major "disequilibrium" occurs.

Approaching the salience issue from the perspective of perceptual sets, it can be argued that exposure to information concerning topics of low salience rarely occurs in the real world and that such information may possibly not even be perceived.

An alternative theoretical explanation is perhaps preferable to the continual modification of dissonance theory, which has been suggested as necessary if it is to explain the findings reported herein. Even with the modifications, it is questionable whether the theory and findings will be compatible. One has only to think of Ptolemaic theory to note the problem of continually modifying a theory by adding equants and epicycles.

CHAPTER III

PERCEPTUAL SET THEORY AND OTHER RESEARCH APPROACHES

A verified hypothesis may support more than one theory (Kelly, 1955). The review of attitude-consistent selective exposure research suggests that the hypotheses verified by the research, while derived from dissonance theory, can also serve to validate perceptual set theory. Unlike dissonance theory, which predicts avoidance of attitude-discrepant information by people in order to maintain balanced, relational cognitions, perceptual set theory suggests that attention thresholds for certain elements (or information) are heightened, and the subsequent selection of these elements is of greater likelihood than the selection of elements of a lower attention threshold. Perceptual threshold research on selective perception, a construct related to selective exposure (Abelson, 1968), tends to verify the predictions of set theory, but not those of dissonance theory.

Prior to the formalization of dissonance theory by Festinger (1957), McGinnies and Sherman (1952) hypothesized the existence of a "perceptual defense mechanism" against "contra-valuant" information. This hypothesis can be described as a primitive formulation of dissonance theory, suggesting that cognitive mechanisms screen out dissonant information. The screening process makes contra-valuant information (or words) more difficult to perceive than either neutral or attitude-consistent information

(or words). To test this hypothesis, an experiment was conducted. The experiment consisted of the presentation of neutral and contra-valuant words tachistoscopically and the measurement of the thresholds of recognition for the words. The subjects were presented with a preparatory word (e.g., rider, luck, etc.), followed by the tachistoscope presentation. The subjects were asked to identify the tachistoscopically presented words. The results indicated that subjects could more rapidly recognize neutral than contra-valuant words. This was interpreted as supporting the theory of a perceptual defense mechanism.

Taylor and Forrest (1966) suggested that the findings were not due to a perceptual defense mechanism, but to a set established by the preparatory words presented to the subjects. They argued that the method established a perceptual set (or expectation) for neutral words, which increased the threshold of attention for these words, but not the contra-valuant words. To test this rival hypothesis, subjects were set for either the presentation of neutral or contra-valuant words during the preparatory period. The results showed that contra-valuant words were recognized as rapidly as the neutral words after a set for the contra-valuant words was established. The results suggest that sets affect perception, not a cognitive screening or defense mechanism as consistency theory suggests.

Bruner (1958) has suggested that the operation of sets is necessary because of inherent human inabilities to perceive and process large chunks of information. Selective perception of attention occurs for this reason, not because of dissonance-avoidance behavior or defense mechanisms. As Bruner notes, "in most instances there are more things

to notice than one can possibly register upon" (1958: 86). In order to effectively and efficiently perceive and process information, humans must focus on only one or a few elements in the environment at one time. Attempting to simultaneously focus on several elements results in an information overload, limiting the effectiveness of the perception and creating cognitive strain.

A study of Postman and Bruner (1949) has given support to the perceptual set theory prediction that processing effectiveness is hampered during multiple set processing. A multiple set is defined by Postman and Bruner as a perceptual readiness to react alternatively to several elements of information. A single set is characterized by a readiness to perceive one circumscribed, clearly defined element in the environment. A single set characterized the experiment of Kulpe (1904) which was discussed in the Introduction. The experiment showed that a single set limits the perception of other elements in the environment when subjects are prepared to perceive one specific element among many. The subjects were unable to perceive or identify other elements in the environment when looking for the one element.

Postman and Bruner hypothesized that an impoverishment of perception occurs during multiple set processing. To test the hypothesis, two experimental conditions were created: a single set and a multiple set condition. To create the single set condition, the researchers instructed the 20 student subjects to look for one circumscribed class of stimulus objects (color words) among word-pairs presented tachistoscopically. Subjects in the single set condition were asked to find and report a "color" word (e.g., yellow, brown), while multiple set subjects were asked to find and report either a color word or a "food" word

(e.g., bacon, salad) in each pair. Each word-pair contained either a food word or a color word, but not both (e.g., green-rock; bacon-stone; height-brown). The results showed that under multiple set, the time necessary to recognize the set words was significantly longer than in the single set condition ($F = 5.05$; $df = 1, 19$; $p < .05$). The results led to the conclusion that single set perception occurs because as the number of elements perceived increases, perception becomes increasingly impaired. Selective attention or selective perception occur because of the human inability to process large and disparate amounts of information at one time.

Although single set perception is the most efficient method of perceiving environmental elements, sets used for perceiving the environment shift. Sets can be affected by emotional and physiological factors, expectations, experiences and attitudes (Postman and Schneider, 1951). Organic sets, created by physiological and emotional conditions, change hourly. A classic study by Sanford (1936), using a repeated measure design, showed that hunger can affect the perception of ambiguous drawings. When hungry, subjects interpreted drawings as being food related significantly more often than when not hungry. While organic sets change rapidly, as does their effect on perception, most other sets can be termed lasting or "fixed" sets (Uznadze, 1966). The history of set theory research suggests that experimentally created sets (expectancies) are generalized or learned, as are attitudes. These sets affect perception of the environment. A review of the literature demonstrates how these diverse affectors of set are related.

Rees and Israel (1935) conducted a series of (five) experiments to determine the effects of preparatory set on problem solving.

One-hundred and eighty-two student subjects were assigned to one of three conditions: 1) an "eating" set condition; 2) a "nature" set condition; and 3) a control condition. The two set conditions were established by telling subjects that the solutions to a number of tachistoscopically presented anagrams were nature or eating-related words. No specific set was established for the control group. The subjects were then exposed to the anagrams and their solution times recorded. Examples of the anagrams used included "esitd," which could be solved for diets (eating word), tides (nature word), edits or deist; and "altpe," which could be solved for plate, petal, pleat or leapt. The majority of anagram solutions obtained for each set condition corresponded to the established preparatory set (i.e., subjects in the eating word set arrived at significantly more eating related solutions than subjects in the nature or control conditions). Subjects in the control condition also took longer to solve the anagrams than did subjects in the two set conditions.

The results suggest that an expectancy or preparatory set can affect perception, limiting the recognition of words (or objects) to that expected by the set. The experiment, however, does not demonstrate that sets are enduring, which attitudes by definition are, or that sets are established by other than experimental manipulation.

Siipola (1935) extended the research of Rees and Israel, demonstrating that experimentally established sets are learned and can affect perception beyond the limited period of an experiment. Siipola, like Rees and Israel, told subjects that animal words (Condition A) or transportation words (Condition B) could be found among several tachistoscopically presented words. Included with the presented words were

ambiguous items such as "sael." The subjects were asked to report the words that they perceived. The results across all of the ambiguous items indicated that the perceptions of the subjects corresponded to their expectancy sets. "Sael" was perceived as either seal or sail, depending on the set condition. While this portion of the study is subject to the same limitations as the Rees and Israel experiment, a subsequent experiment conducted by Siipola using the same subjects indicated that the expectancy set created in the above experiment had an enduring effect on subsequent perceptions. During a second experimental session, the subjects were provided with incomplete skeleton words such as _oat, __bin, and ho___, which the subjects were asked to complete. Subjects originally in Condition A tended to complete such skeleton words as goat, robin and horse, while subjects originally assigned to Condition B completed the words as boat, cabin and hotel, suggesting that sets established under one condition are learned and generalized to subsequent similar conditions. An experiment conducted by Uznadze (1966) showed that experimentally induced sets do not "disappear even 2 to 3 months after the first day of fixation" (1966: 53).

The experiments of Uznadze (1966) were modeled after an experiment conducted by Leeper (1935). Leeper showed that a set established by perception affects subsequent perceptual tasks. In Leeper's experiment, subjects were exposed to either a one field or two field (optical illusion) drawing. Following the initial exposure, the subjects originally exposed to the one field drawing were unable to identify a second field in the two field drawing, while subjects originally exposed to the two field drawing continued to see a second field in the one

field drawing, where none existed. The results suggest that a perceptual set prevents people from easily "seeing any different sensory organization" than that originally established by the set.

Luchins (1942) extended these results to more complex behaviors. In his experiment, subjects were provided with an initial series of problems which could only be solved by using derivations of one complex method. When subjects encountered later problems which could be solved with a very simple direct method, they continued to use the complex method. Post-experimental interviews were conducted with the subjects. One question asked of the subjects was why they had used the complex solution method for the simple problems. The most frequently obtained answer was that they were "unable to see the simple solution."

The above experiments demonstrate that expectancy and learning sets are related phenomena. The sets established by manipulation in experimental conditions are used to process information when subsequent similar conditions are encountered. Bruner (1958) suggests that sets are repeatedly used to "recode into simpler form the diversity of events that are encountered so that our limited attention span and memory" can be protected from overload. The information recoding serves an economy function but also leads to a loss of information. The information loss is frequently defined as selective perception. The above experiments, while indicating that certain types of sets affect perception, do not demonstrate that attitudinal sets exist or, if they do exist, affect perception. There are reasons to believe that attitudes affect perception, since attitudes, like experimental sets, are learned. Attitudes are "a learned predisposition to respond in a consistently favorable or unfavorable manner with respect to a given object" (Fishbein and Ajzen, 1975).

Familiarity, homophily and importance (salience) can all be termed "attitudinal components." Fishbein and Ajzen (1975) suggest that the term attitude be used to describe all such concepts even though numerous attempts have been made to distinguish among different types of attitudes (Rokeach, 1968; Katz, 1960). They suggest that the attempts to distinguish between different types of attitudes have failed to show that the attitudinal constructs given different names (values, needs, etc.) "obey different scientific laws" (1975: 11-12). The only psychological concept distinguishable from an attitude, according to Fishbein and Ajzen, is a belief. While an attitude is determined by locating subjects on a bipolar evaluative dimension vis-a-vis a given object or source, a belief is a subject's linking of a person or object to another attribute. For example, having a subject identify the political position of a source on a bipolar liberal-conservative scale would constitute a belief measurement, although having the same subject identify his own political position on the same bipolar scale would constitute an attitude measurement.

Familiarity has been shown to be a component of the concept of attitude by Zajonc (1968), who showed that familiarity underlies bipolar (positive-negative) evaluations by subjects. The adages "familiarity breeds contempt" and "absence makes the heart grow fonder" were suggested by Zajonc to reflect the bipolar evaluative dimension of the construct. The first adage suggests a negative evaluative dimension while the second adage suggests a positive evaluative dimension. Zajonc conducted a series of experiments where familiarity with nonsense words was manipulated. Zajonc exposed subjects to the

nonsense words one or more times and then had subjects evaluate dummy ads which used the nonsense words as brand names. He found that subjects tended to more positively evaluate the ads when they were highly familiar with the nonsense names than when not. The experiment is probably limited in its generalizability, however, because most real world exposures to information result in an increase in information beyond just the brand name. That is, most media information will contain additional information such as product attributes which can also be used to make positive or negative evaluations of the brand.

Fishbein and Ajzen suggest that importance or salience, which they use interchangeably, are attitudinal constructs reflected in bipolar evaluations. They suggest that "highly positive and highly negative attitudes will tend to be perceived as important" (1975: 221). Homophily, frequently termed "attitude toward a communicator" (Kelman and Eagley, 1965) or "communicator-communicatee similarity" (Berscheid, 1966), has been a principal construct in attitude change/persuasion research (Hovland, Janis and Kelly, 1953). For these reasons, set theory research involving these three constructs can be termed "attitudinal set research" which distinguishes it from organic and experimental set research.

In communication research, homophily has typically been defined as source receiver similarity (McCroskey, Richmond and Daly, 1975). The measurement of homophily has taken a variety of forms. Field researchers have measured homophily by using coders, who judge the degree of source-receiver similarity using a coding form (Rogers and Shoemaker, 1971). Several laboratory studies have used this operationalization.

Other researchers have asked a number of persons to complete scales about themselves. The researchers then compare the responses of the subjects, and define homophily as the degree of similarity in the responses. This approach is most frequently used in interpersonal communication research (Byrne, 1961). Other researchers have operationalized homophily by asking subjects to complete separate scales about themselves and other persons. The scales are compared and used to define the degree of homophily between the persons evaluated. This approach to defining homophily can be termed "perceived homophily" because it relies on the beliefs of subjects about other persons, not the objective coding standards of judges.

McCroskey, Richmond and Daly (1975) developed a scale to measure perceived homophily. A factor analysis of subjects responses on the scale suggests that the concept of homophily is multi-dimensional. The dimensions of the scale include attitudes, values, appearance and background. Since the development of the scale, perceived homophily and homophily have become synonymous terms, principally because the beliefs of people have been shown to be more important in evaluation than the objective standards of judges (Anderson and Mancillas, 1978). In mass communication research, perceived homophily has become synonymous with homophily because the other methods of definition are either impractical (such as having mass communication sources complete scales about themselves) or irrelevant because the receiver of a media message, unlike the receiver in a small group or interpersonal communication situation, is the sole determiner of exposure to messages.

In one of the early studies of object perception and attitudes, Dearborn (1898) conducted an investigation using ink blots as stimulus

units. Data were collected by Dearborn on the life experiences of his subjects, including their familiarity with animal forms, mythology, and fairy tales, as well as their occupations, habits and hobbies. Before conducting the actual investigation, the physiological "normality" of each subject was established, controlling for the effects of organic sets, later shown by Sandord (1936) to affect perception. During the investigation each subject was asked to observe an ink blot card and report each concrete object perceived as concisely as possible. Dearborn found that the reports of subjects were based on attribute salience and familiarity with the objects perceived in the ink blots.

McClelland and Liberman (1949) measured subjects' attitudes toward achievement on their "n Achievement test." Based on the test scores, subjects were assigned to one of two categories: high (positive) achievers and low (negative) achievers. All of the subjects were exposed to positive, negative, and neutral achievement words in a tachistoscopic presentation. The words in the presentation included:

<u>Positive Achievement</u>	<u>Negative Achievement</u>	<u>Neutral Achievement</u>
achieve	unable	window
compete	failure	neutral
success	obstacle	western

The dependent measure in the investigation was rapidity of recognition or perceptual threshold. The investigators found that positive achievers recognized the positive achievement words more rapidly than negative achievers, although negative achievers did not recognize the negative words more rapidly than positive achievers. The latter result may be due to instrumentation: a negative achievement score does not indicate

that subjects have positive attitudes toward failure, but rather that they do not favor competition or success as defined by the instrument. Nonetheless, the results do suggest that positive attitudes toward an attitude do affect the perceptual threshold for the attribute.

A study by Postman, Bruner and McGinnies (1948), cites in the review of selective exposure research, suggests that a different perceptual threshold exists for values of different salience levels. The researchers measured their subjects attitudes using the Allport-Vernon Values Scale. Stimulus words representing the six value categories were later shown to the subjects by tachistoscope. The time necessary for each subject to accurately identify the words was recorded. The results showed that the attitude and recognition scores were closely associated. Attitudes of greater importance or high value were more rapidly recognized than words of low value.

Howes and Solomon (1951) suggested that the findings of Postman, Bruner and McGinnies were spurious, arguing that subject familiarity with the stimulus words could account for the findings. They hypothesized that subjects should be more familiar with frequently used words and thus able to recognize them more rapidly than less frequently used words. To determine if familiarity and perceptual threshold were related, the investigation of Postman, Bruner and McGinnies was replicated using word familiarity rather than value salience as the independent variable. Word frequencies were obtained from the Thorndike-Lorge word frequency scale, with the selected words ranging from those rarely used to those frequently used. The words were tachistoscopically presented to the subjects and the recognition durations recorded. Correlations ranging

from .68 to .75 between familiarity and perceptual threshold were obtained. The researchers suggested that familiarity was the major determinant of perceptual threshold, not value salience as suggested by Postman, Bruner and McGinnies.

Postman and Schneider (1951) extended the studies of Postman, Bruner and McGinnies (1948) and Howes and Solomon (1951), by controlling familiarity and value salience in the same investigation. The attitudes of subjects were measured using the Allport-Vernon Scale, while simultaneously controlling the familiarity of words reflecting the different value saliences. The Thorndike-Lorge scale was used to select frequently and rarely used words along each of the six value ranks, resulting in a 2x6 factorial design. An analysis of variance test using perceptual threshold as the dependent variable obtained a significant interaction between familiarity and value salience, suggesting why each of the two previous investigations had obtained significant, non-spurious results.

The investigation was replicated by Solomon and Howes (1951). While not obtaining a significant interaction between value salience and familiarity, they did find a general tendency in the data which supported Postman and Schneider's findings: the mean duration threshold for the highest three value ranks was slightly lower than the mean duration threshold for the lowest three ranks both for the frequent and infrequent words. The difference between the mean duration thresholds for infrequent words of ranks one and six were significant at the .05 level, as was the F-ratio for familiarity. The familiarity variable explained the greatest variance in perceptual threshold.

The research concerning sets and perception found two significant attitudinal predictors which were also shown to be predictors of selective exposure. From the perspective of both perceptual set and cognitive consistency (dissonance) theory, one would expect to find similar variables capable of predicting selective registration, perception and exposure because these selectivity phenomena are related constructs (Abelson, 1968). The two significant predictors were familiarity and salience. A third variable, homophily, found to be a significant predictor in selective exposure research, was not examined in any of the perceptual set investigations.

Although the research and theory suggest that perception and exposure are related phenomena, a gap exists in the theory concerning the question of when perception of recognition of information will lead to actual exposure. While theory suggests that the perception of information is a requisite to subsequent information selection (or usage), perceptual set theory offers no explanation of when or under what circumstances perception will lead to information selection (or usage). This theoretical gap seems to be filled by the "uses and gratifications" approach.

Uses and Gratifications Research

Uses and gratifications research, like selective exposure research, has been principally confined to the study of mass communication, as opposed to small group, interpersonal or public communication. Greenberg (1974); Katz, Gurevitch and Haas (1973); and Becker (1979) have all restricted their uses and gratifications research to mass media, which they operationally define as books, cinema, television, radio, magazines

and newspapers. Johnstone (1974) and Adoni (1979) include records in the definition. Selective exposure research has also been associated with the study of mass communication because, as Schramm (1973) suggests, selective exposure is possible in mass communication situations but not small group or interpersonal communication situations because social norms make it "hard to tune out face-to-face communication" (1973: 119). Relatively few studies of selective exposure have used public, small group or interpersonal communication situations. Kaid and Hirsch (1973) examined selective exposure to public communications. Brodbeck (1956) and Berkowitz (1965) examined selective exposure in small group and interpersonal communication situations. None of these studies found straightforward evidence of selective exposure, partly for the reasons cited in the review of selective exposure research and partly because of the probable inapplicability of the selective exposure hypothesis to non-mass communication situations.

Where attitude-consistent selective exposure has been investigated as a mass communication phenomenon using investigational or field research techniques, straightforward evidence of selective exposure has emerged. Grupp (1969) examined selective exposure to magazines. Grupp (1970) examined selective exposure to radio newscasts. Atkin (1971) examined selective exposure to newspaper articles. McCroskey and Prichard (1967) examined selective exposure to television programs. All found evidence of selective exposure. The only media not examined in selective exposure research have been books and cinema, using the operational definition of media employed by Katz, Gurevitch and Haas (1973).

The uses and gratifications research approach is not a true theory because it does not make systematic lawlike propositions concerning

phenomena (Swanson, 1979; Blumler, 1979). Uses and gratifications has been termed "an approach to research" which emphasizes the concept of an active audience, suggesting that media usage is based on definable motivations. Because this approach emphasizes the motivations underlying media usage among individuals, uses and gratifications "theory" may be capable of suggesting variables which explain the relationship between perception and selection, the theoretical gap existing in set theory. Blumler (1979) has suggested that uses and gratifications research, because it is not a true theory, can accommodate different theoretical orientations. This suggests that the approach may be complementary to set theory, not contradictory, which dissonance theory is.

Uses and gratifications research has primarily been conducted using survey research methods because the laboratory situation itself tends to act as an intervening variable in the gratifications process. Although Becker (1979) has suggested that uses and gratifications research is possible in laboratory situations, his recommended method strongly implies the need for unobtrusive lab measurements. Because uses and gratifications research has been primarily survey method, the data analysis has been either correlational (Becker, 1976; Adoni, 1979) or factor analytic (Becker, 1979; Greenberg, 1974). These analytic methods have made it difficult to test predictive hypotheses concerning the motivations underlying media use. The research has also tended to address questions concerning what type of media (e.g., newspapers, books, television) people use to obtain gratifications, rather than the specific programs selected for use among the multitude available. Set theory, however, addresses this question.

Freedman (1965) and Atkin (1972) have suggested that information novelty and utility are more useful predictors of information selection than variables derived from cognitive dissonance theory. They did not operationally define either concept, but others have made limited empirical attempts to define these constructs. Goodwin (1980) has noted that the general area of novelty-seeking has received little attention, especially in media research. Research attention to novelty has primarily been given to the incongruity component of novelty. Novelty as incongruity has been operationally defined as using blurry information stimuli (Berlyne, 1963); incomplete drawings or headlines (Goodwin, 1980); or incongruous drawings, such as one depicting a duck with four legs. These operationalizations have only limited generalizability to most mass media.

The theoretical writings concerning human drives to obtain novelty have defined relationships and concepts used in uses and gratifications research. Raju and Venkatesan (1980) state that boredom and arousal are components of novelty. They state that "when the arousal potential from (a) stimulus is below the optimum level, the result is boredom; and when the arousal potential is above the optimum level of stimulation for the individual, the stimulus causes discomfort" (1980: 259). When these relationships are observed in a media context, it can be said that media usage occurs when the arousal or entertainment value of media exceeds that of other elements in the environment. A similar relationship was suggested by Gibson (1980), who postulated an inverse relationship between boredom and the arousal value of information. Gibson used the terms "arousal value" and "novelty" interchangeably.

Uses and gratifications research has studied the relationship between boredom, arousal and media usage. Using factor analysis, Greenberg (1974) showed that a multidimensional "boredom" variable significantly explained variance in the television usage of British children. Boredom was operationally defined in the survey instrument by the statements:

"It fills up time."

"It gives you something to do when you haven't got anything else to do."

"...there is not much else to do."

Katz, Gurevitch and Haas (1973) found that eighteen percent of their survey respondents agreed with the statement that they primarily use media "to kill time." Dotan and Cohen (1976) found that "killing time" was a major reason cited for television use by Israeli adults. The killing time aspect of television use was accentuated under wartime conditions.

As suggested by Raju and Venkatesan, the boredom items are operationalizations of novelty. Media are used to reduce boredom. Boredom reduction is synonymous with increasing arousal. Media thus serve a novelty function when no other comparable (or superior) arousal stimuli are available. Becker (1979) has provided empirical evidence supporting the conceptual relationship between arousal and boredom. Becker found that the boredom and arousal items on a survey loaded on one factor, while the twelve remaining items loaded on two different factors. The emerging factors were the novelty factor, a social utility factor and an advertising/economic factor.

Industrial psychologists have also examined the construct of boredom, but as a psychological trait. The research indicates that

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boredom tolerances or thresholds for individuals differ. No specific test has been developed to measure boredom threshold. Evidence (Wyatt, Langdon and Stock, 1937) has suggested that boredom and introversion are related. The relationship exists because introverted persons are less dependent upon social stimulation and therefore better able to function under conditions of isolation (Siegel, 1962). Introverts tend to accept conditions of isolation more easily than extroverts and are less likely to need diversion or arousal stimuli. Wyatt, Langdon and Stock also found that interest in available stimuli could affect boredom. They suggest that boredom threshold, operationally defined as introversion-extroversion, and stimulus interest interact.

In media research, Haskins (1960) has shown that interest in specific topics is related to media exposure. Haskins developed a rating scale for measuring subjects' interest in specific topics. The scale was originally designed as a practitioner's tool to be used in making "gatekeeping" decisions. The scale has been used to predict exposure to newspaper editorials (Haskins, 1960), paperback book sales (Haskins, 1961) and television commercials (Reid and Haan, 1979). The Haskins Interest Scale has undergone several modifications to increase its reliability. The latest version of the scale uses verbal anchors of "absolutely interested" at the top and "absolutely not interested" at the bottom.

Uses and gratifications research has also examined the variable of utility, which is operationally defined in terms of the anticipated interpersonal communicatory uses of information obtained from media. Becker (1976) found anticipated interpersonal communicatory utility to

be a significant correlate of media use during the 1973 Watergate hearings and during the 1974 Congressional elections. Atkin (1972a) found media usage and expected information use "in a variety of communicatory situations, including everyday communication with friends and relatives" to be significantly correlated. Becker (1979) found that the survey items "to use in discussions with my friends" and "to get something to talk about" were significant variables in explaining newspaper usage. Katz, Gurevitch and Haas (1973) found that 63 percent of their respondents used media to obtain information "to use in discussions with friends," although the interpersonal communicatory utility of media differed. They found that cinema had lower communicatory utility than newspapers, books or television. Motion pictures were used principally to promote collective experiences. Johnstone (1974) obtained similar results. He found radio usage to be negatively correlated with peer interaction, while other media were positively rather than negatively associated with the extent of the subject's interaction with his peer group. The media which have low interpersonal communicatory utility, motion pictures and radio, can be termed purely escapist or entertainment media.

Interaction and interpersonal communication with peers has been shown to relate to the construct of introversion-extroversion (Eysenck, 1964), as has tolerance for boredom. Extroverts, by definition, are more socially communicative than introverts and should, therefore, have greater use for information obtained from media than introverts. A hypothesis which can be derived from the relationships is that most media have greater utility for extroverts than introverts, if utility is defined in terms of anticipated interpersonal communicatory utility. Extroverts should be more inclined to use most media than introverts

because the anticipated interpersonal communicatory utility of the information would be greater for extroverts than introverts. Excluded from this usage would be radio and cinema which were found to have little communicative utility by Katz, Gurevitch and Haas. Radio was also found to negatively correlate with peer interaction by Johnstone (1974).

This research suggests an explanation of when or under what circumstances perception of available (media) information will lead to usage (or exposure). Media must not only be perceived, but also must carry interest or arousal value and potential interpersonal communicatory utility for subjects. Interest value is both a subject and environmental variable. As a subject variable, interest is defined as the subject's interest in the topic or content of available media. As an environmental variable, the perceived interest value of media is related to surrounding environmental elements. If surrounding environmental elements have less arousal or interest value than available media, the perceived media will be selected for use. If the perceived information has less arousal value than other elements perceived in the environment, media usage will not occur. These hypotheses explain why media usage occurs under certain circumstances and not others, even if (media) information is perceived. The predictions apply to general media usage, but are not predictions concerning which information will be selected (i.e., whether the selected information is attitude-consistent or discrepant). The anticipated interpersonal communicatory utility of information is purely a subject variable, varying with the amount of interaction or interpersonal communication participated in by the subject with others.

The research suggests that the environmental variable of interest or arousal can be controlled in a laboratory situation by controlling the number of extraneous elements existing in the laboratory. The fewer environmental elements in the laboratory which offer potential alternative sources of arousal, the greater the likelihood that media usage in a laboratory will occur, provided that subjects are not given explicit instructions to select media. Instructing subjects to select media, as was done in most previous studies of selective exposure, tends, according to perceptual set theory, to focus the subject's attention on the information, which under normal (non-laboratory) situations may not even be perceived. By controlling the potential alternative sources of arousal, the effects of the subject variables can be ascertained.

CHAPTER IV

SYNTHESIS AND HYPOTHESIS

Perceptual set research has shown that the familiarity that a subject has with a source, object or concept determines the rapidity with which the source, object or concept is perceived or recognized. Objects, sources or concepts which are unfamiliar are less rapidly recognized than those which are highly familiar. Perceptual set research has also shown that the salience or importance of the object, concept or source for the subject also affects rapidity of recognition. Objects, sources or concepts of low salience are not recognized as rapidly as those of high salience. Both familiarity and importance have been shown to explain variance in perceptual threshold and in selective exposure. An additional variable, homophily, although not examined in perceptual set research, has proved to be a useful predictor of selective exposure. Because selective exposure has linked the three variables (of homophily, familiarity and importance), one can hypothesize that the variable of homophily may also be a useful predictor of the perceptual threshold which subjects have for sources, objects or concepts.

Uses and gratifications research has shown that media usage or simple (media) information selection is a purposeful rather than passive activity. People actively seek information. They are not mere passive recipients of media messages. One can therefore conclude that information,

prior to its selection for use, must be both available and perceived if it is to be selected. A corollary of this conclusion is that the variables which affect perception should also have an effect on information selection or media usage. These variables include familiarity, homophily and salience, when referring to attitudinal determinants of perception, and other non-attitudinal factors. Organic set research has shown that hunger, thirst and other physiological factors affect perception (Sanford, 1936). Research has also shown that emotional factors such as fear (Murray, 1933), stimulus variables such as color, size or movement (London, 1975) and preparatory set can affect stimulus perception. These latter variables are not attitudinal variables and are therefore not relevant exposure hypothesis, which predicts that attitude-consistent information will be selected over attitude-discrepant information.

Media usage or simple information selection is not synonymous with selective exposure. It is possible and likely that the array of available (media) information does not offer choices between attitude-consistent and discrepant information. For example, the telecasts of the Democratic and Republican Party Conventions occur at different times, with almost every station pre-empting regular programming to carry convention coverage. Coverage of the Republican Convention by television stations precludes offering Democrats the choice of viewing attitude-consistent programs. In this situation, the selective exposure hypothesis may not be applicable, because no possibility exists for Democrats to select a supportive or even neutral television program. In such situations, media usage must be explained by variables other than homophily, familiarity and salience.

Uses and gratifications research suggests that the variables of interpersonal communicatory utility and the novelty that subjects perceive in available information can explain media usage or information selection. Interest, a component of novelty, is not necessarily synonymous with salience, because subjects may be interested in information concerning topics of low salience. Interest can also be transient, rather than an enduring predisposition. For example, most people would express high interest in visiting Paris or London, although the importance of such a trip may be low and the expressed interest only transient. The importance of the Republican Convention to committed Democrats may be low, although Democrats may nonetheless be interested in viewing television coverage of it. Interest need not be related to a positive or negative evaluation of a source, object or concept, while salience, according to Fishbein and Azjen (1976), is. Interest is related to arousal value or novelty.

Novelty has also been suggested to be related (inversely) to boredom, which uses and gratifications researchers have found to be a determinant of media usage. The research has shown that media are frequently used to reduce boredom. Psychological research has shown that tolerance for boredom differs greatly among individuals. This suggests that differential media usage might be explained by differences in boredom tolerance. Although no validated instrument exists which measures boredom tolerance or threshold, research suggests that introversion-extroversion co-varies with boredom tolerance.

Introversion-extroversion research also indicates that extroverts are more socially communicative than introverts. Interpersonal communicatory utility has been shown by uses and gratifications researchers to be

a determinant of media usage. These findings suggest that introversion-extroversion may explain media usage when used as a proxy measure for a subject's anticipated interpersonal communication.

The relationship of these variables is depicted in Figure 2. The relationships expressed in Figure 2 are based on the research reviewed in Chapters II and III. As is shown by the model, interpersonal communicatory utility and novelty, represented by the proxy measure of introversion-extroversion and interest, are determinants of whether or not a person selects to use or be exposed to (media) information. Before information selection can occur, recognition or perception of the information (stimulus) is necessary. Affectors of recognition include familiarity, homophily and salience, as well as the variables listed in Box 3. Box 3 contains non-attitudinal variables. The broken line between recognition and media usage indicates that recognition does not always result in information selection. Information selection occurs only when 1) the media can serve an arousal (novelty) function; 2) offer subjects information usable in future interpersonal communications; and 3) when the information (stimulus) is perceived over other, competing environmental elements.

Selective exposure is also a conditional occurrence, as indicated by the broken line between perception and selective exposure. Because selective exposure is a special case of information selection, the conditions necessary for information selection to occur must be met before selective exposure can occur. Because selective exposure is the case of information selection where attitude-consistent information is selected over attitude-discrepant information (according to the hypothesis), it

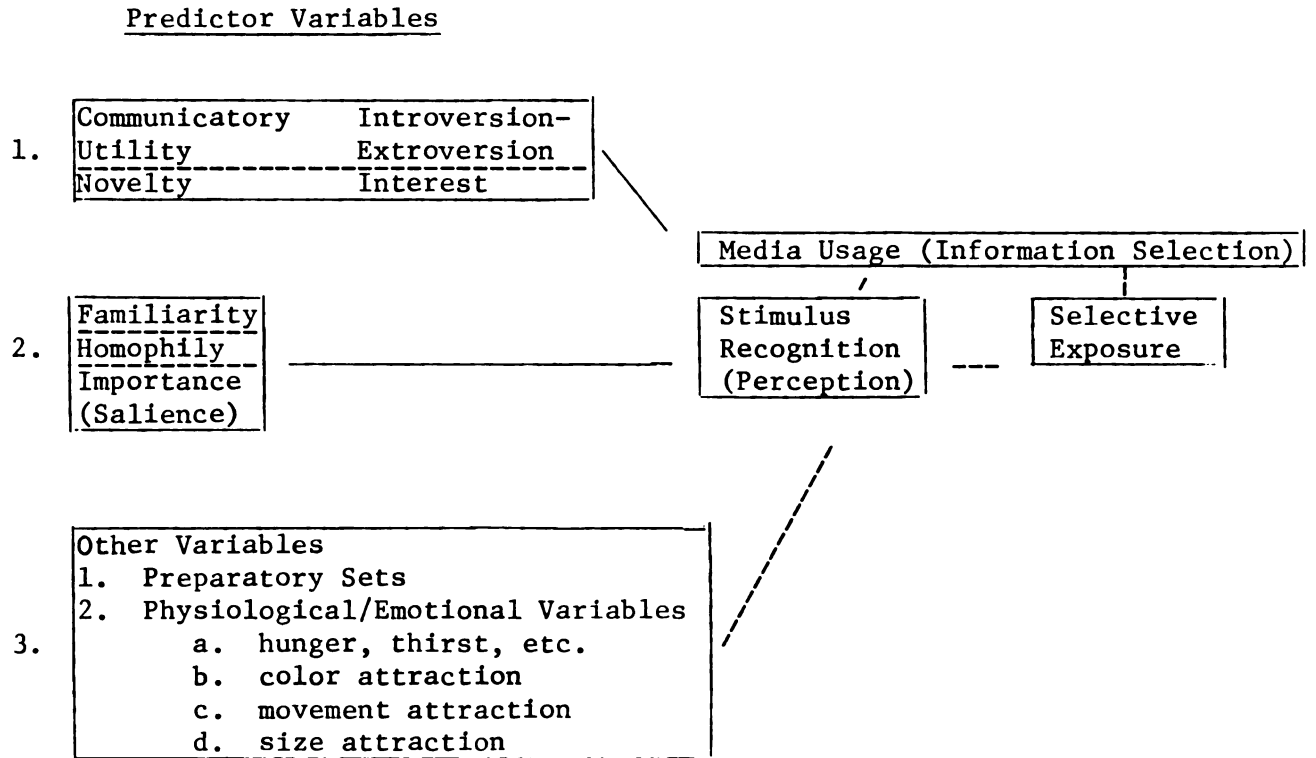


FIGURE 2

A Model of Recognition, Information
Selection and Selective Exposure

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can occur only when attitude-consistent and attitude-discrepant information choices are available.

The model leads to the following hypotheses:

Determinants of Stimulus Recognition. Based upon the perceptual set research of Bruner, Postman and McGinnies (1948), Howes and Solomon (1951), Postmand and Schneider (1951), Solomon and Howes (1951) and the research of Wheelless (1974b), it is predicted that the perception or recognition of a stimulus is determined by the homophily, familiarity and importance attached to the stimulus by a subject, specifically:

Hypothesis 1(a): The homophily between a subject and an information source will affect the subject's recognition of the information source ($b \neq 0$).

Hypothesis 1(b): The importance that a subject attributes to a topic or concept will affect the subject's recognition of an information source about the topic ($b \neq 0$).

Hypothesis 1(c): The familiarity that a subject has with an information source will affect the subject's recognition of the information source ($b \neq 0$).

Hypothesis 1(d): Familiarity and importance will interactively ($X_1 \times X_2$) affect subjects' recognition of an information source ($b \neq 0$).

Determinants of Information Selection. As suggested by uses and gratifications (Katz, Gurevitch and Haas, 1973; Becker, 1976; and Dotan and Cohen, 1976) and other research (Siegel, 1962 and Wyatt, Langdon and Stock, 1937), it was predicted that subjects' interest and introversion-extroversion scores, a proxy measure for interpersonal communicatory

utility and boredom tolerance, will discriminate between selectors and non-selectors of media information. Based upon the research of Wyatt, Langdon and Stock, it is also hypothesized that introversion-extroversion and interest will interactively discriminate between selectors and non-selectors of media information, specifically:

Hypothesis 2(a): The introversion-extroversion scores of subjects discriminate between subjects who do and do not select (media) information ($d \neq 0$).

Hypothesis 2(b): The interest that subjects have in a topic (or concept) will discriminate between those who do and do not select (media) information concerning the topic ($d \neq 0$).

Hypothesis 2(c): The interest that subjects have in a topic (or concept) and their introversion-extroversion scores will interactively discriminate between those who do and do not select (media) information concerning the topic ($d \neq 0$).

Determinants of Selective Exposure. Because selective exposure is predicted to be an artifact of a subject's perceptual (or attitudinal) set, with the set heightening the subject's perception of familiar, homophilous and important concepts, objects or sources, resulting in a greater probability of their selection, the following hypotheses are developed for testing:

Hypothesis 3(a): When information selection occurs, the selected information can be predicted by the homophily between the subject and the information source ($b \neq 0$).

Hypothesis 3(b): When information selection occurs, the selected information can be predicted by the subject's familiarity with the information source ($b \neq 0$).

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Hypothesis 3(c): When information selection occurs, the selected information can be predicted by the subject's importance evaluation of the information's content ($b \neq 0$).

Hypothesis 3(d): When information selection occurs, the selected information can be predicted by the interactive effect ($X_1 \times X_2$) of the importance evaluation and familiarity score ($b \neq 0$).

The Relationship of Recognition and Selective Exposure. Because selective exposure is hypothesized to be a product or artifact of perceptual set, as discussed in Chapter 3, the predictor variables of familiarity, importance and homophily should have similar effects on both the selective exposure and recognition variables. While hypothesis sets 1 and 3 suggest that the three predictor variables affect both dependent variables, the hypotheses do not test the quality of the effects. The following hypotheses are designed to test the similarity of the predictor effects on the two dependent variables:

Hypothesis 4(a): The variable of familiarity will affect the response measures of recognition and selective exposure equally ($b_r = b_{se}$).

Hypothesis 4(b): The variable of importance will affect the response measures of recognition and selective exposure equally ($b_r = b_{se}$).

Hypothesis 4(c): The variable of homophily will affect the response measures of recognition and selective exposure equally ($b_r = b_{se}$).

CHAPTER V

THE INVESTIGATIONAL APPROACH

Field research has primarily investigated selective exposure to political information (Atkin and Herald, 1976; Kaid and Hirsch, 1973; Grupp, 1970; McCroskey and Prichard, 1967; Surlin and Gordon, 1974). Few selective exposure laboratory investigations used political information as the information stimulus. Only Miller (1978), Rhine (1967) and Wheelless (1974b) specifically addressed the issue of selective exposure to information from political sources, although Wheelless (1974), Tan (1973), and Donahew and Palmgreen (1973) used information about topics (the space program, women's liberation, and the Vietnam war) which are frequently considered political. Miller (1978) determined subjects' attitudes toward political sources (candidates) using a proxy measure of poster displays to define his parent population. Rhine (1967) measured preferences in the 1964 presidential election between Johnson and Goldwater, using source preference as a variable in the mixed model study. Because of the importance of information dissemination in democratic countries, this study will also examine selective exposure to political information. This study, like the studies of Rhine and Wheelless, will rely on political sources to define the variables and the information stimuli.

Defining the Political Source

To obtain an array of political sources, the "Nation" section of various issues of Time magazine was systematically analyzed. Five years of the magazine prior to 1980, or 260 issues from 1975 to 1979, served as the sampling frame. From the 260 issues, 35 issues were selected using a skip interval technique. The starting point for the sample was randomly selected from the earliest fifteen issues of 1975. The names of American political figures appearing in the "Nation" section of the sample issues were recorded. The resulting list consisted of 78 (unduplicated) names.

To determine whether the political sources on the list represented a dispersion in terms of familiarity (from unfamiliar to very familiar) and political position (from very conservative to very liberal), 50 undergraduate students enrolled in communication courses at Michigan State University were asked to serve on an evaluation panel. Each judge was presented with a list of the political personalities and was asked to rate their familiarity with the personalities using direct magnitude estimation scaling (Stevens, 1956). The judges were then asked to identify their beliefs about the liberalism or conservatism of the personalities, again using direct magnitude estimation scaling. The scales used in the panel evaluation are presented in Appendix C.

Decision rules were established for evaluating the judges' responses. When 50 percent of the panel evaluated the political figure as "totally unfamiliar" (0), the name was deleted from the list. Only 42 of the original 78 names remained after applying the rule. For the 42 "familiar" political figures, the mean direct magnitude familiarity

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score across all subjects was computed. The least familiar political figure was Jacob Javits, obtaining a mean score of 2.6. Ted Kennedy and Jimmy Carter were the most familiar personalities on the list. Their means were 9.9.

The mean liberalism-conservatism scores were also computed for the 42 "familiar" personalities. The most liberal figure was Angela Davis, who had a mean score of 9.4. Anita Bryant was rated the most conservative of the 42 personalities. The judges assigned her an average score of 1.1.

The scales were then combined to form a familiarity-political position index. An index is a composite of several scales which are unrelated. A scale is a combination of items or questions which are inter-related (Jones, 1971). An example of a commonly used index is the "social homogeneity index," which is:

$$\text{social homogeneity score} = \text{religious score} + \text{linguistic score} + \text{racial score}$$

Indices show ordinal dispersions of subjects, nations, or things over several dimensions even if the scales used to form the index are metric level of measurement. Two problems associated with index development are: 1) the index can obscure the relative contributions of each scale; and 2) a theory is needed to assign weights to the scales. To control for the obscuring of the relative contributions of each scale (in this case, an index score of 10 could be obtained from a familiarity score of "5" and a liberalism-conservatism score of "5" or from a familiarity score of "9" and a liberalism-conservatism score of "1"), linear transformation is used. Weighting is used when theory suggests that the

scales are of unequal importance. For example, the social homogeneity index usually assigns religion a greater weight than racial scores when used for making cross-national comparisons (e.g., when comparing the homogeneity of Northern Ireland and Brazil) (Jones, 1971).

Because familiarity and political position are considered to be of equal importance as test variables, each was considered to be of equal weight. To control for the obscuration of each scale's contribution, a simple linear transformation of the liberalism-conservatism scale was performed. The form of the transformation was:

$$X^1 = cX$$

where c = a constant of 8

X = the original mean score for liberalism-conservatism

X^1 = the transformed liberalism-conservatism score

The transformation number (8) was arbitrary. Any other number would have a comparable effect because metric scales are invariant over all transformation (Nunnally, 1967: 15). The transformed liberalism conservatism score for Angela Davis was 74.2. The transformed score for Anita Bryant was 8.8.

The familiarity scores were then added to the X^1 liberalism-conservatism scores to obtain the index. The index ranged from 79.3 for Angela Davis to 14.4 for George Wallace. Anita Bryant had an index score of 17.9, having been considered by the judges to be a more familiar personality than George Wallace. To reduce the 42 names to a more usable (practical) number while maintaining dispersion along both the familiarity and liberalism-conservatism dimensions of the index, a skip interval selection technique was used. Sixteen political personalities were selected. The political figures were:

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Charles Percy	Hubert Humphrey
Ted Kennedy	Robert Strauss
John Glenn	Ronald Reagan
Angela Davis	Jesse Jackson
William F. Buckley	S.I. Hayakawa
Betty Freidan	Robert Griffin
Tom Hayden	Daniel Moynihan
Anita Bryant	Joseph Califano

A brief biographical sketch of each political personality is included in Appendix E. The names of these political personalities were used in all subsequent investigations.

All subjects used in the three investigations were selected from the same parent population as the panel of judges who evaluated the original list of political figures.

Investigation 1

Investigation 1 was designed to test the first hypotheses which concern the effects of homophily, familiarity and topic importance on stimulus recognition. The investigation is an extension of the research of Postman and Schneider (1951) and Solomon and Howes (1951). The investigation differs from the original studies because it includes the variable of homophily, which has not been previously examined in perceptual set research. The operationalizations are as follows:

Independent (Predictor) Variables

The independent variables were homophily, familiarity and importance. Homophily, or communicator-communicatee similarity, was measured using direct magnitude estimation procedures. Subjects were asked to complete the homophily scale (Appendix D), following the directions at the top of the page. The directions informed the subjects that they were to estimate the similarity (or distance) between themselves and

the sixteen listed political figures. Because homophily is a multi-dimensional concept, no additional information was given concerning what evaluatory criteria were to be used by the subjects. Included with the homophily scale were belief-evaluatory comparisons. The belief evaluatory comparisons were included for two reasons: 1) the comparisons gave the subjects practice making direct magnitude estimates; and 2) it gave subjects a calibration reference for making the homophily estimates. The scale was similar to the one used by the evaluation panel. The panel results showed that subjects from the same parent population had no difficulty in using the scale.

Homophily, as used in this operationalization, is actually perceived homophily, as defined by McCroskey, Richmond and Daly (1975). Rather than using the McCroskey et al. scale to measure perceived homophily, direct magnitude scaling was used. Direct magnitude scale was used because of the complexities involved in the administration of the McCroskey, et al. scale and because direct magnitude scaling has been shown to be flexible, reliable and capable of measuring multi-dimensional concepts (Hamblin, 1974; Moskowitz and Jacobs, 1980). The complexities of the McCroskey, et al. scale consist of its size and components or dimensions. The unreduced McCroskey scale consists of 26 comparative items, and the reduced scale consists of 16 items. During the administration of even the reduced McCroskey scale in this investigation, each subject would have to complete 256 items on homophily (16 items on 16 political figures), before completing the familiarity and salience scales. Because it has been shown that increases in exposure duration can increase information recall (Simon and Arndt, 1980), the completion

of the 256 items could result in hypothesis guessing during the laboratory portion of the investigation. Because of this problem and the complaint that certain dimensions of the McCroskey scale are inappropriate for use in mass communication research (Andersen and Mancillas, 1978), direct magnitude estimation was selected for the operationalization.

Direct magnitude estimation scaling developed during the 1930s and 1940s when psychologists became interested in relating human perceptions to the physical stimuli to which humans are exposed. Because physical stimuli (such as temperature) could be described on ratio scales (such as the Kelvin scale of temperature), the psychologists attempted to develop a perception scale with similar ratio properties. The resulting scale was the direct magnitude estimation scale. The estimation scale showed that subjects can be forced to use the entire scale, rather than just portions of it (Stevens and Galanter, 1957). Subsequent to this research, the scale was applied to the liking and disliking (of physical stimuli on a bitter to sweet continuum) (Moskowitz and Chandler, 1977). In every instance where the scales were used, direct magnitude scales showed a higher correlation with the measured physical stimuli than did fixed point scales.

The usual method of direct magnitude estimation scaling consists of having subjects develop a calibration which can be compared to the physical stimuli (Moskowitz and Chandler, 1977). The initial calibration, however, requires a comparison of the physical stimuli and the sensory perception. In studies of aesthetics, political conservatism and utility, where no physical stimuli can be used to make the initial calibration, another procedure is used (Ekmand and Kunnapas, 1963). This procedure

consists of the arbitrary assignment of a numerical distance to two items, provided that the assigned number is easily added, subtracted, multiplied or divided by subjects (e.g. 10, 100, etc.). Because any number contains an infinite number of points between it and another number, the subject has an infinite choice of numerical scale values to use. In the application of the (perceived) homophily scale in this investigation, the arbitrary number chosen as an anchor was "100." The value specified the distance between political liberalism and conservatism. Subjects then estimated the political distance between different scale items on personalities. The initial estimates serve as the calibration for the homophily items which appear as later scale items.

Familiarity was also measured using direct magnitude estimation procedures. The scale used for measuring familiarity in the investigation was identical to the scale used by the panel of judges except that it contained 16 political sources rather than 78. The panel results showed that the scale could be used without difficulty.

The importance of "politics" as a topic was measured using a modified form of the Political Participation (PPS) Scale (Matthews and Prothro, 1966), a prevalidated instrument. The scale has a reported reproducibility coefficient of between .98 and .95. The Guttman-style scale is a behavior-based self report and is shown in Appendix D.

The scale was modified for use among college students. Consequently, questions concerning office holding and union activities were deleted. The deleted items were replaced with an additional item concerning voting behavior (item 4). Because the scale measures political participation, a behavior, it is used as a proxy measure for salience, an attitude.

Dependent Variables

As in the Postman and Schneider (1951) and Solomon and Howes (1951) studies, stimulus (source) recognition was operationally defined as the duration (in seconds) necessary to identify the tachistoscopically presented source name. The source names were drawn from the 16 political figures on whom homophily and familiarity measures were obtained.

As Solomon and Howes have observed, the perceptual thresholds of subjects differ due to physiological and educational differences among subjects. Subjects with good eyesight or vision are able to more rapidly recognize words than are subjects with poor vision. Subjects with good reading skills are also better able to recognize presented words than are subjects with poor reading skills. For this reason, the duration of recognition scores for each subject cannot be used as a simple or untransformed measure. The recognition duration scores must be transformed before being used as the dependent variable. The transformation controls for effects due to subject differences along physiological and educational dimensions. The form of the transformation is:

$$Z = \frac{X - \bar{X}}{S}$$

Z = the standardized recognition duration score of the i th subject for political source p

\bar{X} = the mean recognition duration for all exposures (including control exposures) for each subject

X = the unstandardized recognition duration score of the i th subject for political source p

S = the standard deviation of recognition duration for all exposures for the i th subject.

The standardized score of recognition duration is used as the dependent variable.

Apparatus

A modified Viewlex slide projector with an Alphax shutter was used as a tachistoscope. The adjustable Alphax shutter allowed for presentation of slides ranging in times from 1/100 of a second to 1 second. The names of the sources and nine other two word "names" were photographed and mounted on slides. Each slide contained only one name, with the first name directly above and flush left with the last. The form of the slides was as follows:

ANGELA
DAVIS

Procedure and Protocol

The procedures of Postman and Schneider (1951), Howes and Solomon (1951) were followed. Approximately two weeks prior to conducting the laboratory portion of the investigation, the subjects were asked to complete the scales on homophily, familiarity and importance. The purpose of the scale administration was disguised. Subjects were told that the scales would be used to project "the results of an upcoming state election."

The same subjects who completed the scales were later offered incentives for participating in a (different) "study." Of the subjects who volunteered, thirty-two were randomly selected from the volunteer list. Each subject was assigned a specific time for participating in the study. The number of subjects was twelve greater than used by Solomon and Howes (1951) or Postman and Schneider (1951). The number of subjects was increased because of the inclusion of the homophily variable in this study. Because the investigation uses a repeated measures design, the sample size of thirty-two results in 95 degrees of freedom total (N-1).

When the subject arrived at the laboratory, he (or she) was seated eight feet from a projection screen and was given the following instructions:

This is an experiment to see how keen your vision is when a word is briefly flashed before your eyes. You will be given words to identify. A number of increasingly long flashes will be presented for each word. I will notify you before I change the word that is being flashed.

The first flashes will be very brief, and you probably will be unable to recognize the word. I will then gradually increase the duration of the flash for the successive trials of that word. After each flash, please state clearly and distinctly whatever you think you saw. There is no objection to guessing; but, if you have no idea what it is, say so.

Before I present each flash, I will say, "Ready." You will then look at the screen. After the ready signal, do not say anything until you have made your response to the flash. After you have made your response, sit back and relax until I give the ready signal for the next presentation. We will have a recess after every few words, or whenever you say you are tired.

The first few words will be for practice, so that you will become familiar with this procedure.

Do you have any questions?

The practice words like the source names, were all two word names. Only three of the names of political sources were included among 12 different slides shown to each subject. For each subject the three political source names were randomly selected. The reason why only three political names were included among the 12 slides shown was that it reduced expectancy set responses to the names of the political figures. The control words included the following:

DUSTIN	GEORGE	FORD
HOFFMAN	WASHINGTON	TRUCKS
SELF	WONDER	BETTE
ESTEEM	WOMAN	MIDLER

The order of presentation was as follows: C C C P C C C P C C C P, where "C" is a control word and "P" is a political source.

The words were presented to each subject by tachistoscope. The duration threshold for each word was determined by the "method of limits" (Solomon and Howes, 1951). Starting with very brief flashes, the experimenter increased the time of stimulus exposure until correct recognition had been achieved. The durations of a recognition for the three political sources for each subject were recorded and used as the dependent variable, creating a repeated measures design.

Analysis

To test Hypotheses 1(a) through 1(d), ordinary least squares, multiple regression, techniques were used. The form for the analysis is as follows:

$$Y_{ip} = a + \sum_{i=1}^4 b_{ip} X_{ip} + e_{ip} \quad (1)$$

where y = the standardized recognition duration score of the i th subject for political source p

X_1 = the familiarity score of the i th subject with the p th political source

X_2 = the importance of politics measure (PPS) for the i th subject

X_3 = the homophily score between the i th subject and the p th political source

X_4 = the $(X_1 \times X_2)$ interaction vector

e = the error term, assumed to be randomly distributed with a mean of zero.

Because the homophily variable has not been examined in previous perceptual set research, it was entered into the regression equation after the familiarity and importance variables. As Finn (1974) notes, the "simple effects

and those known to be of importance are placed first" in the equation. The unknown variables are entered into the equation after those already shown to explain variance to "test for their unique contribution to criteria variation, above and beyond others." In this manner one avoids the problem of attributing effectiveness to a variable that may be explained by the already known variates (1974: 325). The familiarity and importance variables were entered into the equation using stepwise procedures. Because the interaction vector was not a simple variable, it was entered into the equation last. Hypotheses 1(a) through 1(d) were tested by determining the significance of the partial regression coefficients for the predictor variables.

Results

Data on thirty-two subjects were obtained during the investigation, with three measures being obtained from almost every subject. Two rather than three measures were obtained from two subjects. Technical problems with the instrument limited the number of repeated measures to two for two subjects. Ninety-four measures of recognition duration were obtained from the thirty-two subjects, resulting in 93 degrees of freedom total ($N-1$) for the analysis.

The dependent variable, recognition duration (in seconds), was standardized for each subject to control for differences in subject recognition thresholds. A multiple regression analysis was conducted with the familiarity, importance, homophily and the interaction vectors serving as predictor variables. The analysis was performed using the SPSS program. The regression results are reported in Table 3. The omnibus table for the regression is shown in Table 4.

TABLE 3

Regression Results for
Test of Hypothesis 1

Dependent Variable: Recognition Duration			
<u>Predictor Variables:</u>	<u>b</u>	<u>F</u>	<u>r² change</u>
Familiarity	-.80*	12.2*	.109
Importance (Salience)	.497	1	.005
Homophily	-.004	1	.006
Interaction	-.052*	5.10*	.047
Overall R ² = .169 d.f. = 4.89 F = 4.51*			

*p < .05

TABLE 4

Anova (Omnibus) Table
For Regression Results
(Hypothesis 1)

Dependent Variable: Recognition Duration						
<u>Predictor Variables:</u>		<u>SS</u>	<u>d.f.</u>	<u>MS</u>	<u>F</u>	<u>p<</u>
Familiarity	(X_1)	12.2	1	12.2	12.2	.001
Importance (Salience)	(X_2)	.56	1	.56	<1	n.s.
Homophily	(X_3)	.67	1	.67	<1	n.s.
Interaction	(X_1XX_2)	5.3	1	5.3	5.10	.03
Residual		92.2	89	1.04		
Total		111	93			

As can be observed from Table 3, the predictor variable of familiarity and the interaction vector were significant. The negative coefficient for familiarity shows that as subject familiarity with a source increases, the time necessary to recognize the source name decreases. The significant interaction vector suggests that as familiarity increases and the salience (or importance) of politics to the subject increases, the time necessary for recognition of political source names sharply decreases. The variable of homophily and the independent effect of the importance variable were not found to be significant.

The results confirm the findings of Postman and Schneider (1951) and Solomon and Howes (1951). Solomon and Howes found "the largest estimate of variance...(to be) associated with differences in word familiarity" (1951: 63). The omnibus table (Table 4) shows that the greatest explained variance in this analysis is also attributable to the variable of familiarity $R^2 = .109 = SS_e \div S_t S_t(111)$. The interaction of familiarity and importance explains an additional 5 percent of the variance. Postman and Schneider (1951) also found a significant interaction between familiarity and salience.

Hypotheses 1(a) and 1(d), which predict that familiarity and the interaction vector will affect recognition duration, are confirmed by the results. Hypotheses 1(b) and 1(c), which concern the effects of homophily and the independent effect of importance were not confirmed.

Discussion

The results generalize the findings of Postman and Schneider (1951) and Solomon and Howes (1951) from words related to valued concepts to potential sources of information. The results suggest that a subject's perceptual set will affect not just the perception of commonly and uncommonly

used words, but also the names of persons associated with policy-making or political issues in America. These political sources frequently communicate with the public using mass media.

The results are a straightforward confirmation of the findings of Postman and Schneider (1951). Postman and Schneider, using a factorial design, found familiarity and an interaction (between salience and familiarity) to be significant predictors of recognition duration. Solomon and Howes (1951) found familiarity to be the most powerful predictor of recognition threshold, although they did not find a significant interaction between importance and familiarity. They did, however, observe that "the interaction..., although not statistically significant, is large in comparison with the variance contributed" by the salience measure alone (1951: 264).

Although the results do confirm previous research findings, the applicability of perceptual set theory to the selective exposure hypothesis is not directly supported by the findings. The homophily variable, which represents the "classic" variable for defining attitude-consistent and discrepant information sources, was not found to have a significant effect on recognition threshold. The failure to find a significant relationship between homophily and recognition threshold is not attributable to the hierarchical regression solution method because the zero-order correlation between the familiarity and homophily variables approached zero (see Appendix F). The significant correlation suggests that subjects were as familiar with the heterophilous sources used in this study as they were with the homophilous sources. This finding is to be expected because of the method used to index and select the political

sources used in the investigation. The indexing and selection method assured dispersion on both the familiarity and liberal-conservative continua. The selection method resulted in the use of liberal, middle-of-the road, and conservative sources as the treatment stimuli. For each political position, one also finds familiar, somewhat familiar and quite unfamiliar sources. Among liberal sources, for example, there is a very familiar personality (Ted Kennedy); a somewhat familiar source (Tom Hayden); and a somewhat unfamiliar source (Betty Friedan). For this reason, one can expect to find a correlation equal to zero between familiarity and homophily.

To assert the applicability of perceptual set theory to selective exposure, given these findings, requires a reformulation of the hypothesis so that the dependent variable of selection reflects not the similarity-dissimilarity between the source and selector, but instead reflects the familiarity of the subject with the source. The reformulation suggests that familiarity is the major determinant of exposure to messages, not source-selector homophily or attitude-consistency. This reformulation suggests that previous research findings of selective exposure to attitude consistent or homophilous sources may be artifacts of uncontrolled levels of familiarity. The familiarity between source and subject in previous research has been largely uncontrolled.

From a face validity perspective, this explanation seems plausible. For example, Wheelless (1974b) found a significant relationship between homophily and exposure preferences. An examination of his heterophilous and homophilous sources suggests a closer correlation between homophily and familiarity than observed in this study. Heterophilous sources

(Robert Sheldon of the Ku Klux Klan, George Lincoln Rockwell of the American Nazi Party, etc.) tended to be less familiar than the more homophilous sources (Ted Kennedy, Nelson Rockefeller, etc.). The sources used by Wheelless were purposively rather than randomly selected. The reformulation would suggest the following:

People tend to expose themselves to information for highly familiar sources, especially when salience is high. (A)

This "hypothesis" is testable using the investigational design and variables used to test hypothesis (set) 3. Although the hypothesis is a post hoc formulation, it may nevertheless be useful in suggesting areas for further research.

Investigation II

The second investigation is designed to test hypotheses 2 and 3. The second investigation consists of one method with two separate analyses used to test the two sets of hypotheses.

Hypotheses 2(a) through 2(c), drawn primarily from the uses and gratifications research reviewed in Chapters III and IV, suggests that subjects' interest in the content or topic of available media and utility and novelty, represented by the proxy measure of introversion-extroversion, will discriminate between selectors and non-selectors of information. The theory underlying this set of hypotheses, as observed earlier, is that extroverts are more likely to seek and select media information than introverts. Katz, Gurevitch and Haas (1973), Johnstone (1974) and Greenberg (1974) have shown that usage of certain media occurs when individuals find themselves alone. Research has shown that cinema is a social medium, used primarily by people in groups. Newspapers

radio and books are individualized media. Television, under many circumstances, is an individualized medium, although it is also used socially or in group situations. Much individual media usage occurs to "kill time" when individuals find themselves alone. The theory suggests that extroverts are more likely to seek media immediately in situations of aloneness because they find it difficult to cope with non-communicatory situations. Extroverts, for similar reasons, also have lower boredom thresholds. Introverts, on the other hand, are more accustomed to being alone and are less likely to seek (media) information than extroverts. Introverts do not need the diversion (or arousal) that media offer in situations of isolation nor do media have the interpersonal communicatory utility for the introvert that is has for the extrovert. The interest measure also reflects the entertainment or arousal value of the available media. The operationalizations of variables in this part of the study are as follows:

Independent Variables For Hypothesis (Set) 2

Introversion-extroversion was measured using the Eysenck introversion-extroversion items on the Pittsburg social extroversion-introversion scale (Bendig, 1962), a prevalidated and pretested instrument. The scale is one of the most frequently used of existing psychological scales. The scale is shown in Appendix D.

Dependent Variable For Hypothesis (Set) 2

The dichotomous dependent variable of selection-no selection is a behavioral measure, obtained by the unobtrusive recording of a subject's activities. Unobtrusive measures are frequently made through observations

behind a one-way mirror or using apparatus of which the subject is unaware (Well, Campbell, Schwartz, Sechrest, 1967).

Katz, Gurevitch and Haas (1973), aside from finding newspapers to be an individual medium, found newspapers to be the best medium at satisfying needs. Selective exposure research (Atkin, 1971) has already examined exposure to newspapers. Research has also examined exposure to magazines (Grupp, 1969); radio (Grupp, 1970); and television (Surlin and Gordon, 1976; McCroskey and Prichard, 1967; and Rosenbau, Rosenbaum and McGinnies, 1974). Despite Katz, Gurevitz and Haas' finding that books were "second best at satisfying needs" among five media studies, research on exposure patterns to that medium has been rare. Because books, like magazines, newspapers and radio, are considered to be an individualized medium, books were selected as the medium for examination in this study. The dependent variable is operationally defined as the act of selecting or not selecting a book by a subject while sitting in laboratory isolation.

The third set of hypotheses represent a hynthesis of hypotheses 1 and 2. This hypothesis set predicts that the variables which affect perception or recognition (familiarity, homophily and importance) also affect selective exposure. The model depicted in figure 2 suggests that recognition does not always lead to selective exposure although it is a prerequisite of exposure. Media information must also be available before selective exposure can occur, and the content of the available media must be related to a positive or negative evaluation of the information's content. The selection of or exposure to information concerning topics which have a neutral evaluative dimension cannot be termed selective

exposure, but rather information selection or simple media usage. Selective exposure is a specific case of information selection, rather than being a synonym for media usage.

Hypotheses 3(a) through 3(d) are conditional hypotheses, tested only when information selection has occurred. The test of these hypotheses is an extension of hypotheses 2(a) through 2(c). When subjects did select information in the test of hypothesis 2, their selections were evaluated in the test of hypothesis 3 to determine whether the selection represented an attitude-consistent selection or not. Subjects who were coded as "non-selectors" in the test of hypothesis 2 were eliminated from the sample base for this hypothesis test. This investigation represents an extension of the previous hypothesis tests, utilizing the independent variables of hypotheses 1(a) through 1(d) and the selections made by subjects during the test of hypothesis 2 as the dependent variable. The variables used to test the third set of hypotheses are defined as follows:

Independent Variables For Hypothesis (Set) 3

The operationalizations of the predictor variables (familiarity, homophily and importance) were identical to the operationalizations used in Investigation 1. Homophily and familiarity were measured using the direct magnitude estimation scales shown in Appendix D. Importance was measured using the Political Participation (PPS) Scale shown in Appendix D.

Because the selective exposure hypothesis predicts that the source-title selected from the bookshelf will be the most homophilous source-title available, the lowest homophily score (which indicates high similarity with the source) and the highest familiarity score (which indicates

high familiarity with the source) of the source-titles available will be the values assigned the dependent variables.

Dependent Variable For Hypothesis (Set) 3

Previous selective exposure research studies have used subjects' attitudes toward political sources to define available media as attitude-consistent or attitude-discrepant. When a subject positively evaluated a political figure, information by or about the political figure was defined as attitude-consistent. Although this definition has problems, it has been consistently used in the laboratory and field research on selective exposure.

Atkin (1971) measured subjects' preferences for student government candidates and used exposure to newspaper articles about the candidates to define attitude-consistent and discrepant information seeking. A problem apparent with this definition is that newspaper articles about a favored or preferred candidate do not necessarily contain information supportive of the candidate. Newspaper articles frequently contain information which expose candidates' misdeeds. An article about Ted Kennedy which concerns "the Chappaquidick incident" may not be supportive for Kennedy supporters. The article may, however, be attitude-consistent for Carter or Reagan supporters.

Rhine (1967) and Wheelless (1974) had a more precise operationalization of attitude-consistent and discrepant information than Atkin. Positively evaluated and negatively evaluated political figures were stated to be the sources of available information in the Rhine and Wheelless studies. Rhine measured subjects' attitudes toward candidates in the 1964 presidential election and used pamphlets purportedly authored by

the candidates to define attitude consistent and discrepant information. Similarly, Wheelless measured subjects' homophily with political personalities and used pamphlets purportedly authored by the candidates to define attitude consistent and discrepant information. Pamphlets authored by homophilous personalities were defined as attitude-consistent information (+), while pamphlets authored by heterophilous personalities were defined as attitude-discrepant information (-). The dependent variable in the Wheelless study was source valence (+, -), a categorical variable.

In this investigation, the definition of selective exposure is similar to that used by Wheelless. The political personalities, as in the Wheelless study, were attributed as the sources of information available on the bookshelf. Rather than transforming the selection (score) into a positive or negative (binary) variable, however, ratio levels of measurement were utilized in the analysis. The dependent variable was operationally defined as the direct magnitude homophily score between the subject and the selected source-title, as estimated on the homophily scale. The theoretical dependent variable value, according to the selective exposure hypothesis, should be the most homophilous source-title available for selection. The value of the dependent variable, in effect, forces the test of a null hypothesis that no deviation from the selection of the most homophilous source-title will occur. Should subjects select the most homophilous source title available, the correlation between the dependent and independent variable values will equal + 1, indicating a perfect relationship between the selective exposure hypothesis and the actual selections of subjects. A lower correlation (or b value) will suggest deviations from the prediction of the selective exposure hypothesis.

Apparatus

Because hypotheses 2(a) through 2(c) and 3(a) through 3(d) were investigated simultaneously, the apparatus used in both hypothesis tests was the same. The difference between the two hypothesis sets lies in the predictor variables (familiarity, homophily and importance vs. introversion-extroversion and interest), the dependent variable (the homophily estimate for the source of the selected information vs. whether or not information was selected), and the subjects. Only the scores for subjects who selected information in the test of hypothesis (set) 2 were used in test of hypothesis (set) 3.

The laboratory consisted of a desk, on top of which was a small bookshelf, and a chair. The bookshelf contained ten books from a series entitled The Writings and Speeches of (political figure). The media were thus attributed to the sixteen political figures evaluated in Investigation 1. Ten rather than sixteen source titles were placed on the bookshelf because of the limitations of the apparatus. Prior to each subject's entering the laboratory, the books were rotated. For each subject the single most and single least homophilous source title was placed on the shelf with eight other titles. The other eight source titles on the shelf were randomly chosen from among the fourteen remaining source titles. The randomization controlled for ordering effects and was designed to present each subject with an array of source titles between the two extremes of high and low homophily. Each book on the shelf was connected to a "hairtrigger" microswitch which signalled the experimenter, who was in an adjacent room. The switch indicated when and which book was removed from the shelf. If the subject removed a

book from the shelf, he was assigned to the "selected media" category. If no book was removed from the shelf, the subject was assigned to the "no selection" category. The "selected" and "no selection" behaviors served as the dependent variables in the test of hypotheses 2(a) through 2(c).

The selected book was recorded. The homophily score assigned that source by the subject was ascertained from the direct magnitude homophily scale and used as the dependent variable for the test of hypotheses 3(a) through 3(d).

The books on the shelf had covers specifically created for use in the investigation. All of the books in the series were the same size, color and thickness. The only observable difference between the books was the source-title, which could easily be read by subjects while seated in front of the bookshelf.

Procedure and Protocol

Two weeks prior to conducting the laboratory part of the investigation, subjects were asked to complete a questionnaire, which included the homophily, familiarity, importance, introversion-extroversion and interest scales. The purpose of the scale administration was disguised. Subjects were told that the scales would be used to predict "the results of an upcoming election."

The same subjects who completed the scales were later offered incentives for participating in a (different) "study." All of the subjects who volunteered were assigned a specific time for participating in the study. When each subject arrived at the laboratory, he was

requested to leave all belongings in an adjacent room. After leaving the belongings, he (or she) was led to the laboratory and was asked to sit at the desk. On the desk was a questionnaire consisting of four questions. The questions were:

1. Approximately how many days per week do you listen to the radio?
2. What radio station(s) do you usually listen to?
3. Approximately how many days per week do you read a newspaper?
4. What newspaper(s) do you usually read?

The subject was asked to complete the questionnaire by the experimenter. The questionnaire was used to disguise the purpose of the study. The experimenter also added:

When you finish the question, just sit back and make yourself at home. I'm running a little behind with the study. It may be several minutes until we can get started. When I'm able, I will return and get you.

The experimenter then left the laboratory, closing the door behind him. Each subject was left in the laboratory for five minutes or until the subject selected a book from the shelf, whichever occurred first. In the laboratory the subject had the choice of selecting a book or entertaining himself in some other fashion. The five minute time period was established by pretesting the apparatus. The pretest indicated that five or six pretested individuals selected information within the first five minutes of isolation. The books available in the pretest, however, included a wide array of topics. It was concluded that when the source-titles of the books were limited only to those related to politics, fewer actual selections would be made.

After five minutes had elapsed or after the subject had selected a book from the shelf, the experimenter returned to the laboratory.

The subject was debriefed and asked whether he (or she) had any "guess" about the purpose of the study. If the subject had correctly guessed the purpose of the study prior to participating or had obtained information about the study from previous subjects, the subject's score was deleted from the sample base. Each subject was asked not to tell other potential subjects about the study's purpose and was then dismissed.

Analysis For Hypothesis (Set) 2

To determine whether the interest, introversion-extroversion scores and their interaction discriminated between selectors and non-selectors of (media) information, a discriminant analysis was performed. The form of the discriminant model is as follows:

$$D_i = k_{i1}Z_1 + d_{i2}Z_2 + d_{i3}Z_3 \quad (2)$$

where D_i = is the score on the discriminant function for the dichotomous variables of "selection-no selection"

d = the weighting coefficients for the variables of interest, introversion-extroversion, and the interaction ($Z_1 - Z_3$)

z = the standardized scores of the independent variables of interest, introversion-extroversion, and their interaction ($Z_1 \times Z_2$)

The significance of the coefficients (d) for the independent variables was the test of hypotheses 2(a), 2(b) and 2(c).

Results

Data were obtained on the information seeking activities of 86 subjects. Of the 86 subjects participating, 60 selected books from the shelf. Twenty-six made no selection. For the purpose of the discriminant analysis, subjects selecting information from the bookshelf were assigned a value of "one" (1); subjects not selecting a book were assigned a

value of "zero" (0). A multiple discriminant analysis with the selectivity values as the dependent variable was performed using the SPSS program. The introversion-extroversion, interest and interaction (vector) variables were the independent or predictor variables. The results of the discriminant analysis are shown in Table 5. The overall discriminant analysis was significant ($\chi^2 = 21.32$, d.f. = 3, $p < .001$). Of the 86 cases (subjects) analyzed, the discriminant function correctly classified sixty-two (72 percent). As shown in Table 5, the greatest contributor to discrimination was introversion-extroversion ($d = 1.33$, $F = 21.08$, $p < .001$). The positive direction of the coefficient indicates that an increase in extroversion results in a greater likelihood of information selection, as suggested by hypothesis 2(a). The mean introversion scores for the two groups are shown in Table 6. The table shows that non-selectors have significantly higher introversion scores ($\bar{x} = 26.69$) than selectors ($\bar{x} = 22.35$).

Although hypothesis 2(b) was not confirmed by the discriminant analysis, the results were in the predicted direction (see Table 6). As hypothesized, selectors of political information exhibited higher interest in the topic of politics ($\bar{x} = 68.05$) than non-selectors ($\bar{x} = 58.65$). The difference approached significance ($p = .07$), but did not reach an acceptable rejection level ($p < .05$). The failure to reach an acceptable rejection level may be the result of the relatively small size (N) of the non-selection group. Only 26 of the subjects did not select information. It is possible that a larger sample would have decreased the large within group variability observed for this group (S.D. = 12.47).

TABLE 5
Results of Discriminant Analysis

<u>Variables</u>	<u>Discriminant Coefficient</u>	<u>F</u>	<u>p</u>
Introversion- Extroversion (X_1)	1.33	21.08	<.001
Interest (X_2)	.467	3.31	<.07
Interaction ($X_1 \times X_2$)	-.929	.10	n.s.
$\chi^2 = 21.32$ d.f. = 3 p < .001			

TABLE 6

Mean Scores of Predictor
Variables By Dependent Measure Of Selection

	<u>Selectors</u>	<u>Non-Selectors</u>
Introversion	22.35 (3.82)	26.69 (4.48)
Interest	68.05 (21.23)	58.65 (23.68)

() = standard deviations

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The discriminant results do not confirm the interaction effect (between introversion and interest) predicted by hypothesis 2(c). The two variables independently affect the dependent variable of information selection.

Discussion

The results, in confirming hypothesis 2(a), show a compatibility between field and laboratory research findings, a phenomenon not frequently observed (Hovland, 1959). The results confirm the open-ended responses obtained from subjects in uses and gratifications field research, and tie the responses to psychological theory and research. Atkin (1972); Katz, Gurevitch and Haas (1973) and Becker (1976) found that many respondents state that they use media to obtain information to use in interpersonal communication situations. These findings suggest that these respondents use media for "extroverted" purposes. If media are used for this purpose, one should find (and which this research confirms), a difference between the selectivity of introverts and extroverts for informational media, such as used in this investigation. The findings, however, are not necessarily generalizable to other media, because uses and gratifications have been shown to be media specific (Katz, Gurevitch and Haas, 1973). Because introverts, by scale definition ("I am inclined to keep quiet when out in a social group"), tend to limit their interpersonal communication, media should not offer the introvert the same gratifications that they offer the extrovert--information to use in interpersonal communicatory situations.

Extroverts also find it difficult to be in situations of social isolation ("I would be very unhappy if I were prevented from making

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numerous social contacts"), which limit their interpersonal communicatory needs (Siegel, 1962). In situations of social isolation, extroverts should readily seek diversion. The diversion offered in this investigation was book media. The results of the investigation also confirm this aspect of the theory. Extroverts selected books from the shelf significantly more often than introverts. Over longer periods of time, however, the results may not be generalizable because this study only examined media selectivity during a rather short time interval (five or less minutes).

Although the interest measure was not found to be a significant discriminator between selectors and non-selectors ($p < .07$), the results do indicate that the interest that subjects have in the content of available media may affect selectivity. Subjects with a greater interest in politics were slightly more likely to expose themselves to the political media than were subjects with lower interest. The failure to find interest to be a major discriminator may also be interpreted as support for Paul Klein's "theory" that people will use media regardless of what is available, even when interest in the content of the available media is low (Brown, 1971; Head, 1976). The interest measure was not found to interact with introversion-extroversion ($F < 1$).

The overall results suggest that introversion-extroversion may be a useful psychological variable for use in discriminating the media usage (habits) of individuals. It confirms previous findings and suggests new areas of research concerning media usage. In mass communication research, psychological constructs have up to now previously proved to be poor predictors of media usage. As observed in the literature

review of this dissertation, the psychological construct of dogmatism (Rokeach, 1960) has proved to be, at best an equivocal predictor of media usage (Clarke and James, 1967; Kleck and Wheaton, 1967; and Donahew and Palmgreen, 1973).

One note of caution should be observed in relation to the findings. The caution is not unique to this investigation, but applicable to all investigations (Miller, 1970). The caution concerns the interactive effect of the laboratory situation and the antecedent organismic condition (introversion-extroversion) on the outcome measure of selection. A rival hypothesis existing within the study is that the psychological trait may have affected responses within the laboratory and that the findings are not generalizable to the real world. That is, introverts react to the laboratory environment by not selecting the available media. The results are an artifact of the laboratory setting and are not truly reflective of media usage. While the criticism is applicable to this and other investigations, the rival hypothesis can be rejected by subsequent field research. A field research project designed to test the rival hypothesis and replicate these findings would consist of surveying and distinguishing the media usage of introverts and extroverts. Field research which found that extroverts are heavier newspaper readers than introverts would confirm these findings while dispelling the rival hypothesis.

While the research has found a significant discriminator between selectors and non-selectors of information, the research does not explain why a particular vehicle or message is selected from the array of messages available. The following analysis is designed to test the specific selectivity of subjects.

Analysis For Hypothesis (Set) 3

Only the subjects who selected books from the shelf were included in the analysis. The direct magnitude distance, as measured on the homophily scale shown in Appendix D, between the selected source and the subject was used as the dependent variable. The dependent variable is the actual selection score, which is compared to the theoretically predicted selection score or most homophilous source (value) available. The selective exposure hypothesis suggests that the most homophilous source-title available should be selected.

To determine whether the book selections could be predicted by the variables of familiarity, homophily, and importance, ordinary least squares, multiple regression, techniques were employed. The form of the analysis was that employed in Investigation 1:

$$Y_{ip} = a + \sum_{i=1}^4 b_{ip} X_{ip} + e_{ip} \quad (3)$$

where Y = the direct magnitude distance between the homophily score of the selected source and the subject, as estimated on the direct magnitude homophily scale

a = the intercept term for unequal measurement

X_1 = the familiarity score of the i th subject with the most familiar source-title available on the bookshelf

X_2 = the importance of politics measure for the i th subject

X_3 = the direct magnitude homophily score between the i th subject and the most homophilous political source (available on the bookshelf)

X_4 = the ($X_1 \times X_2$) interaction vector

e = the error term, assumed to be randomly distributed with a mean of zero.

The variables were entered into the equation in the same order as used in Investigation 1. The order was that stated above: familiarity was entered first; importance was entered second, etc. Hypothesis 3(a) through 3(d) were tested by determining the significance of the partial regression coefficients for each variable vector.

Results

An observation of the direct magnitude values assigned the most homophilous sources by subjects indicated that the sources used in the investigation represented a wide array along the liberal-conservative continuum and indicated that the subjects knew how to use the self-administered instrument. This conclusion was reached because very little variance was observed in the assignment of values to the most homophilous sources available. Almost every subject assigned the most homophilous source available a direct magnitude value between ten and fifteen units. No subject believed that all of the sources were greatly different from themselves (which would be indicated by uniformly high magnitude distances) nor did any subject believe that they were not at all different from the sources (which would be indicated by a value of zero).

The results of the regression analysis, using the selection score as the dependent variable, are shown in Table 7. As the table indicates, the only significant coefficient or variable found by the regression was the predictor variable of homophily. The familiarity, importance and interaction vectors were not significant. Although the regression contained a significant predictor variable, the cumulative variance explained (11 percent) by the set of four predictors was not sufficient to make the overall regression significant.

Because the homophily variable was significant, while the familiarity, importance and interaction vectors were not, the three non-significant predictors were deleted and a new regression estimated using homophily as the sole predictor variable. The results of the reduced (model) regression are shown in Table 8. As suggested by the full model analysis, the homophily variable explains significant variance in the dependent measure of selection ($F = 4.13$, d.f. = 1.55, $p < .05$). The results can be accepted as confirmation of hypothesis 3(c), the "classical" attitude-consistent selective exposure hypothesis.

Although the results can be interpreted as evidence of attitude-consistent selective exposure, the amount of variance explained by the regression was small ($R^2 = .07$). This finding is consistent with numerous previous studies which found significant, but low levels of selective exposure. For example, Atkin (1970) found selective exposure among the audience of the televised Republican National Convention, although over half of all Democrats were found to have watched at least some part of the convention. Wheelless (1974b) found evidence of selective exposure, but noted that a high degree of similarity or homophily between the source and subject is not necessary for exposure. Brock and Balloun (1967) also found only modest (although significant) evidence of selective exposure. One of their studies yielded an F of 5.47 (d.f. = 1,32) which was significant at the .05 level, but which indicates a low level of explained variance (1967: 420). A second Brock and Balloun study found a $-.28$ correlation for selective exposure. The correlation, while significant with d.f. = 110, indicates that the selective exposure variables explained only eight percent of the variance in their subjects'

TABLE 7

Full Model Regression Results
For Test Of Hypothesis 3

Dependent Variable: Selection			
<u>Predictor Variables:</u>	<u>b</u>	<u>F</u>	<u>r² change</u>
Familiarity	15.14	n.s.	.030
Importance (Saliency)	-1.09	n.s.	.000
Homophily	4.16*	4.58*	.077
Interaction	.246	n.s.	.004
Overall R ² = .11	d.f. = 4.52	F = n.s.	

p < .05*

TABLE 8

Reduced Model Regression
Results

Dependent Variable: Selection		
Predictor Variable:	<u>b</u>	<u>F</u>
Homophily	3.92*	4.13*
Constant	-16.34	--
$R^2 = .07^*$	d.f. = 1.55	F = 4.13*

*p < .05

behavior, approximately the same amount of variance explained in this analysis.

Discussion

When defining the dependent variable in relation to selector-source similarity (or homophily), one finds a small amount of variance explained by the predictor variable of homophily, and little or no variance explained by familiarity, salience or their interaction. The results of the analysis, although significant, raise the question: how useful is a predictor variable (or theory) which explains only seven percent of the variance in selection? In addressing this question, Hays (1963) observed:

...statistical significance is not the only, or even the best, evidence of a strong statistical association. A significant result implies that it is safe to say some association exists...if the estimated strength of the association is relatively small, it may not be worthwhile to spend more time effort in this direction. (1963: 328)

Hays also noted:

There is surely nothing on earth that is completely independent. The strength of an association may approach zero, but it should seldom or never be exactly zero. If one applies a large enough sample of the study of any relation, trivial or meaningless as it may be, sooner or later he is almost certain to achieve a significant result. Such a result may be a valid finding, but only in the sense that one can say with assurance that some association is not exactly zero. The degree to which such a finding enhances our knowledge is debatable. (1963: 326)

Hays suggests that studies which find a relationship between variables which can explain only seven or eight percent of the total variance are of limited importance (1963: 383). Using Hays' criterion, it can be argued that the variable relationships observed in this and similar investigations of selective exposure are of limited importance. Because

the selective exposure hypothesis, by previous definition, predicts a relationship between the variables, it can be said to be of limited importance.

Analysis For Hypothesis (Set) 4

The hypotheses comprising hypothesis (set) 4 predict an equality of predictor variable effect on the dependent variables of recognition and selective exposure. In multiple regression (the analytic technique used to test hypotheses 1 and 3) terms this means that the slopes in equations (1) and (3) will be the same. Equations (1) and (3) differ only in the dependent variables. In equation (1) recognition is the dependent variable and in equation (3) selective exposure is the dependent variable. The slopes are the partial regression coefficients (b) in the equations. In symbolic form, hypotheses 4(a) through 4(d) are stated: $b_r = b_{se}$. The test for equality of coefficients in separate linear regressions is a t-test (Goldberger, 1964):

$$t = \frac{b_j - b_k}{S_{b_j - b_k}} \quad (4)$$

The standard error of estimate is simply the standard deviation of the residuals (Kerlinger and Pedhazur, 1973).

Results

By definition the standard error of a significant regression coefficient cannot span zero. A significant regression coefficient is either truly positive or truly negative. The coefficients in the two linear regressions which tested hypotheses 1 and 3 are therefore

observably different. For that reason, equation (4) (or the t-test for the differences in coefficients) was not used to test hypothesis (set) 4.

The observed relationships are:

	<u>Regression Test of Hypothesis 1</u>	<u>Regression Test of Hypothesis 2</u>
Dependent Variable:	Recognition Threshold	Selective Exposure
Independent Variables:		
Familiarity	$b \neq 0$	$b = 0$
Importance	$b = 0$	$b = 0$
Homophily	$b = 0$	$b \neq 0$
Interaction	$b \neq 0$	$b = 0$

As can be observed from these regression results, the coefficients in the two linear regressions are completely different. In regression 1, familiarity and the interaction vector are significantly different from zero, whereas in the second regression, the same variables equal zero. Conversely, the homophily variable is significantly greater than zero in the selective exposure hypothesis test, but not significant in the first. The only observable equality is with the importance variable, which equalled zero in both equations. The importance variable by itself (or in a non-interacting manner) explains no variance in either equation.

Discussion

The array of predictor variables has a markedly different effect on selection than on recognition or perception. The results fail to confirm any of the hypotheses comprising hypothesis (set) 4 and suggest that perceptual set theory is unable to explain selective behavior.

The non-significant findings for hypothesis (set) 4 are the result of defining selective exposure in relation to source-selector similarity. Although this definition of selective exposure can be termed the "classical" definition of selective exposure, it has been observed that the definition has severe limitations. In research studies where significant findings of selective exposure have been obtained, the amount of variance explained in selectivity was usually low (less than ten percent). In studies where the variance explained in selectivity was larger (greater than ten percent), the homophily (or source-selector similarity) variable was probably correlated with source familiarity. The high explained variance in selection under these circumstances may be associated with the variable of familiarity, not homophily.

If familiarity were responsible for the high explained variance in previous selective exposure research, the selective exposure hypothesis should be redefined as:

"Exposing oneself to information which is highly familiar." (A)

rather than:

"Exposing oneself to information which is attitude-consistent." (B)

This reformulation is similar to the post hoc hypothesis suggested by hypothesis test 1. The reformulation is based on the findings of percentual threshold or set theory research. It suggests that the attitude-consistency findings of selective exposure are due to the confounding of the homophily effect with the familiarity effect.

In this investigation, the choice of sources available for exposure was based on an index of familiarity and political position. The indexing and method of assignment of the source titles to the

bookshelf resulted in a correlation between the familiarity and homophily variables which equaled zero (see Appendix F). It is therefore understandable why familiarity failed to explain any variance in the dependent variable, which was operationally defined in relation to homophily.

The data obtained to test hypothesis (set) 3 in this investigation (and also used in the test of hypotheses 4a through 4b) can be used to test the reformulated selection hypothesis (A). The dependent variable in the test would be the direct magnitude distance between the familiarity score of the selected source and the subject as estimated on the direct magnitude homophily scale. The predictor variables used to test the hypothesis would also be the same as those used to test hypothesis (set) 3.

The Post Hoc Hypothesis Test

The last portion of this dissertation seeks to determine why the obtained findings were not as predicted. The "post hoc" hypothesis suggests that the non-significant findings are due to an incorrect operationalization of selective exposure. The post hoc hypothesis suggests that people expose themselves to familiar rather than attitude-consistent information. Selective exposure appears to be an attitude-consistent choice when the attitude-consistent information is also highly familiar.

The reformulated hypothesis is, in effect, a retesting of hypothesis (set) 3, using the familiarity score of the selected source-title rather than homophily score as the criterion measure. The hypotheses to be tested in the post hoc evaluation are:

Post Hoc Hypothesis 1(a): When information selection occurs, the selected information can be predicted by the subject's familiarity with the information source ($b \neq 0$).

Post Hoc Hypothesis 1(b): When information selection occurs, the selected information can be predicted by the homophily between the subject and the information source ($b \neq 0$).

Post Hoc Hypothesis 1(c): When information selection occurs, the selected information can be predicted by the subject's importance evaluation of the information's content ($b \neq 0$).

Post Hoc Hypothesis 1(d): When information selection occurs, the selected information can be predicted by the interactive effect ($X_1 \times X_2$) of the importance evaluation and familiarity score ($b \neq 0$).

The hypotheses are identical to hypotheses 3(a) through 3(d), except that "selected information" will be operationalized in relation to familiarity rather than homophily.

Method and Analysis:

The selection data collected from the 57 subjects (and used to test hypotheses 3a through 3d) were reanalyzed. The method for testing the post hoc hypothesis set was ordinary least squares, multiple regression, techniques. The same method was used to test hypothesis (set) 3. The only difference between this and the third analysis lies in: 1) the operational definition of the dependent variable, and 2) the fact that the Y variables were standardized before estimating the fit of the data. The method of standardization was identical to the method of standardization used during the test of hypothesis (set) 1:

$$Z = \frac{X - \bar{X}}{S}$$

where Z = the standardized familiarity score of the i th subject with political source p

\bar{X} = the mean familiarity score of the ten political sources used in the bookshelf

X = the unstandardized familiarity score of the i th subject with the selected political source

S = the standard deviation of the familiarity scores assigned by the i th subject to the ten political sources used in the bookshelf

The standardization was conducted to make the dependent variable of equal measurement interval with the dependent variable of recognition threshold, which was standardized in the test of hypothesis (set) 1. Direct comparison of the two slopes would be impossible without standardization because the coefficients would, without standardization, differ, if for no other reason than the difference in the measurement intervals. The slope comparison test (or test of hypothesis set 4) is the critical hypothesis which tests the generalizability of set theory to information exposure.

Following the standardization of the dependent variable, the directionality or signs of the dependent variable values were reversed. Positive (+) standard scores were given negative (-) signs and negative standard scores were assigned positive signs. The reversal, like the standardization, was required to make the dependent variables used in the test of hypothesis 1 and the post hoc hypothesis test comparable. In the test of hypothesis set 1, familiarity was inversely related to recognition duration, as indicated by the significant negative coefficient. In the post hoc hypothesis test, a significant positive coefficient would

normally indicate a significant finding as predicted, as was found with the homophily variable in the test of hypothesis (set) 3. In order to make the coefficients in the post hoc hypothesis comparable in directionality with the coefficients in the test of hypothesis 1, the signs of the dependent variable values were reversed for the post hoc test.

The predictor variables in the post hoc hypothesis set are the same as in the test of hypothesis (set) 3. The form of the analysis is:

$$Y_{ip} = a + \sum_{i=1}^4 b_{ip} X_{ip} + e_{ip} \quad (5)$$

where Y = the (standardized and reversed) direct magnitude familiarity score between the selected source and the subject, as estimated on the direct magnitude familiarity scale

a = the intercept term for unequal measurement

X_1 = the direct magnitude familiarity score between the i th subject and the most familiar political source available on the bookshelf

X_2 = the importance of politics measure for the i th subject

X_3 = the homophily score of the i th subject with the most homophilous political source available on the bookshelf

X_4 = the ($X_1 \times X_2$) interaction vector

e = the error term, assumed to be randomly distributed with a mean of zero

Following this regression analysis, which tests the post hoc hypotheses, hypothesis (set) 4 will also be retested. The retest involves an analysis of the coefficients obtained from this and the first regression, which examined the effect of the same variables on recognition threshold. The retest is designed to see if a similarity in slopes was obtained.

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Results

The least squares regression results, using the standardized variable derived from the familiarity measure as the criterion variable, are shown in Table 9. The results of the overall regression, unlike in the test of hypothesis (set) 3, are significant ($F = 15.49$, d.f. = 4.55, $p < .001$). The amount of variance explained by the overall regression exceeds fifty percent ($R^2 = .53$), indicating a very strong relationship between the predictor variable set and the source-title selections.

An examination of the table shows that only two of the four coefficients are significant. The obtained significant effects are due to familiarity and the interaction vector. Of the two significant vectors, familiarity and the interaction vector explain about equal proportions of the variance. The amount of variance explained by the familiarity variable is 22 percent, while the interaction vector explains approximately 25 percent. The homophily variable, while significant in the regression test of hypothesis (set) 3, was not significant in this test. The salience (or importance) measure by itself was also not significant, although it was found to significantly interact with the familiarity variable.

The significance of this variable array is similar to the significance found in the first regression, which tested hypothesis (set) 1. Hypotheses 1(a) through 1(d) examined the effects of familiarity, importance and homophily on recognition threshold. In the regression test of that hypothesis set, the familiarity variable and the interaction vector explained significant amounts of variance in the rapidity with which subjects could recognize the names of the same political sources.

TABLE 9

Regression Results of
Post Hoc Hypothesis Test

Dependent Variable: Familiarity with Selected Source			
<u>Predictor Variables:</u>	<u>b</u>	Univariate <u>F</u>	<u>r²</u> <u>change</u>
Familiarity	-.710*	16.5*	.222
Importance	.573	3.43	.044
Homophily	-.0004	1.11	.014
Interaction	-.063*	29.2*	.250
Overall R ² = .530*	d.f. = 4.52	F = 15.49	

*p < .01

As in the post hoc hypothesis test, the homophily measure and the importance variable alone also failed to be useful predictors.

An observation of the directionality of the coefficients for the two regressions (testing hypothesis 1 and the post hoc hypotheses) also show a similarity. The equivalence of coefficient directionality was obtained by reversing the sign of the standardized familiarity selection score in the post hoc hypothesis test. Failure to have reversed the signs of the dependent variables in this test would have resulted in a positive coefficient. A positive coefficient would have made a t-test for similarity in slopes between the coefficients in the first and post hoc hypothesis set impossible.

Because the familiarity and interaction vectors were significant in the first and post hoc hypothesis tests and in the same direction, a test for similarity of slopes was conducted. This test is a retest of hypothesis (set) 4, testing whether the variable of familiarity and the interaction between importance and familiarity affect both recognition and selection in a like manner ($b_1 = b_2$). The t-test is defined as (Goldberger, 1964):

$$t = \frac{b_j - b_k}{S_{b_j - b_k}}$$

where S = the standard error of estimate.

The results of the t-tests are shown in Table 10. The coefficients for the importance and homophily variables are included for clarification purposes. Although the coefficients of the importance variable appear to be of greater magnitude or slope than the coefficients of the familiarity variable or interaction vector, .497 and .573 actually equal

zero. The coefficients span zero, as suggested by their large standard errors (.51 and .99 respectively). The coefficients are unstable and are not positive, as the raw coefficients alone might suggest. The coefficients of familiarity and interaction, on the other hand, appear to be of less magnitude or slope than the importance variable, but actually signify measurable effects on the dependent variables. Their standard errors are small and the coefficients are actually negative.

The t-test for the difference in slopes due to the interaction was not significant. This suggests that the interaction of the familiarity and importance variables has the same effect on recognition as selection. The standard errors of the interaction coefficients were relatively small in both regressions (.23 and .01 respectively) and of equal magnitude ($-.052 = -.063$). The similarity is almost observable. T-tests were also conducted for differences in slopes between the importance and homophily variables in the two regressions, despite the fact that the tests were superfluous. As expected, no significant differences were found between the coefficients in the two regressions. The coefficients equalled zero in both equations. The tests were superfluous because it was known that both sets of coefficients equalled zero before the tests were conducted.

The t-test for the difference in familiarity coefficients in the two regressions was significant ($t = 7.79, p < .01$). The significant result suggests that familiarity has a greater affect on selection than on recognition.

Discussion

The post hoc hypothesis tests suggest that perceptual set theory is generalizable to the phenomenon of selective exposure. It is

TABLE 10

Results of t-tests
of Slope Equality

Coefficients for:	Dependent Variables:		
	<u>Recognition</u>	<u>Selection</u>	<u>t</u>
Familiarity	-.180	-.710	7.79*
Importance	.497	.573	n.s.
Homophily	-.004	-.0004	n.s.
Interaction	-.052	-.063	n.s.

*p < .01

generalizable when selective exposure is defined as a propensity to select familiar (rather than attitude-consistent) information. When selective exposure is defined as the propensity to select attitude-consistent information, the set variables of familiarity and the interaction vector are incapable of explaining significant variance in the selection.

A similarity in the effect of the interaction vector on the response measures of recognition and selection was observed. The investigation found that familiarity had a greater effect on selection than recognition. The greater effect may be explainable in several ways. First, it may be that the use of the control words in the tachistoscopic investigation "slowed down" the subjects' ability to recognize the test words or political source names. That is, jumping from the names of historical figures (e.g., George Washington) to film stars (e.g., Dustin Hoffman) to brand names (e.g., Ford Trucks) may have decreased the rapidity with which subjects could recognize the political source names. There is some evidence that (at least some) subjects developed an expectancy for the names of film stars. "John Glenn" was on more than one occasion seen as John Voight." Robert Griffin was observed as "Robert Goulet." This expectancy could affect the rapidity of the name recognition of the political sources, reducing both the variance explained by and the slope of the relationship.

Second, there are two sources of error in the tachistoscopic investigation, but only one source of error in the book selection investigation. Both investigations are subject to errors of measurement in the scales used (which are included in Appendix D). In addition to this error, the tachistoscopic investigation is subject to mechanical error.

Without constant monitoring, it cannot be said for sure that the shutter speeds on the tachistoscope were entirely accurate. Variation in the shutter speeds cannot be determined by observation. Observation, however, ensured that the "bookshelf" was working correctly throughout the entire laboratory investigation. The bookshelf itself was not subject to error. Error associated with the bookshelf can be attributed to measurement error, not mechanical error. The mechanical error associated with the tachistoscope may have reduced the correlation (or slope) between rapidity of recognition and level of source familiarity.

Third, it may be that once recognition of the most familiar source name has occurred, the threshold of attention to that source title overshadows the perception of all competing messages, leading to the selection of the most familiar source. That is, subjects do not perceive the other source-titles after perception of the most familiar source has occurred. There is some support for this explanation. During the debriefing session, several subjects were asked why they selected the source-title that they did. One subject responded that she "picked up the first book" that she "saw." Another subject stated that he "really didn't notice what else was available."

In the laboratory study with the bookshelf, subjects were able to perceive or observe the source-titles in a "naturalistic" setting. The subjects were allowed, as in the natural environment, to perceive many competing stimuli (i.e., the different books on the shelf) simultaneously. The simultaneity of perception heightened or accentuated the effects of source familiarity, creating the overshadowing effect and the blocking of the perception of less familiar source titles. In the tachistoscopic

investigation, however, subjects were exposed to source names separately (or non-simultaneously). The slides were presented one after another. Because the subjects were viewing each slide separately, the overshadowing effect of high source familiarity could not occur. Because there were no competing stimuli, the magnitude of the effect of familiarity would logically be reduced. In least squares regression terms, the reduction in the effect of the familiarity variable would be a lower slope line, which was obtained.

This argument suggests that the two investigations measured the same phenomenon, but under two different conditions. The changed conditions affected the obtained slopes or coefficients. This explanation is the most parsimonious of the three within the perceptual set theory framework and suggests new avenues for research in the area.

A method for extending this dissertation's research (and testing the explanation) would consist of replicating the tachistoscopic investigation, but presenting several (three or four) source names on each tachistoscopically presented slide, rather than just one. Each source name on the slide would represent a different level of familiarity (from very low to very high, as measured on the direct magnitude scale). Subjects would be exposed to the slides procedurally as in this investigation, and asked to state the name or names on the slides that they recognize. If it is found that subjects consistently fail to recognize the names of the less familiar sources, the findings can be taken as corroboration of this dissertation's findings and as support for a perceptual set theory explanation of why familiarity (and the familiarity-importance interaction) affect(s) information selectivity.

CHAPTER VI

SUMMARY AND CONCLUSIONS

This dissertation began with a critical review of the research on information selection. While it initially addressed the specific theoretical question of: why is one information stimulus selected over another? it also addressed the general question of: why are some persons more inclined to expose themselves to media than others? The first question is that of selective exposure. The second question is that asked by "uses and gratifications" research.

Uses and gratifications research is a functionalist sociological approach which seeks to explain what people obtain from the media, rather than what media do to the users (which "effects" research explains). Uses and gratifications research suggests that people use media to relieve boredom; for stimulation or novelty; for companionship; for obtaining information to use in interpersonal communications; and for many other, less important reasons. Because uses and gratifications research is a sociological approach, it has never examined the relationship between particular psychological traits and the obtained gratifications. This dissertation examined that relationship.

By examining uses and gratifications research results, it was found that certain media usage functions (interpersonal communicatory uses; boredom relief; and novelty) were also variables common to and

correlated with the psychological trait of introversion-extroversion, which has been examined in psychological research. A synthesis of the two approaches suggested that the precedent organismic condition of introversion-extroversion could explain differences in the information selection behaviors of individuals. To test this hypothesis, a laboratory investigation was conducted. The results showed that the psychological trait was a significant discriminator between the selectors and non-selectors of print media containing "non-entertainment" information. Because the research was conducted in a laboratory, it is subject to the criticism that it lacks external validity. The study proposes a field method for extending the research and validating the findings. The synthesized theory suggests that the laboratory and field findings should achieve comparable results, a phenomenon rarely observed (Hovland, 1959).

One reason why the field and laboratory findings should concur is that the theory was synthesized from both sociological theory (which uses field methods) and psychological theory (which uses laboratory methods). This is a different approach than used in other research areas, such as in persuasion research. Persuasion research began in the laboratory. Subsequent persuasion research attempted to replicate the laboratory findings in the field, but with rare success (Hovland, 1959). This study used the opposite approach. It examined field research studies (Katz, Gurevitch and Haas, 1973, Johnstone, 1974; Becker, 1976) and laboratory research (Siegel, 1962; Wyatt, Langdon and Stock, 1937; Gibson, 1980) to find their area of compatibility before developing the research design for use in the laboratory. And it suggests a subsequent field approach for validating the laboratory research findings.

The second investigation on information selectivity sought to discover why a particular information stimulus is selected from the array of information that is available. This research and review examined the selective exposure hypothesis.

The theoretical framework used to examine selective exposure was perceptual set theory. The perceptual set theoretical approach was selected because the literature review found that the major theoretical framework used in previous selective exposure studies (dissonance theory) was unable to provide a parsimonious explanation of the prior research findings. Dissonance theory was viewed as a seriously flawed theory because it suggests that decision-consistent and attitude-consistent selectivity will occur, even though no evidence has been presented which supports the existence of decision-consistent selectivity.

Perceptual set theory was examined as a possible theoretical framework because it seeks to explain only attitude-consistent information selectivity, not decision-consistent information selectivity. The set theory explanation of selective exposure is that a person's pre-dispositions to a stimulus heightens the recognition of the stimulus and that the perceptual heightening leads to the selection of the stimulus. Selective perception, a concept related to the phenomenon of selective exposure, has been examined numerous times within a set theory context.

A series of set theory investigations of selective perception were conducted by Postman, Bruner and McGinnies (1948), Solomon and Howes (1951), and Howes and Solomon (1951) and Postman and Schneider (1951). Each study was a methodological replication of the preceding study with minor extension. As a body of replicated studies, they show that the

salience and familiarity that a subject has with an object or concept affects the threshold of recognition for the object or concept. Bruner (1958) synthesized these and other studies into a more comprehensive theory. Bruner argued that a subject's predispositional set affects attentiveness, memory and perception.

This dissertation argued that if selective perception and selective exposure are related phenomena, the variables which affect perception should also affect selection. More precisely, the dissertation hypothesized that the set variables of familiarity and salience should have the same effect on perception as on selection.

In addition to examining the effect to the set variables on perception and selection, this study also examined the effect of the variable of homophily (or source-selector similarity). This variable was added to the set theory investigation because it has been consistently used in selective exposure research conducted in the context of dissonance theory.

A tachistoscopic investigation of source recognition using the methodology of Postman, Bruner and McGinnies (1948) and Solomon and Howes (1951) was conducted. The t-scope investigation found that homophily has no effect on source recognition, but that familiarity and the interaction of salience and familiarity do. The findings corroborated the results of the original investigations. The results were interpreted precisely as Bruner (1958) had interpreted the results of the original investigations: familiarity and salience raise the threshold of recognition for objects concepts and sources.

The second set theory investigation consisted of the analysis of information (sources) selected by subjects during a disguised laboratory

session. The investigation was designed to measure actual selectivity, unlike most prior research investigations. Prior research on information selectivity almost always used "paper and pencil" tests as proxy measures for selectivity. Paper and pencil tests consist of measuring interest in available information stimuli by rank ordering or using ratings of interest. Brock (1965) has shown that paper and pencil tests are not reflective of actual behavior, but are laboratory reactive.

A least squares regression analysis, testing the null hypotheses that familiarity, salience and homophily were unable to explain information selectivity, was conducted. Information selectivity was operationally defined as the direct magnitude difference between the subject and the selected source, as estimated by the subject on the homophily scale. The analysis showed that only the homophily variable, of the three predictor variables tested, was able to explain any variance in the subjects' selections. An examination of the amount of variance explained by the homophily variable suggested that it was not large enough to be considered important, despite the significant results.

Because of the inability to reject the null hypotheses, a re-evaluation was conducted. The re-evaluation consisted of a theoretical and empirical re-analysis. The theoretical re-evaluation suggested that the original dependent variable used in the selection investigation was derived from dissonance theory, not perceptual set theory. The re-evaluation suggested that the findings were the result of a theoretical mistake, which necessarily resulted in a methodological mistake. The error lay in defining selective exposure as the propensity to select attitude-consistent rather than familiar information. The attitude-consistency

definition was concluded to be a definition derived from dissonance theory, but not supported by perceptual set theory. The set theory investigation of source recognition found that homophily had no effect on perceptual threshold. Because the dependent variable was operationalized as attitude-consistency, significant results should not have been anticipated.

This mistake contains a lesson concerning theoretical or paradigmatic shifts in social science. As observed in the introductory chapter of this thesis and in Kuhn's The Structure of Scientific Revolutions (1970), a reigning theory will dominate and limit the scope of investigations conducted during its reign. Rival theories, which seek to replace the traditional or reigning theory, must "solve the problems which led the old one to crisis." While the rival theory must solve existing problems, it may be hampered in obtaining a solution by the reigning theory. The rival theory may be hampered because it is born from the old theory and "ordinarily incorporates much of the vocabulary and apparatus, both conceptual and manipulative, that the traditional paradigm had previously employed" (Kuhn, 1970: 149).

In this investigation, set theory was used to solve a problem left unanswered by dissonance theory. Because dissonance theory served as the departure point for the investigation, dissonance theory's definition of selective exposure was incorporated into the rival set (theoretical) model. The incorporation of the definition into the model initially hampered the development and testing of the rival theory. In effect, the same problem that the rival theory sought to explain was incorporated into its constructs and operational definitions. A lesson

learned by this mistake is that new theories are not easily developed, generalized, tested or free from the effect of preceding theories from which they emerge.

The t-scope investigation supported the revised rival theory: familiarity and the interaction of salience and familiarity, not homophily, should raise the threshold of attention to information. The theoretical re-evaluation suggested that the dependent measure be operationalized as the degree of familiarity between the subject and the selected source (title), not the attitude-consistency of the information. The data obtained in the laboratory investigation of selectivity were then re-analyzed using the familiarity score of the subject with the selected source as the dependent variable. Null hypotheses were tested which predicted that familiarity, salience, homophily and the interaction vector would not explain variance in the new dependent measure of selectivity. The hypotheses were tested using ordinary least squares multiple regression techniques.

The analysis resulted in the rejection of two null hypotheses. The analysis showed that the variable of familiarity and the salience-familiarity interaction had a measurable effect on subjects' selections. Homophily was not found to be significantly related to selectivity. Similar results were obtained in the t-scope investigation which used recognition as the dependent variable, except that the magnitude of the familiarity effect was not as pronounced.

The reasons for the difference in the magnitude of the effects were critically analyzed. Three explanations were proffered: one suggested that the method of presenting source names in the t-scope

investigation may have reduced the true familiarity effect; the second suggested that the difference could be due to mechanical error; while the third suggested that the difference was due to the measuring the phenomena under different circumstances. The third explanation suggested that, while recognition threshold and selectivity are both set responses, the differences in the observed effects are due to the presentation of either multiple or individual stimuli. It was suggested that the presentation of a single stimulus, as in the t-scope investigation, does not allow observation of perceptual heightening to familiar stimuli. On the other hand, when multiple stimuli are presented, as in the selectivity investigation, the heightening effect is measurably more pronounced.

The concept of perceptual heightening, as used in this dissertation, is very similar to the concept of reduction of attention to less familiar stimuli, as proposed by Treisman (1960). Treisman argued that one cannot speak of a rejection of information as dissonance theory does, but rather of a weakening of attenuation of attention to one stimulus compared to another. This conceptualization, as applied to this dissertation's findings, was considered to be most parsimonious of the three Proffered explanations.

The dissertation suggests subsequent research to extend the theory, replicate the findings and test the adequacy of the proffered explanation. A methodology proposed by the dissertation consists of the tachistoscopic presentation of multiple rather than individual source names on one slide. The three or four source names on the slides would be of differing familiarity levels. If subjects consistently recognize the name of the most familiar source name on the slide first, regardless

of location on the slide, the results could be interpreted as support for the theory of perceptual heightening.

The model proposed in Chapter IV, with the exception of the homophily variable, was corroborated by the research. The research results indicate that introversion-extroversion and the interest that subjects have in available information can affect whether media usage occurs or not, while familiarity and salience (singly and interactively) affect the perception and subsequent selection of available information. The revised model, excluding the homophily variable, is shown in Figure 3.

The findings support what has apparently been believed and practiced by people in the media: that familiarity is a major determinant of people's media exposure patterns. This can explain the propensity of network executives and television program producers to use highly familiar performers as program stars over less familiar performers, even if the highly familiar performer has been associated with several television program failures (e.g. Tim Conway or Don Rickles). It can also explain why performer publicity, even if judged to be negative by the public (as one could argue were Jane Fonda's tour of North Vietnam and other activities), has a less detrimental effect on success than no publicity at all. The results of this investigation suggest that the success rates of television programs starring highly familiar performers will be greater than the success rates of programs starring less familiar performers. The policy and social significance of these generalizations, however, are minor when compared to the implications that the findings have in the area of politics.

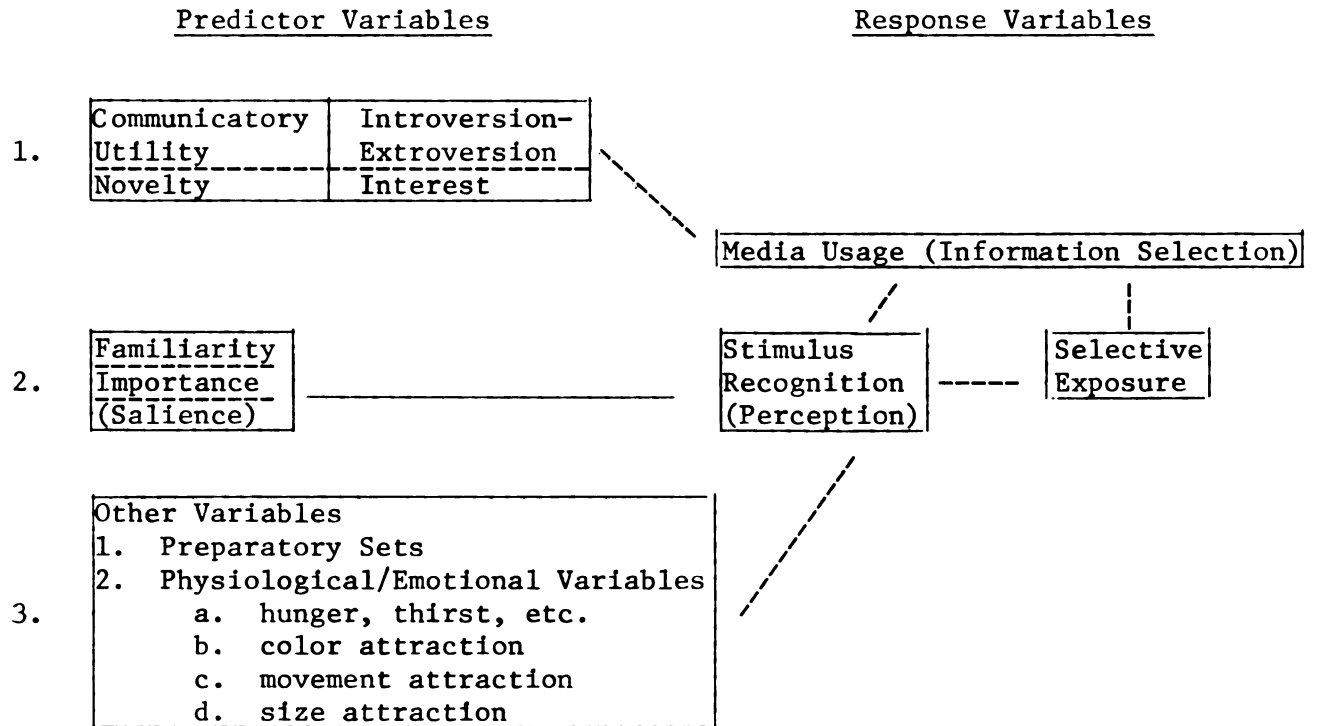


FIGURE 3

Revised Model of Recognition, Information
Selection and Selective Exposure

The results suggest that familiarity is a more important determinant of exposure to non-broadcast political communications than other variables, such as political source (candidate)-receiver (voter) similarity. The results suggest that even if a political candidate holds political positions of great similarity to those of the voting public, he will be at a major disadvantage to another candidate in communicating this similarity if he is less familiar to the public than his opponent. The more familiar opponent is in a better position to persuade the public to vote for him because of the exposure advantage that he has.

To a limited extent, this explains both the advantage held by political incumbents and the lack of issue-oriented campaigns in political contests. Incumbents, at least in primary campaigns, tend to be more familiar than non-incumbents. In these circumstances, the high familiarity of the incumbent, regardless of the similarity between his position and that of the public, can lead to the recognition of and exposure to his campaign messages. This exposure may serve to further increase his familiarity, foreclosing a challenge by anyone other than an equally familiar personality. This can explain the relative scarcity of "dark horse" victories and the practice of many politicians to "work themselves up from the ranks." Many politicians work themselves up from entry level positions (such as councilmanic or supervisory seats) to higher level positions (such as mayor or congressman). At the entry level position, it is necessary to achieve high familiarity levels among relatively few voters in restricted geographical districts. Once elected to an entry level position, the politician can use the office to enhance his

familiarity among voters in other areas. The politician is then in a position to run for a higher office, once a high familiarity level has been established among voters in the larger area.

This theory suggests that persons who have achieved high familiarity levels among the general public, even for reasons other than politics (sports, acting, etc.), should have a communication advantage in political campaigns. Examples of such persons include John Glenn in Ohio (1974); Ronald Reagan in California (1966); and Admiral Denton in Alabama (1980). Their high familiarity level allows them to circumvent the necessity of developing political experience, because familiarity determines the receptivity of the public to campaign messages. On the other hand, when a political candidate enters an election as an unfamiliar personality, huge sums of money are probably needed to television advertising, which has been shown to circumvent selective exposure (Surlin and Gordon, 1976; Atkin, et. al., 1972), to increase familiarity level. Because of the necessity of establishing high candidate familiarity among voters, political issues, platforms and problem solutions are, at least in the early stages of a political campaign, relegated to secondary status in the political arena.

The findings of this investigation, while indicating that high source (or candidate) familiarity can affect exposure to non-broadcast political communications, do not demonstrate that exposure to the communications has a direct affect on electoral outcomes. What it does suggest is that highly familiar political sources have an advantage in obtaining public exposure to their messages. Although it has been

consistently acknowledged that exposure is a prerequisite to opinion and behavior changes, exposure to political communications does not necessarily indicate a substantial opinion or behavioral effect. Substantial research has been conducted on the role of exposure in persuasion (Howland, Janis and Kelley, 1953), but considerably less has been conducted on the role of advertising messages, as a specific type of political communication, on the electoral process.

The issue of the effect of exposure to political messages during electoral campaigns is an area that needs intensive research. Although the 1974 election law (PL93-443) establishes limits on campaign expenditures, a loophole in the law allows political parties to spend substantially more on congressional and senate campaigns than candidate committees can spend. The loophole has been enlarged by a recent Supreme Court ruling which stated that independent political action committees are not limited by the 1974 election law. As a result, the Republican National Committee and independent conservative action committees dominated campaign spending during the nine months preceding the 1980 general election (Congressional Quarterly Weekly Report, 1980). The higher levels of expenditure can increase the conservative candidates' familiarity among voters; increase exposure to their non-broadcast campaign communications; and create an environment for opinion change. In the 1980 elections, conservative Republicans won landslide victories in both Congressional and Senate elections (Time, November 17, 1980).

This campaign spending and the results of this investigation revive the issue of the effect of campaign spending on elections. Spokespersons for the Republican Party have argued that campaign spending

has no effect on the electoral process. For example, Nick Longworth, field operations director for the Republican National Committee, has states: "I've heard of a guy spending a quarter of what his opponent did and still won." On the other hand, many Democrats, including defeated Iowa Senator John Culver, have argued that campaign spending can win an election (U.S. News and World Report, Sept. 29, 1980). The effect of campaign spending on elections needs examination. If it is found that campaign promotional expenditures can effect elections, a revision of the 1976 campaign law is probably necessary.

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APPENDIX A

DOCUMENTATION FOR TABLE 1

APPENDIX 1

DOCUMENTATION FOR TABLE 1

Laboratory Studies

A	B	C
1. Adams (1961)	1. Berkowitz (1965)	1. Atkin (1971)
2. Brodbeck (1956)	2. Brock (1965)	2. Donahew and Palmgreen (1971)
3. Canon (1964)	3. Brock and Balloun (1963)	3. Donahew, Parker, et al. (1972)
4. Cohen, et al. (1959)	4. Clarke and James (1967)	4. Innes (1978)
5. Feather (1962)	5. Kleck and Wheaton (1967)	5. Kleinhesselink and Edwards (1975)
6. Feather (1963)	6. Lowe and Steiner (1968)	6. Lowin (1969)
7. Freedman (1965)	7. Rhine (1967)	7. McGinnies, et al. (1978)
8. Jecker (1964)		8. Miller (1978)
9. Mills, Aronson, et al. (1959)		9. Schultz (1974)
10. Mills and Ross (1964)		10. Tan (1973)
11. Rosen (1961)		11. Wheelless (1974b)
12. Sears (1965)		12. Wheelless (1974b)
13. Sears (1966)		
14. Sears and Freedman (1965)		

Field Studies

A	B	C
1. Lazarsfeld, et al. (1948)	1. Diab (1965)	1. Atkin (1970)
2. Berelson, et al. (1954)	2. Greenberg (1965)	2. Atkin, Bowen, et al. (1972)
3. Ehrlich, et al. (1957)	3. McCroskey & Prichard (1967)	3. Atkin, Greenberg, et al. (1979)
4. Freedman and Sears (1963)	4. McGinnies & Rosenbaum (1965)	4. Atkin & Herald (1976)
5. Schramm and Carter (1959)	5. Mills (1965a)	5. Bartlett, et al. (1974)
6. Starr and Hughes (1950)	6. Mills (1965b)	6. Chaffee & McLeod (1973)
	7. Mills and Jellison (1968)	7. Grupp (1969)
	8. Stempel (1961)	8. Grupp (1970)
	9. Lowin (1967)	9. Kaid & Hirsh (1973)
		10. O'Keefe and Mendelson
		11. Rosenbaum, et al. (1974)
		12. Rosenbaum, et al. (1973)
		13. Surlin & Gordon (1974)

APPENDIX B

DOCUMENTATION FOR TABLE 2

APPENDIX 2

DOCUMENTATION FOR TABLE 2

Experiments

Manipulated Variables ()

A	B	C
<p>Canon (decision usefulness, confidence)</p> <p>Cohen, <u>et al.</u> (dissonance level)</p> <p>Freedman (decision)</p> <p>Jecker (decision usefulness)</p> <p>Mills and Ross (decision certainty, commitment)</p> <p>Mills, Aronson, <u>et al.</u> (decision importance)</p> <p>Sears, 1965 (decision, information newness)</p> <p>Sears, 1966 (decision)</p> <p>Sears and Freedman, 1965 (commitment level, argument newness, commitment)</p> <p>Rosen (decision importance)</p>	<p>Lowe and Steiner (decision consequences, reversibility)</p>	<p>Lowin (decision confidence, ease of refutation)</p> <p>McGinnies, <u>et al.</u> (reinforcement)</p> <p>Miller (decision regret time)</p> <p>Tan (dissonance level, situation)</p>

APPENDIX 2

(Continued)

Investigations

Measured Variables ()

A

Feather, 1962 (smoking)
Feather, 1963 (smoking)

B

Donahew and Palmgreen (attitudes,
dogmatism)
Donahew, Parker, et al. (attitudes,
dogmatism)
Wheelless, 1974a (source, attitudes)
Wheelless, 1974b (source, attitudes)

C

Mixed

Measured and Manipulated Independent Variables (/)

Adams (wiredtapping/ease of
refutation)
Brodbeck (beliefs/dissonance
level)

Berkowitz (attitude/dissonance
level)
Brock (smoking/visibility)
Brock and Balloun (smoking,
church attendance/usefulness)
Clark and James (dogmatism/use-
fulness)
Kleck and Wheaton (dogmatism/
commitment)
Rhine (attitudes/dissonance
level)

Atkin (attitudes/information
accessibility)
Innes (dogmatism/usefulness)
Kleinhesselink and Edwards (atti-
tudes/refutability)
Sultz (dogmatism/confidence)

APPENDIX C

UNREDUCED SCALES USED BY JUDGES

APPENDIX C

UNREDUCED SCALES USED BY JUDGES

Unreduced Familiarity Scale Used By Judges

Below are listed the names of many personalities. You may be very familiar with some names and unfamiliar with others. Based on the number of facts that you know about each person names below, please rate your familiarity with them. If "0" (zero) means total unfamiliarity and 10 (ten) means high familiarity, how familiar are you with the following:

For example: Richard Nixon 10. He is a very familiar personality.
Governor Milliken 9. He is quite familiar, but not as familiar as Richard Nixon.

Phyllis Schlafly _____	Eugene McCarthy _____	Billy Graham _____
Jimmy Carter _____	Daniel Barrigan _____	S. I. Hayakawa _____
Ted Kennedy _____	Donald Rumsfeld _____	John Connally _____
J. K. Galbraith _____	L. Patrick Gray _____	Ronald Reagan _____
John Glenn _____	John Sparkman _____	Medgar Evers _____
Jerry Brown _____	Jacob Javits _____	Joseph Califano _____
Harold Brown _____	Robert Shelton _____	Arthur Burns _____
Tom Hayden _____	Charles Percy _____	Edward Brooke _____
Richard Helms _____	Alexander Haig _____	Daniel Flood _____
Gloria Steinem _____	Howard Jarvis _____	Earl Warren _____
Russell Long _____	John Mitchell _____	J. Edgar Hoover _____
Howard Baker _____	George McGovern _____	Frank Church _____
Angela David _____	Birch Bayh _____	Henry Jackson _____
Andrew Young _____	Ralph Nader _____	Nelson Rockefeller _____
Charles Schultze _____	Robert Griffin _____	Charles Colson _____
Bella Abzug _____	Elliot Richardson _____	Frank Rizzo _____
Coleman Young _____	Daniel Moynihan _____	Gerald Ford _____
Zbigniew Brzezinski _____	Joan Little _____	Spiro Agnew _____
Robert Byrd _____	Daniel Ellsberg _____	Morris Udall _____
James Schlesinger _____	Lester Maddox _____	Hubert Humphrey _____
Betty Friedan _____	Emily Harris _____	Robert Strauss _____
Adam Clayton Powell _____	William O. Douglas _____	Henry Kissinger _____
Philip Agee _____	Carl Albert _____	George Wallace _____
William F. Buckley _____	Anita Bryant _____	Jesse Jackson _____
Sargent Shriver _____	Cyrus Vance _____	Phil Crane _____
Fred Harris _____	Abraham Ribicoff _____	Wayne Hays _____

APPENDIX C

(Continued)

Unreduced Liberalism-Conservatism Scale Used By Judges

Below are listed the names of personalities involved in politics or identified with political issues. You may be very familiar with some and completely unfamiliar with others. If you are unfamiliar with a name, place an "X" in the space next to the name. Otherwise estimate the political position of the personality with this scale: "10" means very liberal (left) and "0" means very conservative. For example: Governor Milliken is usually identified as Middle-of-the-Road, but tending slightly toward conservatism. If this is your picture of him, he would be given a "4": Governor Milliken 4.

Phyllis Schlafly _____	Eugene McCarthy _____	Billy Graham _____
Jimmy Carter _____	Daniel Barrigan _____	S. I. Hayakawa _____
Ted Kennedy _____	Donald Rumsfeld _____	John Connally _____
J. K. Galbraith _____	L. Patrick Gray _____	Ronald Reagan _____
John Glenn _____	John Sparkman _____	Medgar Evers _____
Jerry Brown _____	Jacob Javits _____	Joseph Califano _____
Harold Brown _____	Robert Shelton _____	Arthur Burns _____
Tom Hayden _____	Alexander Haig _____	Daniel Flood _____
Gloria Steinem _____	Howard Jarvis _____	Earl Warren _____
Russell Long _____	John Mitchell _____	J. Edgar Hoover _____
Howard Baker _____	George McGovern _____	Frank Church _____
Angela Davis _____	Birch Bayh _____	Henry Jackson _____
Andrew Young _____	Robert Griffin _____	Charles Colson _____
Bella Abzug _____	Elliot Richardson _____	Frank Rizzo _____
Coleman Young _____	Daniel Moynihan _____	Gerald Ford _____
Zbigniew Brzezinski _____	Joan Little _____	Spiro Agnew _____
Robert Byrd _____	Daniel Ellsberg _____	Morris Udall _____
James Schlesinger _____	Lester Maddox _____	Hubert Humphrey _____
Betty Friedan _____	Emily Harris _____	Robert Strauss _____
Adam Clayton Powell _____	William O. Douglas _____	Henry Kissinger _____
Philip Agee _____	Carl Albert _____	George Wallace _____
William F. Buckley _____	Anita Bryant _____	Jesse Jackson _____
Sargent Shriver _____	Cyrus Vance _____	Phil Crane _____
Fred Harris _____	Abraham Ribicoff _____	Wayne Hays _____

APPENDIX D

SCALES USED IN INVESTIGATIONS

APPENDIX D

SCALES USED IN INVESTIGATIONS

(Reduced) Familiarity Scale Used in Investigation

Below are listed the names of many "political" personalities. You may be very familiar with some names and unfamiliar with others. Based on the number of facts that you know about each person named below, please rate your familiarity with them. If "0" (zero) means total unfamiliarity and "10" (ten) means high familiarity, how familiar are you with the following:

For example: Richard Nixon 10. He is a very familiar personality.
Governor Milliken 9. He is quite familiar, but not as familiar as Richard Nixon.

Charles Percy _____
Ted Kennedy _____
John Glenn _____
Angela Davis _____
William F. Buckley _____
Betty Friedan _____
Tom Hayden _____
Anita Bryant _____

Hubert Humphrey _____
Robert Strauss _____
Ronald Reagan _____
Jesse Jackson _____
S. I. Hayakawa _____
Robert Griffin _____
Daniel Moynihan _____
Joseph Califano _____

APPENDIX D

(Continued)

Homophily Scale Used in Investigation

Below are listed pairs of names of personalities involved with or identified with political issues. If you are totally unfamiliar with either name in the pairings, place an "X" in the space next to the names. Otherwise try to estimate the distances between the names using the following scale:

IF THE DISTANCE BETWEEN LIBERAL AND CONSERVATIVE IS 100 UNITS, what is the distance between:

(For example: Liberal and Conservative 100

Jimmy Carter and Governor Milliken 10. Governor Milliken and Jimmy Carter are seen as Middle-of-the-Road by the person answering here, although Jimmy Carter is seen as slightly "liberal" while Governor Milliken is seen as slightly "conservative."

George McGovern and George Wallace 95. George McGovern is seen as very liberal while George Wallace is seen as very conservative by this person.

Ted Kennedy and Ronald Reagan ____
 William F. Buckley and Ted Kennedy ____
 Me and Ted Kennedy ____
 Me and Ronald Reagan ____
 Me and William F. Buckley ____
 John Glenn and Ronald Reagan ____
 Angela Davis and John Glenn ____
 Tom Hayden and Angela Davis ____
 Me and John Glenn ____
 Me and Tom Hayden ____
 Me and Angela Davis ____
 Betty Friedan and Anita Bryant ____
 Robert Griffin and Betty Friedan ____
 Hubert Humphrey and Robert Griffin ____
 Me and Betty Friedan ____
 Me and Anita Bryant ____
 Me and Robert Griffin ____
 Me and Hubert Humphrey ____
 Jesse Jackson and Ronald Reagan ____
 Jesse Jackson and S. I. Hayakawa ____
 Robert Strauss and S. I. Hayakawa ____
 Me and Robert Strauss ____
 Me and S. I. Hayakawa ____
 Me and Jesse Jackson ____
 Charles Percy and Angela Davis ____
 Angela Davis and Ronald Reagan ____
 Daniel Moynihan and Charles Percy ____
 Angela Davis and Daniel Moynihan ____
 Me and Charles Percy ____
 Me and Daniel Moynihan ____

APPENDIX D

(Continued)

Political Participation Scale (Matthews and Prothro, 1966)

(political discussion)

1. When you talk with your friends or family, do you ever talk about political problems--that is, what's happening in the country or your community?
☐ yes ☐ no ☐ can't recall
2. Have you ever talked to people to try to get them to vote for or against a candidate running for political office?
☐ yes ☐ no ☐ can't recall

(voting)

3. Have you ever voted?
☐ yes ☐ no ☐ can't recall
4. Did you vote in the last congressional election in 1978?
☐ yes ☐ no ☐ can't recall

(campaign participation)

5. Have you ever given any money or bought tickets or anything to help someone who was trying to win an election?
☐ yes ☐ no ☐ can't recall
6. Have you ever done any work to help a candidate in his campaign?
☐ yes ☐ no ☐ can't recall
7. Have you ever gone to any political meetings, rallies or things like that in connection with an election (or a political issue)?
☐ yes ☐ no ☐ can't recall

(political membership)

8. Do you belong to any clubs or groups like Young Democrats, Young Republicans, NAACP or any political organization?
☐ yes ☐ no ☐ can't recall

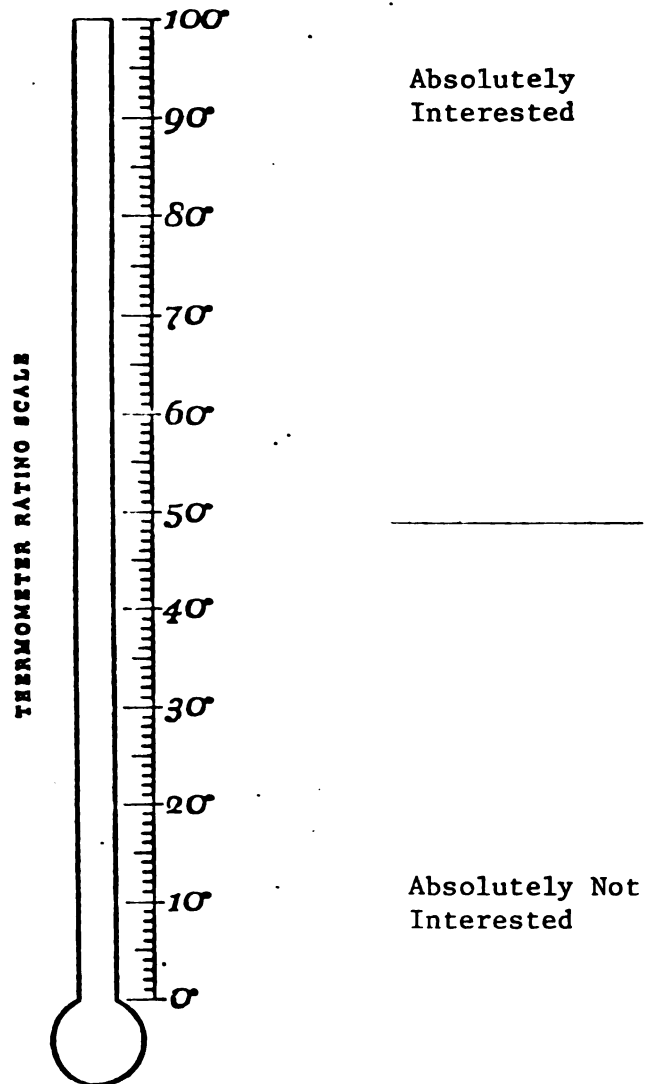
APPENDIX D

(Continued)

Haskins Interest Scale (Haskins, 1960)

HOW INTERESTED ARE YOU IN POLITICS?

The Interest Rating Scale



Place a line through the thermometer
at the point which best describes your
interest in politics.

APPENDIX D

(Continued)

Introversion-Extroversion Scale (Bendig, 1962)

Place an "X" in the space that best describes you.

1. I am happiest when I get involved in some project that calls for rapid action.

<u> </u> yes	<u> </u> sometimes	<u> </u> no
--------------------------	--------------------------------	-------------------------

2. I usually take the initiative in making new friends.

<u> </u> yes	<u> </u> sometimes	<u> </u> no
--------------------------	--------------------------------	-------------------------

3. I would rate myself as a lively individual.

<u> </u> yes	<u> </u> sometimes	<u> </u> no
--------------------------	--------------------------------	-------------------------

4. I would be very unhappy if I were prevented from making numerous social contacts.

<u> </u> yes	<u> </u> sometimes	<u> </u> no
--------------------------	--------------------------------	-------------------------

- *5. I am inclined to keep in the background on social occasions.

<u> </u> yes	<u> </u> sometimes	<u> </u> no
--------------------------	--------------------------------	-------------------------

6. I like to mix socially with people.

<u> </u> yes	<u> </u> sometimes	<u> </u> no
--------------------------	--------------------------------	-------------------------

- *7. I am inclined to limit my acquaintances to a select few.

<u> </u> yes	<u> </u> sometimes	<u> </u> no
--------------------------	--------------------------------	-------------------------

8. I like to have many social engagements.

<u> </u> yes	<u> </u> sometimes	<u> </u> no
--------------------------	--------------------------------	-------------------------

9. I generally prefer to take the lead in group activities.

<u> </u> yes	<u> </u> sometimes	<u> </u> no
--------------------------	--------------------------------	-------------------------

10. I nearly always have a ready answer for remarks directed at me.

<u> </u> yes	<u> </u> sometimes	<u> </u> no
--------------------------	--------------------------------	-------------------------

Interversion-Extroversion Scale (Continues)

11. I would rate myself as a happy-go-lucky individual.

<u> </u>	<u> </u>	<u> </u>
yes	sometimes	no

*12. I am inclined to keep quiet when out in a social group.

<u> </u>	<u> </u>	<u> </u>
yes	sometimes	no

13. I can usually let myself go and have a hilariously good time at a party.

<u> </u>	<u> </u>	<u> </u>
yes	sometimes	no

14. Other people regard me as a lively individual.

<u> </u>	<u> </u>	<u> </u>
yes	sometimes	no

15. I would rate myself as a talkative individual.

<u> </u>	<u> </u>	<u> </u>
yes	sometimes	no

*Indicates reversal questions

APPENDIX E

BIOGRAPHICAL SKETCHES OF POLITICAL FIGURES
USED AS INFORMATION SOURCES IN INVESTIGATION

APPENDIX E

BIOGRAPHICAL SKETCHES OF POLITICAL FIGURES
USED AS INFORMATION SOURCES IN INVESTIGATION

- Anita Bryant (1940-). Performer and conservative spokeswoman on women and gay rights. Performer on Billy Graham Egangelical Crusades (1965-); attendant and performer at Republican National Convention, 1968.
- William F. Buckley, Jr. (1925-). Magazine editor and author. Host of conservative television show "Firing Line" (1966-); syndicated columnist (1962-); and editor-in-chief of National Review magazine. Author of What is Conservatism? (1964); Dialogues in Americanism (1964); and McCarthy and His Enemies (1954).
- Joseph Califano (1931-). Attorney and politician. General Counsel, Department of the Army (1963-4); Special Assistant to the President (1964-5); Secretary of HEW (1977-9); General Counsel, Democratic National Committee (1970-2).
- Angela Davis (1944-). Political activist and author. Member and Vice-Presidential Candidate (1980) of Communist Party; author of If They Come in the Morning: Voices of Resistance (1971); Angela Davis: An Autobiography (1974).
- Betty Friedan (1921-). Author and feminist leader. President and founder of National Organization of Women (1966-70); organizer of National Women's Political Caucus (1971) and International Feminist Congress (1973). Author of The Feminist Mystique (1963) and Writings on the Women's Movement (1976).
- John Glenn (1921-). U.S. Senator. Participant in first non-stop supersonic transcontinental Flight (1957); Pilot, Mercury-Atlas 6, orbital space flight launched from Cape Canaveral (1962); U.S. Senator from Ohio (1975-).
- Robert Griffin (1923-). Lawyer and politician. Member, 85th-89th Congress from 9th District, Michigan; U.S. Senator from Michigan (1966-1979); Visiting Fellow, American Enterprise Institute on Public Policy Research (1979-).

APPENDIX E

(Continued)

- S. I. Hayakawa (1906-). Author and Republican Senator from California. President of San Francisco State College (1968-9); Senator from California (1977-). Author of Language, Meaning and Maturity (1954) and Symbol, Status and Personality (1962).
- Tom Hayden (1940-). Author and social activist. Co-founder and member of Student Non-Violent Co-ordinating Committee; Co-founder and President (1961-3) of Students for a Democratic Society; U.S. Senate Candidate in California State Primary (1976). Author of Rebellion in Newark (1967); Rebellion and Repression (1969); and Trial (1976).
- Hubert Humphrey (1911-1978). Politician. U.S. Senator from Minnesota (1948-64; 1971-78); Senate Majority Whip (1961); Vice-President of U.S. (1965-1969); Democratic Presidential Nominee (1968). Author of A Liberal Program for Modern America; Political Philosophy of the New Deal; and Young Americans in the Now World.
- Jesse Jackson (1941-). Clergyman and civic leader. Co-founder of Operation Breadbasket, Southern Christian Leadership Conference; Operation PUSH (1971); member, Active Black Coalition for United Community Action.
- Edward Kennedy (1932-). Politician and author. Brother of U.S. President, John Kennedy; U.S. Senator from Massachusetts (1962-); former Assistant Majority Leader; Chairman, Judiciary Committee (1979-). Author of Decisions for a Decade, (1972) and Our Day and Generation (1979).
- Daniel Moynihan (1927-). Politician and author. Counsellor to President, Member of Cabinet (1969-70); Ambassador to India (1973-75); Permanent U.S. Representative to United Nations (1975-76), U.S. Senator from New York (1977-). Author of The Politics of a Guaranteed Income (1973) and The Defense of Freedom (1966).

APPENDIX E

(Continued)

- Charles Percy (1919-) . Politician. Vice-Chairman, Republican National Finance Committee (1957-59); Chairman, Committee Platforms for Republican National Convention (1960); Republican candidate for Governor of Illinois (1964); U.S. Senator from Illinois (1967-).
- Ronald Reagan (1911-) . Motion picture actor and politician. President of Screen Actors Guild (1947-52, 1959); Governor of State of California (1967-74); elected President of United States (1980).
- Robert Strauss (1918-) . Lawyer and politician. Democratic National Committeeman from Texas (1968-72); Member of Executive Committee, Democratic National Committee (1969-77); Chairman, Democratic National Committee (1972-77); Chairman, President Carter Re-election Campaign (1979).

APPENDIX F

CORRELATION MATRICES OF VARIABLES
USED IN INVESTIGATIONS

APPENDIX F

CORRELATION MATRICES OF VARIABLES
USED IN INVESTIGATIONSTable 1Correlation Matrix of Variables
Used to Test Hypothesis (Set) 1

Familiarity	-.331*		
Homophily	.015	-.141	
Importance	-.004	.211*	-.122
	Recognition Duration (Standardized)	Familiarity	Homophily

*p < .05

APPENDIX F

(Continued)

Table 2

Correlation Matrix of Variables
Used to Test Hypothesis (Set) 3

Familiarity	-.037		
Homophily	.264*	-.076	
Importance	-.036	.265*	-.109
	Selection (Homophily)	Familiarity	Homophily

*p < .05

APPENDIX F

(Continued)

Table 3

Correlation Matrix of Variables
Used to Test Post Hoc Hypotheses

Familiarity	-.47*		
Homophily	-.044	-.076	
Importance	-.159	.265*	-.109
	Selection (Familiarity)	Familiarity	Homophily

*p < .05

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