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THE UNIVERSITY OF ALBERTA

# CONCEPTUAL STRUCTURE, COMMITMENT, AND SELECTIVE EXPOSURE

by

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "Conceptual Structure, Commitment, and Selective Exposure," submitted by Mark Lawson Sandilands in partial fulfilment of the requirements for the degree of Doctor of Philosophy.

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## ABSTRACT

Although selective exposure is often proposed as an explanation for the failure of attitude manipulation attempts, the phenomenon has been difficult to produce in the social psychological laboratory. A variable which has been largely ignored in research on selective exposure is that of individual differences in responses to attitude-discrepant information. This study was an attempt to determine the relationship between selective exposure and such an individual difference variable, conceptual structure (Schroder, Driver, & Streufert, 1967). Two other variables, commitment to a position and level of discrepancy of the communication, were also investigated. Sixty-eight subjects from the extremes of the abstract-concrete conceptual structure dimension took part in a mock jury study. After reading a summary of a murder trial and indicating their verdicts, subjects were offered the opportunity of leaving or staying to read an article discrepant from their verdicts. Three measures of selective exposure were used: leave-stay behavior, willingness to read the article, and time spent reading the communication. As predicted, concrete subjects were significantly less willing to read the discrepant article than were abstract subjects ($p < .01$). A similar relationship was found between high and low commitment subjects ($p < .01$). Time spent reading the discrepant communication was significantly less for concrete subjects than for abstract subjects ($p < .05$); however, this relationship was not found for high and low commitment subjects. Variations in level of discrepancy produced no significant main effects. It was concluded that conceptual structure

and commitment to attitudinal position are significant determinants of selective exposure.

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# INTRODUCTION

One of the most extensively investigated areas in social psychology is that of attitude and attitude change. In the past decade more than ten separate books dealing entirely with aspects of attitude and attitude change have been published (Cohen, 1964; Fishbein, 1967; Hovland, 1957; Hovland & Janis, 1959; Hovland & Rosenberg, 1960, Insko, 1967; Katz, 1960; Newcomb, Koenig, Flocks, & Warwick, 1967; Rosnow & Robinson, 1967; Sherif & Hovland, 1961; Sherif & Sherif, 1967; Sherif, Sherif, & Nebergall, 1965) and countless articles dealing with attitude and attitude change have appeared in the literature over the same period. Moreover, this area of research is one which has direct implications for the applied social sciences. Advertisers, politicans, salesmen, educators and many others are interested in how attitudes form and how they change. However, although it is often possible to produce changes in attitudes and opinions in the laboratory, extra-laboratory manipulation of attitudes is too often disappointingly unsuccessful (Hovland, 1959).

Various mechanisms have been proposed to account for the failure of large scale attitude manipulation attempts. Many of these mechanisms involve the notion that a person with a firmly held attitude can employ techniques which will reduce the effectiveness of an attitude-discrepant message. He can derogate the source, dissociate the source from the communication, or distort the content of the message. These ways of dealing with attitude-discrepant information have been widely discussed in the literature (e.g., Feather, 1967a). On the other hand, the person with a strongly held attitude can avoid exposing himself to messages which are discrepant with his attitude, thereby effectively removing any perceived threat to his attitude. Klapper (1960) has concluded

that a major barrier against mass persuasion is this "widely demonstrated" tendency toward selective exposure. Thus, for example, it might be expected that a strong adherent of political party "A" would actively seek out arguments presented by his own party, and avoid listening to and reading arguments presented by adherents of political party "B". In a review, Freedman and Sears state that:

> One of the most widely accepted principles of mass communications and social psychology is that voluntary exposure to information is highly selective. People seek out information that supports or reinforces their previous beliefs, and avoid information that challenges their opinions (1965, p. 59).

Although the notion of selective exposure is a widely accepted and often invoked explanation for the failure of attitude or information campaigns, it, unlike attitude change itself, has been difficult to demonstrate in the laboratory. Brehm and Cohen (1962), Brock (1965), Feather (1962, 1963, 1967b), Freedman and Sears (1965), Rhine (1967b), Steiner (1962), and many others have criticized the data, the experiments, and the generalization of selective exposure. For example two researchers (Brock, 1965; and Feather, 1962, 1963) have shown that smokers did not avoid information indicating a link between smoking and lung cancer - contrary to a prediction derived from dissonance theory (Festinger, 1957). Brock (1965) has suggested that dissonance theory requires reformulation with respect to the avoidance postulate. In disagreement with these reports are a smaller number of studies finding some selective exposure effects in laboratory or controlled settings (e.g., Brock & Balloun, 1967; Festinger, 1957, pp. 162-176; Lowin, 1967; Mills, 1965a; Rhine 1967a).

Several early authors (e.g., Lipset, Lazarsfeld, Barton, and Linz, 1954, p. 1158) consider selective exposure to be the simple preference

for attitude consistent information. However, selective exposure appears to be more complex. More recently Festinger (1957) has pointed out that the process has two aspects: avoidance of discrepant information and seeking of supportive information. Although the latter aspect is considered to have more support than the former (Brehm & Cohen, 1962), the support is minimal. Freedman and Sears (1965) reviewed seventeen studies and found only five in which subjects indicated a preference for supportive information. They concluded that if there is such a process as selective exposure to information, it is often masked by such other factors as characteristics of the audience (education, intelligence, social class), base rates of exposure (how readily the information is available), utility of the information, and past history of exposure on the issue.

By far the most influential theory for selective exposure is Festinger's (1957) cognitive dissonance theory. Festinger (1957) defines dissonance as a psychological tension aroused by inconsistency between cognitions, and he further hypothesizes that a person who is experiencing dissonance is motivated to reduce the tension. One method of reducing dissonance is by selectively exposing oneself to information. As Festinger originally stated it:

> If a source of information is viewed as potentially decreasing dissonance or providing new elements consonant with (their) behavior, persons should expose themselves to this source. If the source of information is viewed as potentially increasing dissonance, there should be active avoidance of exposure to the information (1957, p. 163).

Since selective exposure is one of the basic postulates of dissonance theory, doubts concerning the generality of selective exposure reflect doubts about dissonance theory itself. Even though much support for dissonance theory has been obtained, this support occurs mostly when

evaluations and attitudes are the dependent measures (Brock, 1965). However, Festinger (1957) and Brehm and Cohen (1962) observe that "selective exposure is a more direct reflection of avoidance of dissonant cognitions than (is) attitude change (Brehm & Cohen, 1962, p. 93)." The lack of support for the selective exposure aspect of dissonance theory has resulted in a number of attempts to clarify the portions of dissonance theory dealing with selective exposure (Brock, 1965; Festinger, 1964; Lowin, 1967).

Festinger's (1964) revision of his (1957) position introduced two new variables: confidence and usefulness. He argued that a person may expose himself to dissonant information if he feels confident that he will be able to reduce the dissonance and/or if he feels that the information will be intrinsically useful to him. Canon (1964) varied both confidence of subjects and usefulness of information and found evidence in support of Festinger's (1964) position. But in an attempt to replicate Canon's findings, Freedman (1965) failed to obtain evidence for the confidence postulate. However, Freedman (1965) did find support for the usefulness postulate.

In reporting an experiment in which some subjects expressed a preference for dissonant information, Brock (1965) suggested a different revision of the controversial dissonance postulate that persons would avoid "situations and information which would likely increase dissonance (Festinger, 1957, p. 3; quoted in Brock, 1965)." Brock's reformulation stressed several aspects of post-decision behavior and the drive character of dissonance. He suggested that following a decision, a person always attempts to marshall cognition justifying his chosen alternative. Thus Brock proposed that "(a) persons will expose themselves to cognition

dissonant with their choice (of behavior, opinion, object, etc.) in direct proportion to the number and importance of (their) prior cognitions consonant with the choice; (b) the gratification of dissonance reduction is proportional to the magnitude of dissonance reduction; (c) when dissonant cognition is not avoided, receptivity to it will be proportional to the magnitude of the anticipated discrepancy (Brock, 1965, p. 17)." This reformulation is closely related to Festinger's (1964) confidence postulate.

Employing an approach conceptually similar to Brock (1965), Lowin (1967) suggested that ease of message refutation was a variable important to approach or avoidance of discrepant information. He hypothesized that "in a controversial realm in which social support plays a central role weak consonant information may prove uncomfortable (p. 2)" because if the argument is easily refuted those who hold to the argument may change their minds and withdraw social support. In such situations weak dissonant information might be preferred over weak consonant information. Although Lowin's (1967) study supporting this hypothesis suffered from methodological problems (only 18 per cent of subjects responded to a mail survey), his hypothesis is in accord with other similar theories (e.g. Brock, 1965; Festinger, 1964).

In a departure from the dissonance theory approach, Feather (1967b) has proposed an "expectancy-value model of information seeking behavior" which considers this behavior as determined by the resultant of approach and avoidance tendencies. He further analyzes these tendencies into a resultant extrinsic tendency, a tendency to select information in order to achieve consistency, and a tendency not to select information in order to avoid inconsistency. He assumes that each tendency is determined

by the interaction of a relatively stable personality disposition or motive, intolerance of ambiguity, with an expectation and an incentive value that are assumed to be a function of the existing situation. In an experimental test of his model Feather (1967b) found that a person who has a high intolerance of ambiguity is more likely to seek out information consistent with his attitude than is a person who has a low intolerance of ambiguity.

The theoretical reformulations of Festinger (1964), Brock (1965), and Feather (1967b) possess two common components. First, they stress the possibility of individual differences in reactions to discrepant or dissonant information; and second, they point out that different persons may handle, process, or make use of the discrepant information differently. These individual differences in handling discrepant information can be seen as differences in adaptation to the environment.

Adaptation can be viewed in part as a cognitive process involving two variables: content variables and structural variables. One theory dealing with the relationship between these two variables is that of Schroder, Driver, and Streufert (1967). This theory maintains that "an adaptive orientation acts, first, like a set of filters -- selecting certain kinds of information from the environment -- and, second, like a program or set of rules which combine these items of information in specific ways. The first aspect is the component or content variable, and the second aspect is the structural or <u>information processing</u> variable (p. 4)." Information processing structures are in turn postulated as having two interdependent properties: number of dimensions and complexity of the integrating rules. Dimensions are the aspects by which ranges of stimuli are categorized. "The number of dimensions, taken

alone, . . . has no necessary relationship to the level of information processing; but given complex combinatory rules, the potential for generating new attributes of information is higher, and the degree to which one stimulus can be discriminated from another is increased as the number of perceived dimensions is increased (p. 14-15)."

Schroder et al., (1967) have pointed out several characteristics of different levels of information processing in persons. "Information processing refers to the nature and interdependence of conceptual rules available for organizing dimensional values (p.14)." A simple (information processing) structure is characterized by compartmentalization and by a fixed or hierarchical integration of its parts (rules). A complex (information processing) structure "has more connections between rules; that is, (it) has more schemata for forming new hierarchies, which are generated as . . . further rules for comparing outcomes. (These) structures contain more degrees of freedom, and are more subject to change as complex changes occur in the environment (p. 7)." In the theory the terms "concrete structure" and "abstract structure" are used synonymously with the terms "simple information processing structure" and "complex information processing structure," respectively.

With respect to selective exposure, Schroder et al. (1967) predict that "the lower the level of information processing . . . the greater the tendency to 'ward off' informational units" that do not fit into the attitude (p. 27-28). Although no research has been done which relates directly to this proposition, some related data are to be found.

A concept which is closely related to the notion of complexity of information processing is that of open-and closed-mindedness or dogmatism (Rokeach, 1960). Rokeach has defined a system to be closed "to

the extent that there is a high magnitude of rejection of all disbelief subsystems, an isolation of beliefs, a high degree of discrepancy in degree of differentiation between belief and disbelief systems, and little differentiation within the disbelief system (1960, p. 61)." In a recent study, Kleck and Wheaton (1967) examined the relationship between dogmatism and responses to opinion-consistent and opinion-inconsistent information. They found that dogmatic subjects showed less recall of inconsistent information and a greater tendency to evaluate consistent information more positively than did open-minded subjects. Their data also indicated, although not significantly, that closed-minded subjects tended to show a greater preference for opinion-consistent information than did open-minded subjects. However, the study had several shortcomings. The subjects were offered a choice between opinion-consistent information and opinion-inconsistent information so that it is not known if the subjects were approaching one or avoiding the other (Rhine, 1967b). Also, all of their subjects were high school students, a group which would be expected to be less open minded than a group of more mature persons (Anderson, 1962). This is born out by the fact that the group's overall mean score on the Dogmatism scale (Rokeach, 1960) was higher than that of the group on which the scale was originally developed. In a related study, Clarke and James (1967) developed a scale of generalized supportive-information seeking behavior. They found that scores on this scale correlated significantly with Dogmatism scores. Although these studies reveal something of the relationship between conceptual structure and selective exposure, their measure of individual differences in conceptual structure (the Dogmatism scale, Rokeach, 1960) has been criticized as being a poor measure of system openness (Schroder

et al., 1967, p. 133-134). For instance, the items on the dogmatism test do not completely avoid agreement and disagreement based on the content of the item. To the extent that items measure agreement with content, they may fail to measure the structure of the attitude generating the agreement or disagreement.

To summarize, in spite of its wide acceptance, selective exposure has proven to be a phenomenon which has been difficult to produce in the social psychological laboratory. Several models dealing with selective exposure point out the possibility of individual differences in reactions to attitude-discrepant information, or in other words, differences in information processing. One theory dealing with human information processing is the conceptual structure theory of Schroder and his colleagues (Schroder et al., 1967). Although there is no published research specifically relating conceptual structure to selective exposure, there are several experiments investigating selective exposure and Dogmatism (Rokeach 1960). However, the data from these experiments (Clarke and James, 1967; and Kleck and Wheaton, 1967) provide only weak evidence about the relationship between dogmatism and selective exposure.

Statement of the Problem

Schroder, Driver, and Streufert (1967) postulate several characteristics of concrete and abstract conceptual structures which are pertinent to the investigation of selective exposure. First, it is postulated that the more concrete a cognitive structure, "the greater the tendency to ward off informational units . . . that do not fit into the attitude (1967, pp. 27-28). Schroder et al. (1967) also hold that the concrete person avoids conflict by distorting new stimuli to fit exisiting

dimensions or else by excluding them altogether. Finally, it has been demonstrated that, compared to abstract persons, concrete persons are more likely to have a low evaluation of persons whose attitudes are deviant from their own (Streufert, 1966).

Considering the above-noted characteristics of abstract and concrete structures and the results of a pilot study*, several hypotheses were formulated for the present research. It was hypothesized (1) that concrete subjects would evidence greater selective exposure to attitude-discrepant information than would abstract subjects; (2) that when exposed to attitude-discrepant information, concrete subjects, compared to abstract subjects, would evidence greater distortion and exclusion on a test of memory for the information; and (3) that when exposed to attitude-discrepant information, concrete subjects would evaluate the information and its author less favorably than would the abstract subjects.

The literature on selective exposure and on conceptual structure indicates that the variable of commitment is important to both of these areas. Kiesler and Sakamura (1966) define commitment as a binding or a pledging of the individual to a behavioral act. They suggest that the individual attempts to resolve inconsistencies between the attitudes he holds and the acts he performs, and that one way of reducing inconsistencies is to change either the act or the attitude. Furthermore, they suggest that the effect of commitment is to make the act less changeable. Kiesler and Sakamura (1966) have found that if an act is consistent with a subject's attitude then commitment to the act makes the subject more resistant to subsequent attack on his attitude. However, their experiment did not reveal the form of this resistance. Within the dissonance framework, Brehm and Cohen (1962) and Sears and Freedman (1963) have

*Appendix R

suggested that increased commitment to a position would result in a greater tendency for a person to avoid exposing himself to information which is discrepant from that position. In other words an increase in commitment would be expected to result in an increase in selective exposure.

Commitment is also an important variable in understanding the operation of different levels of conceptual structure. For example, Harvey (1965) found that concrete individuals were more susceptible to attitude change under strong commitment (producing high levels of inconsistency) than under weak commitment. Generally, the concrete person seems less able than the abstract person to handle cognitive inconsistency (Harvey and Ware, 1967).

Kiesler and Sakamura (1966) propose that one way of manipulating commitment is by increasing "the explicitness of the act, for example, how public or otherwise ambiguous the act was (p. 350)." Thus if an individual is led to believe that his act will become known to others his commitment is greater than if he is not led to have this belief.

In this study two hypotheses regarding commitment were advanced. (1) It was expected that there would be more selective exposure under high commitment than under low commitment. (2) It was also expected that there would be an interaction between commitment and conceptual structure such that differences in selective exposure between concrete and abstract subjects would be larger the greater the commitment.

Recently, Rhine (1967b) has pointed out that selective exposure experiments have yielded equivocal results because of inadequate representation of levels of dissonance. As Festinger (1957) hypothesized, and Rhine (1967a) later confirmed, the curve for avoidance of discrepant (dissonance inducing) information is non-monotonic:

avoidance increases with dissonance up to a point and then decreases beyond that point until the individual prefers to expose himself to the information. At extreme degrees of dissonance, the subject's easiest choice is to expose himself to the discrepant information and change his attitude, thus reducing his dissonance. One type of discrepant information which would likely increase dissonance to a great extent is information which is represented as having a high probability of changing the person's attitude. It was expected, then, that if subjects were offered information with differential probabilities of changing their attitudes, their avoidance responses to this information would follow this non-monotonic curve, at first increasing in avoidance and then decreasing in avoidance. Unfortunately, a shortage of appropriate subjects precluded the possibility of employing more than two levels of probability for the discrepant information which made a test of the non-monotonic argument impossible, However, as a test of the efficacy of using differential probability of attitude change as a method of varying differential discrepancy, two levels of probability were chosen. They were (1) low probability of changing the persons attitude, and (2) medium probability of changing the person's attitude. It was expected that there would be greater selective exposure under medium probability than under low probability.

In summary, six hypotheses regarding various facets of selective exposure were advanced. It was expected that (1) concrete subjects would show greater selective exposure to attitude-inconsistent information than would abstract subjects; (2) concrete subjects would recall less of this information than would abstract subjects; (3) concrete subjects would evaluate the information and its author less favorably

than would the abstract subjects; (4) high commitment would result in greater selective exposure than would low commitment; (5) there would be an interaction between commitment and conceptual structure such that selective exposure differences between concrete and abstract subjects would be larger the greater the commitment; and (6) there would be greater selective exposure when information offered had a medium probability of changing attitudes than when it had a low probability.

# METHOD

## Overview

Following a design from the work of Sears (1965, 1966) and Sears & Freedman (1963, 1965), subjects were asked to partake in a mock jury study. In brief, they read a two page summary of a murder trial, gave verdicts for the trial, wrote a paragraph in support of their verdicts and filled out a form to indicate whether or not they wished to stay and read more about the trial. If they chose to stay, they read a one page article contradictory to their verdict, evaluated it, gave their verdicts again, and completed a test of their memory for the contents of the article.

## Design

There were three independent variables, each having two levels, comprising a 2 x 2 x 2 factorial design. The independent variables were concrete and abstract conceptual structure, low and high commitment, and low and medium degrees of discrepancy. The main dependent variables were (1) whether or not the subject chose to stay to read more about the trial, (2) willingness to read the discrepant article (3) time spent reading the article, (4) evaluation of the article, and (5) memory for the article.

## Subjects

Eighty-six subjects, 66 male and 20 female, were selected from the pool of subjects required to participate in experiments as part of their course requirements in introductory psychology. Subjects were selected on the basis of their responses to the Interpersonal Topical Inventory of integrative complexity (Tuckman, 1966a) which had been administered to the entire subject pool several months prior to the start of the experiment.

Of the 86 subjects selected, 11 had completed their experiment requirements and refused to participate, 3 were impossible to contact, and 2 had withdrawn from university. Of the remaining 70, 1 indicated prior knowledge of the experimental manipulations, 1 was lost through a mistake by the experimenter, and 1 was lost through the nature of the experimental manipulations (see Procedure section, below). The 67 subjects remaining were comprised of 16 females and 51 males.

All subjects were contacted by telephone and asked if they would participate in a psychology experiment for one credit. A total of 12 subjects missed their first appointment and had to be recontacted. Seven of these were concrete persons and 5 were abstract persons.

In order to counteract any gradual changes in procedure, subjects were assigned to experimental treatments in rotation upon their arrival. Usually, two subjects were run at one time in separate rooms; and the two levels of each of the two experimental treatments were alternately paired. The subjects' personality categories were coded by an assistant for the experimenter and the code was not broken until the end of the experiment.

Materials

Subjects were selected on the basis of their responses to the Interpersonal Topical Inventory of cognitive complexity (Tuckman, 1966a; see Appendix A). This test is an objective form of the measure of conceptual structure developed by Schroder et al. (1967). Several recent reports indicate that the objective test has good construct validity (Corfield, 1967; MacNeil, 1969; Tuckman, 1966a, 1966b).

"The Interpersonal Topical Inventory of integrative complexity is a forced choice instrument in which the subject is asked to choose

one of a pair of items that best represents his feeling about or reaction to an interpersonal topic (Tuckman, 1966a, p. 372-373)." The topics are: (a) when criticized, (b) when in doubt, (c) when a friend acts differently toward you, (d) beliefs about people in general, (e) feelings about leaders (f) when people find fault with you. For each topic six pairs of alternatives are presented and the testee must choose one from each pair. Each member of a pair represents a typical response for a different level of conceptual complexity. The test identifies four levels or four systems of conceptual structure, but since the concern of this study was with the effects of concreteness-abstractness, without regard to content differences among the four systems, only subjects who were classified as representing predominantly System I, the more concrete level of conceptual functioning, and System IV, the more abstract way of functioning, were selected for the experiment.

The Interpersonal Topical Inventory was administered to a total of 834 students enrolled in the introductory psychology course at the University of Alberta. Of this total, 43 were classified as System I, 69 as System II, 193 as System III, and 213 as System IV. One hundred ninety-two scored equally high at more than one level and 124 were not predominant in any system, comprising 38.9% of the sample. Neither of these two groups of subjects could be classified. The 43 subjects classified as System I and 43 subjects randomly selected from the 213 System IV subjects comprised the experimental sample.

Two types of materials were used in the context of the experiment itself (see Appendices B to N). Besides paper and pencil materials used to collect data for the dependent variables, there were several materials used for the experimental manipulations. In order to obtain

a measure of selective exposure, subjects were informed of the existence of the discrepant information and then asked to indicate their willingness to read the information, aside from their curiosity about it, by filling out a nine-point scale with endpoints labeled "Extremely unwilling" and "Extremely willing."

In addition to being asked to indicate their willingness to read the new information, aside from their curiosity, the subjects were also asked to indicate their curiosity about the new information, aside from their willingness to read it. This separation of willingness and curiosity is a departure from previous studies of selective exposure. Rhine (1967b) states that "curiosity may account for results of studies in which avoidance of inconsistent information fails to occur," and that although information "seeking behavior is predicted from curiosity motivation as well as from dissonance theory, . . . no effort is made in research on selectivity to separate the two (p. 27-28)." The present study attempted to separate the two possibilities.

After reading the article, the subject was asked to answer a Likert type attitude questionnaire (adopted from Kleck & Wheaton, 1967) to indicate his evaluation of the article. The scale consisted of six five-point scales with the endpoints labeled "Strongly agree" and "Strongly disagree." Finally the subject was given a short-answer type of questionnaire to test his memory for the discrepant article.

Other materials were used in the experimental manipulations. These other materials were two attitude scales, Attitude Toward the Punishment of Criminals (Thurstone, 1932), and the Law Scale (Rundquist & Sletto, 1936); a two page essay describing the murder trial of Johnny Burdick; a form on which the subject marked his verdict by circling "Innocent"

or "Guilty" and then placed his signature on the designated line; a form for indicating his certainty about his verdict and his opinion about the innocence or guilt of the defendent (these were adopted from Sears & Freedman, 1965); a sheet of paper upon which the subject wrote a paragraph in support of his verdict (commitment manipulation); a one page article contradicting the subject's verdict; two forms for indicating verdict, certainty, and opinion again (these were identical to those used for the first verdict); and finally a questionnaire regarding the subjects' feelings during the experiment and about the experiment in general. Data obtained from these materials were used to supplement the avoidance data.

All experimental materials, with two exceptions, were reproductions from a spirit process duplicating machine. The exceptions, the contradictory articles, were Xerox reproductions. This was done to enhance the belief that the articles had been written by someone other than the experimenter.

Procedure

Upon arrival at the waiting area, the subject was escorted to one of two experimental rooms, seated at a small desk, and supplied with a pencil. He was informed that the experiment was a "psychological study of the jury system designed to gather some information about the way individual members of juries come to reach decisions." He was then given two attitude scales, "Attitude Toward the Punishment of Criminals" and "The Law Scale" and asked to complete them. The experimenter left the room to allow the subject to work in private. When the subject had completed the attitude scales, the experimenter collected them and said, "I have here a summary of a criminal court trial which I want you to

read. The summary is an abstract of a trial which took place somewhere in Canada not long ago. When you have finished reading it, decide whether the defendent is innocent or guilty of the charge. You will then be given a form on which to enter your verdict." The subject was then given the summary and allowed up to 8 minutes to read it. After the subject had read the trial summary, it was taken from him and replaced with two forms, one for his verdict and the other containing questions about his degree of certainty.

Following the completion of these forms the subject was given a form with the following statement on it, "suppose you are in a jury and some of the jury members are opposed to the verdict you have chosen. In ten minutes or less, write a paragraph to indicate which aspects of the case influenced you most in your decision and which might convince someone else to change his or her decision to agree with yours." The writing of this paragraph comprised the commitment manipulation. Low commitment subjects simply wrote the paragraph; however, the high commitment subjects' forms had an additional message, "When you have completed your paragraph, sign your name at the bottom. In a later part of this experiment, you will tape record your paragraph. This recording will be played to a group of subjects in an experiment which is related to this one." When the subject had completed his paragraph, the experimenter collected it and said, "This is the end of my part of the experiment and I will give you your credit cards in a moment. However, a Dr. Hamilton, who is a psychologist at another university, is also doing work on this aspect of human behavior. He has asked me to have you fill out some more questionnaires with regard to the trial. It will take about 20 more minutes of your time to finish his part of the experiment.

"Dr. Hamilton has written a short article about some aspects of the trial which were not covered in the summary that you read. He has tested this article on a group of students and found that it changed their decisions 10% of the time. That is, it has only a small chance of changing a person's decision. What he would like to know is how willing are you to read this article?

"Since Dr. Hamilton is not doing research at this university, I cannot give you any credit for extra time spent here and if you stay it will be entirely voluntary on your part.

"So will you fill out this form to indicate whether or not you will stay for Dr. Hamilton's part of this study. I will pass you your credit card with the form."

This statement was read to one half of the subjects. The other half of the subjects heard an identical statement except for the part concerning the "data" which "Dr. Hamilton" had collected. These subjects heard, "He has tested this article on a group of students and found that it changed their decisions 50% of the time. That is, it has an even chance of changing a person's decision."

The subject was then given the form along with the card certifying that he had participated in the experiment. The form asked three questions. First, the subject was asked to indicate whether (1) he would stay, (2) he would like to stay but couldn't afford the time, or (3) he did not want to stay (only one subject chose this third alternative). Those subjects who answered either (1) or (2) were reminded of the information they were to be offered and asked to indicate (1) how willing they were or would be to read the article by marking a nine-point scale having endpoints of "Extremely unwilling" and "Extremely willing"; and

(2) how curious they were about the article by marking a six-point scale having endpoints of "Not curious at all" and "Extremely curious."

When the experimenter collected this form, he observed the subject's response to the first question and, depending on the response, he either gave a brief explanation of the experiment and dismissed the subject with a request that he not discuss the experiment with anyone, or he gave the subject an article contrary to the verdict he had chosen. The subject was asked to turn the sheet face down when he finished reading the article. A statement to this effect was also written at the end of the article. When the experimenter left the room, he started a stopwatch; and by means of one-way mirrors he watched until the subject turned the sheet face down, at which point he stopped the stopwatch, thereby obtaining a measure of the duration of the subject's self-exposure to the article.

Subsequently, the subject was given a form for evaluating the article, the verdict forms for a second verdict, a memory test, and finally the questionnaire regarding feelings during the experiment.

After the final questionnaire was collected, the subject was given a brief explanation of the purpose of the experiment, thanked, and dismissed with a request not to discuss the experiment with anyone who might possibly be a subject.

## RESULTS*

The first hypothesis was that concrete subjects would show greater selectivity than would abstract subjects. This hypothesis was tested on three measures of selective exposure. The first of these was a behavioral measure: the experimenter had asked subjects whether or not they would stay to read some information which might change their opinion. Whether or not the subject stayed was taken as an indication of selective exposure. Table 1 gives the numbers of subjects staying and leaving for each experimental group.

Table 1

Numbers of Subjects Staying and Leaving

| | | Number Leaving | | Number Staying | |
|---|---|---|---|---|---|
| | | Concrete | Abstract | Concrete | Abstract |
| Low Commitment | 10% | 1 | 1 | 7 | 7 |
| | 50% | 2 | 1 | 7 | 9 |
| High Commitment | 10% | 0 | 2 | 8 | 6 |
| | 50% | 4 | 1 | 5 | 7 |

Chi-square analysis of these data indicated no significant differences in leave-stay behavior between concrete and abstract subjects ($X^2$=.405, df=1). One factor which might have had some effect on the data is that some subjects had voted guilty. (A total of eight subjects voted

*An inherent feature of the design of the experiment was that some subjects were lost. A total of 12 subjects (7 concrete and 5 abstract) took advantage of the opportunity to leave the experiment. Because final cell totals were unequal, least-squares analysis of variance were performed on all data except for leave-stay data. Computation was done by the University of Alberta IBM 360-67 computer using a program developed at the University of California (Sampson, 1964). Summary tables for the analyses of variance are contained in Appendix O. Raw data are in Appendix Q.

guilty, four abstract and four concrete). However, a Chi-square analysis of the data in Table 1 with those subjects who voted guilty deleted indicated no differences between abstract and concrete subjects.

The data on the subjects' willingness to read the new information provided strong support for the first hypothesis. Concrete subjects indicated significantly less willingness than did the abstract subjects ($F = 7.66$, df 1/59, $p < .01$). When subjects who had voted guilty were deleted from the analysis, the differences remained significant ($F = 8.53$, df 1/51, $p < .01$) as they did when subjects who left were deleted ($F = 5.25$, df 1/48, $p < .05$) and when both of these subject groups were deleted ($F = 5.37$, df 1/42, $p < .05$). Table 2 gives the mean willingness for concrete and abstract subjects within these subject groupings.

Table 2

Mean Willingness for Concrete and Abstract Subjects

| Subject Group | N | Concrete Mean | Abstract Mean | P |
|---|---|---|---|---|
| All Subjects | 67* | 6.68 | 7.67 | <.01 |
| Subjects voting innocent | 59 | 6.61 | 7.75 | <.01 |
| Subjects staying | 56 | 6.97 | 7.85 | <.05 |
| Subjects voting innocent and staying | 50 | 6.91 | 7.88 | <.05 |

The third measure of selective exposure was the time in seconds spent reading the discrepant article. Data were obtained for 56 subjects; however, 6 of the 56 had voted guilty and consequently read an article different from the one read by those who voted innocent. Therefore only data for the 50 subjects who voted innocent will be presented here.

*One subject chose the third alternative on the form asking subjects to stay (see "Procedure" section) and did not answer the willingness question.

As predicted, concrete subjects spent significantly less time reading the contradictory article than did the abstract subjects ($F = 5.01$, df 1/42, $p < .05$). The mean reading times for the concrete and abstract subjects were 106.34 and 145.59 seconds, respectively.

The second hypothesis concerned the cognitive effects of exposure to discrepant information by concrete and abstract subjects. It was expected that compared to abstract subjects, concrete subjects would give lower evaluations and remember less of the discrepant information when they were exposed to it. Evaluations of the discrepant article were obtained by asking subjects to answer Likert-type opinion items. Each item was scored five points for strong positive evaluation and one point for strong negative evaluation. Analysis was performed on the sum of the item scores. No significant findings resulted.

Following the evaluation questionnaire, subjects were asked to re-indicate their verdicts and then they were given a test of their memory for the article which they had read. Due to differences in the content of the articles, only the data for the 50 subjects who had voted innocent (who had read an article advocating conviction) were analyzed. Since all questions were of an open-end nature, the experimental group of a subject was not known to the scorer at the time of scoring.

Analysis of the memory scores revealed no significant main effects. However, there was a significant interaction between conceptual structure and level of discrepancy ($F = 4.22$, df 1/42, $p < .05$) such that the memory of the concrete subjects was better under low (10%) than under high discrepancy (50%) with the reverse relationship for the abstract subjects. Table 3 shows the means for the interaction.

Table 3

Interaction Between Conceptual Structure and Discrepancy on Memory

| | Concrete | Abstract |
|---|---|---|
| Low Discrepancy | 6.79 | 5.51 |
| High Discrepancy | 6.13 | 7.21 |

The third and fourth hypotheses concerned the effect of commitment on selective exposure and the interaction between conceptual structure and commitment on selective exposure. As for the first hypothesis, three measures of selective exposure were available. It was expected that more subjects would leave under high commitment than under low commitment. Although this was the case (Table 1), the difference was not significant ($X^2$=.561, df=1). It was also expected that high commitment subjects would show less willingness to read the new information than would low commitment subjects. Analysis of variance for the total sample yielded a significant effect for commitment ($F = 8.83$, df 1/59, $p < .01$) with high commitment subjects showing less willingness than low commitment subjects. When subjects who had voted guilty were deleted from the analysis the effect remained significant ($F = 10.21$, df 1/51, $p < .005$); as it did when analysis was performed on only those subjects who voted innocent and stayed ($F = 6.13$, df 1/42, $p < .025$). When analysis was performed on all subjects who stayed, innocent and guilty voting, the commitment effect did not reach significance ($F = 4.69$, df 1/48, $p < .10$). Table 4 gives the means for low commitment and high commitment subjects within these groupings.

Table 4

Mean Willingness for Low and High Commitment Subjects

| Subject Group | N | Low Commitment Mean | High Commitment Mean | P |
|---|---|---|---|---|
| All Ss | 67 | 7.71 | 6.65 | $< .01$ |
| Ss voting innocent | 59 | 7.81 | 6.56 | $< .005$ |
| Ss staying | 56 | 7.82 | 7.00 | $< .10$ |
| Ss voting innocent and staying | 50 | 7.92 | 6.87 | $< .025$ |

For the third measure of selective exposure, time taken to read the discrepant article, it was expected that high commitment subjects would take less time than would low commitment subjects. This expectation was not borne out ($F = .03$). There was, however, an interaction between commitment and level of discrepancy such that less time was spent reading under high discrepancy (50%) than under low discrepancy (10%) for the low commitment subjects, with the reverse for the high commitment subjects ($F = 4.75$, df 1/42, $p < .05$). Table 5 gives the means for the interaction.

Table 5

Interaction Between Discrepancy and Commitment on Time in Seconds

| | Low Discrepancy Mean | High Discrepancy Mean |
|---|---|---|
| Low Commitment | 147.43 | 101.55 |
| High Commitment | 112.18 | 142.72 |

The second hypothesis concerning commitment was an expected interaction between conceptual structure and commitment such that differences in selective exposure between concrete and abstract subjects would be larger the greater the commitment. This predicted interaction was evident on only one measure of selective exposure and then only at a

borderline value. The concrete subjects showed a greater decrease in willingness under high commitment than did the abstract subjects ($F = 3.11$, df 1/59, $p < .10$ for the total sample of 67 subjects; and $F = 3.59$, df 1/51, $p < .10$ for subjects who voted innocent, $N = 59$). Table 6 gives the means for the interaction for the total sample. The means for the 59-subject sample were almost identical to these.

Table 6

Interaction between Conceptual Structure and Commitment on Willingness

| | Low Commitment Mean | High Commitment Mean |
|---|---|---|
| Concrete | 7.53 | 5.83 |
| Abstract | 7.89 | 7.46 |

The final hypothesis concerned the level of discrepancy of the inconsistent information. It was expected that when subjects were told that information had a medium probability of changing their opinions they would show greater selective exposure than when told that the information had a low probability of changing their opinion. The results pertinent to this hypothesis were inconclusive. The main effect was not significant on any of the measures of selective exposure. However, this independent variable of probability of opinion change (or level of discrepancy) cannot be considered to be impotent. It produced interactions with commitment on the time measure and with cognitive complexity on the memory measure. These interactions have been previously presented under the data for the memory hypothesis and the commitment hypothesis.

As was mentioned previously, subjects were asked to indicate willingness separately from curiosity; and they were also asked to indicate curiosity. Analysis of variance was performed on this curiosity data for exploratory purposes. No significant findings resulted, but correlational analysis yielded several interesting findings. Indicated

curiosity correlated significantly with indicated willingness ($r = .42$, $p < .01$*), indicating that the two were positively related. Curiosity also was related to certainty in verdicts ($r = .26$, $p < .05$), indicating that subjects who were more certain of their verdicts later stated that they were more curious about the new information. Certainty did not correlate with willingness.

A number of other significant correlations emerged from the correlation matrices**. Only the more relevant ones will be discussed here. Prior to the experimental manipulation, subjects filled out two attitude questionnaires. These had two purposes, the enhancement of the subject's belief that he was participating in a "psychological study of the jury process," and a check on whether the attitudes measured might effect selective exposure. Correlations computed between the attitude scale scores and all other variables indicated that there were no relationships. The two scales correlated with each other .317 ($p < .02$).

When willingness was correlated with leave-stay behavior, the correlation was -.35 (df 65, $p < .01$), indicating that subjects who stayed indicated greater willingness than those who left. A t-test on the means of leavers (5.91) versus stayers (7.43) verified this relationship ($t = 3.05$, df 65, $p < .005$). Although it would quite reasonably be expected, this relationship serves as a check on the validity of the willingness measure.

After they indicated their verdicts, subjects were asked to show their certainty in their verdict by marking a scale. Their certainty scores correlated with leave-stay behavior ($r = -0.24$, df 65, $p < .05$), indicating that those who left were less certain than those who remained.

*All correlation p-values are for two tailed tests.
**The correlation matrices are contained in Appendix P.

A t-test here also verified the difference between the means of the leavers (1.18) and the stayers (1.69) at a significant level ($t = 2.00$, df 65, $p < .025$).

The subjects evaluations of the discrepant article correlated significantly with the time spent reading it ($r = -.35$, df 53, $p < .02$) and the change in verdict resulting from reading it ($r = .37$, df 53, $p < .01$). These correlations indicate that the more time a subject spent reading the article he was given, the lower his evaluation of it; and that the higher a subject's evaluation of his article was, the more likely he was to change or attenuate his verdict to agree with it.

Finally, the above mentioned change in verdict was positively related to willingness ($r = .38$, df 53, $p < .01$) and curiosity ($r = .36$, df 53, $p < .01$), indicating that subjects who indicated high curiosity and willingness were likely to change or attenuate their verdicts. There was no relationship between change in verdict and conceptual structure. A total of nine subjects changed their verdicts, five concrete subjects and four abstract subjects (see Table 7).

Table 7

Verdict Changes by Experimental Groups

| | | Concrete | Abstract |
|---|---|---|---|
| Low Commitment | 10% | 0 | 1 |
| | 50% | 3* | 2 |
| High Commitment | 10% | 1 | 1 |
| | 50% | 1* | 0 |

*Two subjects, one in each of these asterisked groups, changed from guilty to innocent; all others changed from innocent to guilty.

# DISCUSSION

The main purpose of this study was to explore the relationship between conceptual structure and selective exposure in an attempt to better understand the phenomenon of selective exposure. It has been suggested that selective exposure may be largely limited to persons who function at a conceptually concrete level (Feather, 1967b; Kleck & Wheaton, 1967); and it has also been suggested that dogmatic or cognitively concrete persons have a tendency to avoid or ward off inconsistent information (Rokeach, 1960; Schroder, et al., 1967).

The results of the present study provide support for both of these suggestions, but to a limited extent. It has not been shown that selective exposure is an exclusive mechanism of concrete persons; it has simply been shown that concrete persons are less willing to expose themselves to discrepant information than are abstract persons. Throughout this report, the term "avoidance" has been "avoided" and the term "selective exposure" used instead. The methodology of asking subjects to indicate their willingness to read discrepant information was employed in an attempt to overcome a common difficulty in selective exposure research. Many researchers (e.g., Brock, 1965; Mills, Aronson, & Robinson, 1959; Mills and Ross, 1964; Sears and Freedman, 1965) have asked subjects to rate or rank articles with respect to their interest or lack of interest. However, as Rhine (1967b) has pointed out, "failure to show interest in information does not necessarily measure avoidance (p. 24)." At best "interest" is an indirect measure of avoidance and it can often be a measure of boredom. For these reasons, subjects in this study were asked to indicate willingness rather than interest. However, the

willingness means for abstract and concrete subjects were both above the neutral, "neither willing nor unwilling," point, although the concrete mean was only minimally so. Also a Chi square test of the proportion of concrete subjects indicating any degree of unwillingness (6/34) compared to a like proportion of abstract subjects (1/33) failed to reach significance ($X=2.40$, $df=1$, $p<.15$). Therefore, it can be concluded that compared to abstract subjects concrete subjects were less willing to expose themselves to discrepant information.

A further limitation of the conclusion results from the type of information offered to the subjects. In descriptions of the information, subjects were told that the information to be offered was new information. Sears and Freedman (1965) found that greatest selectivity occured among subjects in a mock jury situation when they had voted innocent and were offered new rather than old information. That acquitters should not want to expose themselves to new information is quite logical, especially when the information offered is represented as probably changing their opinions. They have acquitted the defendent, but new information might now convict him. Thus, because it would be less serious to acquit a guilty man than to convict an innocent man, they do not want to subject their decisions to new information. In the present study, 60 of the 68 subjects chose to acquit the defendant. However, there were no differences between concrete and abstract subjects, 30 of each voting innocent. Thus in the present study new information was offered so as to obtain maximal information selectivity in order to observe differences in selectivity between concrete and abstract persons. Further research is necessary to determine whether these differences in selectivity are more general.

The expected cognitive expressions of selective exposure, decreased evaluation and memory, were not evident. The lack of findings on the evaluation measure could have resulted from lack of variance in evaluation scores. The evaluation questionnaire was quite short (six questions) although pilot work and previous research (Kleck & Wheaton, 1967) indicated that the scale was adequate. It could also be the case that concrete subjects do not derogate a communication as an avenue of dissonance reduction. However, correlational evidence points in a different direction. The time spent reading the article correlated significantly with evaluations of the article ($r = -.35$). This negative relationship suggests the following explanation. The longer a subject spent reading the article, the lower was his evaluation of it. Therefore, subjects who spent a long time reading the article decided that it was poorly written, unconvincing, dull or all three. If the article really were any or all of these, then anyone who decided that he wanted to expose himself to it became disappointed when he read it and his evaluation of it became invalid as a measure of selective exposure. If this were the case then perhaps all measures of selective exposure taken after reading of the article are invalid.

However, an interesting relationship was found in the memory data. Although the hypothesis regarding memory for the inconsistent article was not confirmed in the main effects of the analysis of variance, the interaction between conceptual structure and degree of discrepancy can be seen as partial confirmation of this hypothesis. The memory of the concrete subjects changed little over discrepancy conditions, whereas the memory of the abstract subjects showed a sharp increase from low to

high discrepancy conditions (Table 3). It is possible that the abstract subjects felt that the material was not worth remembering under low discrepancy, but was worth remembering under high discrepancy. That is, when it was represented as having a 50% chance of changing their opinions, the information was considered to be more worthy of being remembered than when it was represented as having only a 10% chance. Although factor might be expected to operate for concrete subjects as well (Schroder et al., 1967, p. 139), such tendencies were possibly over-shadowed by selective exposure effects. Thus the slight decrease in memory for concrete subjects might have been a reflection of selective exposure, whereas the increase in memory for the abstract subjects may have been due to increased importance attached to the 50% information.

The second independent variable generating hypotheses was that of commitment. High commitment subjects were led to believe that they would have to tape record paragraphs which they had written in support of their verdicts while low commitment subjects were not led to have this belief. It was expected that subjects who were committed strongly to their verdicts would show greater selective exposure to inconsistent information than would subjects who were not strongly committed to their verdicts. Analysis of the willingness data provided strong support for this hypothesis. However, the time data did not. The reason for the failure of the time data to show commitment effects may have been due to the nature of the commitment manipulation. If high commitment subjects expected to later record their arguments in favor of their verdict,

it might have seemed useful to find out what other arguments existed on the case. Therefore this factor may have counteracted any selective exposure effects which might have reduced reading time under high commitment.

It was also expected that there would be an interaction between conceptual structure and commitment such that concrete subjects would be more affected by commitment effects on selective exposure than would abstract subjects. Support was achieved only at borderline significance on the willingness measure. The argument presented above would also hold for the lack of an interaction effect on the time measure.

The final hypothesis was that when subjects were offered information represented as having a 50% chance of changing their opinion, they would show more selective exposure than if the information were represented as having a 10% chance. None of the selective exposure measures supported this hypothesis directly. However an interesting interpretation can be offered for the interaction of this variable with commitment on the time measure. The interaction was such that most time was spent in the "low commitment--10% (LC10)" and the "high commitment--50% (HC50)" and the "low commitment--50% (LC50)" conditions. It might be expected that the amount of dissonance would have been greatest in the HC50 condition and least in the LC10 condition with intermediate amounts in the other two conditions. Since time is an inverse measure of selective exposure, the data neatly fit the inverse U of information avoidance proposed by Festinger (1957). Subjects in the HC50 condition fall on the right side of the inverted U--on the side of seeking out information to change their attitudes as the only method of satisfactorily reducing their dissonance.

An entirely different explanation for many of these experimental results lies in the demand characteristics of the experiment (Orne, 1962). Since subjects were told that another psychologist was interested in their willingness responses, they could very easily have been affected by the instructions. In other words, subjects might have perceived that the purpose of the experiment was to determine if they were willing to read the discrepant information. Differential cooperativeness between abstract and concrete subjects, for instance, thus might account for the results. However, several points can be made to counter this interpretation. There is no evidence that abstract persons are more cooperative than concrete persons; on the contrary, indications are that the concrete person is more externally anchored than is the person who is more cognitively complex (Schroder, et. al., 1967, p. 17). Secondly, in order to have cooperation account for the findings one would have to make numerous additional assumptions, such as assuming, for instance, that increased commitment reduces cooperation. Finally, if cooperation had any effect on the experimental results, it would likely work against supporting the predictions. Since the predictions concerned measures of, in essence, the subjects' noncooperativeness, any cooperativeness on their part would have attenuated the significance of the findings. Thus, had the subjects not been so cooperative, more of them might have left, and more of them might have been less willing or more unwilling.

The conclusion of the present study that concrete persons employ selective exposure to a greater extent than do abstract persons corresponds to findings in two separate areas of investigation, complexity theory (Schroder, et al., 1967) and selective exposure. Research in the complexity theory domain has revealed a number of differences in

the information handling and especially the inconsistent-information handling processes of concrete and abstract persons. Crano and Schroder (1967), for instance, found that concrete individuals were unable to use more than one of several available conflict resolution processes whereas abstract individuals were able to use several and in an internally inconsistent manner. Harvey and Ware (1967) found that, compared to abstract individuals, concrete individuals were more likely to perceive, be negatively aroused by, seek to neutralize, and give few explanations of inconsistencies. Furthermore, in the area of information search it has been found (Karlins & Lamm, 1967) that, in a novel environment, abstract individuals engage in greater amounts of information search than do concrete individuals. These studies together with those relating information handling and Rokeach's (1960) Dogmatism (Clarke & James, 1967; Hunt & Miller, 1968; Kleck & Wheaton, 1967) indicate that in studying human communication it is helpful to consider structure of thought as well as content of thought.

The 1965 review of Freedman and Sears on selective exposure seemed to sound the death knell for research on that variable: "Given the paucity of theoretical notions, and the rather discouraging record of previous research, perhaps it would be wiser to seek alternatives (to the search for variables which affect selectivity) (p. 93)." However, in that long review not one study can be found which attempted to determine if individual differences can affect selectivity. The work of Clarke and James (1967), Kleck and Wheaton (1967), Feather (1967), and the present study are attempts to do this. As such, these studies are part of a general trend of investigating individual difference variables as they relate to cognitive consistency models of behavior. This type

of investigation has been called for by Festinger (1957) and Brehm and Cohen (1962). The general result of these studies is that the cognitive consistency models and in particular the cognitive dissonance model do not apply well to conceptually complex persons, but do apply well to conceptually simple persons (Crano & Schroder, 1967; Harvey & Ware, 1967; Ware & Harvey, 1967).

The results of the present study relate to three recent reports (Brock, 1965; Brock & Balloun, 1967; and Sears & Freedman, 1963). Following Festinger (1957), Sears and Freedman (1963) hypothesized that once a person has committed himself to a position, dissonance is created by all cognitions inconsistent with that position; and therefore that increased commitment to a position would increase selectivity of voluntary exposure to information. However, they failed to obtain commitment effects on several measures of selectivity. Several factors could account for the discrepancy between the results of the present study and Sears and Freedman (1965). Although both experiments used a mock jury study, different commitment manipulations were used. Sears and Freedman told high commitment subjects that their trial verdicts were final and irrevocable and gave them cards which indicated their verdicts and which were to be held up in front of them during a discussion to be held later. This commitment procedure would probably sensitize subjects to expose themselves to any information that might aid them in later discussion. On the other hand, the subjects in the present study were committed to their present verdicts so that they would not want to change them. A second factor might be that since the subjects in the present study were selected from the extremes of the cognitive complexity continuum they do not represent the same subject characteristics that the

unselected sample of Sears and Freedman's study did. A third factor might be that information offered to subjects here was represented as being new, whereas, as far as can be determined from their report, nothing was said about the newness of Sears and Freedman's information. A final difference between the two situations is that here the commitment manipulation was of the nature of fait accompli (Brehm, 1959). That is, the subject had already made his decision when the commitment manipulation occured whereas Sears and Freedman's subjects were given the commitment manipulation before their decisions.

Brock and Balloun (1967) using a different (behavioral) measure of selective exposure but the same discrepant information as Brock (1965) obtained dissonance avoidance effects not obtained by Brock (1965). Brock and Balloun attributed the difference to the timing of the measure of selective exposure--in the earlier study, selective exposure had been measured prior to actual exposure whereas in the later study measurement was during exposure. However, the present study obtained selective exposure differences both before (willingness) and during (time) actual exposure to the discrepant article. Brock's earlier (1965) explanation of his lack of findings is probably more correct than his later (1967) explanation. That is, that the earlier study's choice of topic, smoking, presented a difficult one for selective exposure research because the smoker is liable to enjoy exposing himself to dissonant information in order to refute it.

Earlier in this report three models (Brock, 1965; Feather, 1967b; and Festinger, 1964) were mentioned which had been offered as reformulations of Festinger's (1957) dissonance theory of selective exposure.

The results of this study can be interpreted as supporting these models to varying degrees. Feather's (1967) model predicts that a person who is highly intolerant of ambiguity will show greater selective exposure than will a person who is not highly intolerant of ambiguity. The present results are consistent with Feather's position to the extent that concrete persons are intolerant of ambiguity as reported by Harvey (1966). Festinger (1964) as well as Canon (1964), Freedman (1965), and Mills (1965b) have speculated about the role of opinion confidence in determining self-exposure to non-supportive information; and Brock and Balloun (1967) are of the opinion that Brock's (1965) statement subsumes these. Brock's main proposal was that "persons will expose themselves to cognition dissonant with their choice (of behavior, opinion, object, etc.,) in direct proportion to the number and importance of prior cognitions consonant with the choice (1965, p. 17)." "Since opinion confidence and choice certainty are particular kinds of consonant pre-exposure cognitions, . . . as such (consonant) cognitions increase in number and salience, exposure to dissonant cognitions will increase (Brock and Balloun, 1967, p. 426)." For the present study, if it can be assumed that abstract persons handle information better than do concrete persons (Karlins and Lamm, 1967), then abstract persons would also be more confident of their verdicts, and would be more likely to expose themselves to discrepant information. Since data were collected on subjects' certainty, it is possible to test this contention. Abstract subjects were more certain than concrete subjects, but the difference was not significant. However, a second line of data does confirm the Brock (1965) hypothesis. When certainty of subjects who stayed was compared to that of subjects who left there was a highly significant difference. The subjects who were more certain were those who stayed to hear a discrepant

communication.

A problem of this study was the lack of correspondence among the three measures of selective exposure: whether or not the subject stayed, the willingness measure, and the time spent reading the discrepant information. Although the three measures tended to conform to the predictions, only willingness showed consistently significant differences. The failure of leave-stay behavior to show significant differences can be attributed to the previously mentioned demand characteristics of the experiment (Orne, 1962). Subjects likely felt somewhat constrained to volunteer for the second part of the experiment and in an attempt to please the experimenter, most subjects remained.

Failure of the time measure to show significance on commitment can be attributed to the nature of the commitment manipulation. When subjects expected to record a speech in favor of their verdict, a tendency to avoid reading the article might have been counteracted by the perceived utility of reading the article.

Summary

Six hypotheses regarding selective exposure were advanced for this study. Of these six, four received confirmation or partial confirmation. The main hypothesis that concrete subjects would show greater selective exposure than would abstract subjects was supported on two of the three measures of selective exposure, willingness and time spent reading the discrepant article. Although four of the six hypotheses advanced dealt directly with selective exposure, the main hypothesis was the only one to receive direct confirmation on more than one measure of selective exposure. The hypothesis that high commitment subjects would show greater selective exposure than low commitment subjects was

confirmed on one of the three measures of selective exposure, time spent reading the discrepant article. The third hypothesis dealing with selective exposure and receiving partial confirmation was the hypothesis regarding the effects of variation in discrepancy of the information. With respect to this hypothesis, the analysis of the time data revealed an interaction between commitment and discrepancy which approximated the inverted-U hypothesis of information selectivity (Festinger, 1957). A final hypothesis dealing directly with selective exposure was the predicted interaction between commitment and conceptual structure. Although this hypothesis was not confirmed, such an interaction did reach borderline significance ($p < .10$) on the willingness data.

Two hypotheses were advanced concerning other reactions to attitude-discrepant information: evaluation decrease and memory decrease. The evaluation hypothesis received no support; however, an interaction between conceptual structure and level of discrepancy on memory was interpreted as partially supporting the memory hypothesis.

Conclusions

Although previous research has largely ignored all individual difference variables which might pertain to selective exposure, the present research suggests that conceptual structure is a significant determinant of the likelihood or extent of selective exposure behavior. However, much more research is needed to determine the extent to which all levels of conceptual structure generally employ selective exposure. Secondly the present study suggests that commitment in the form of a public-private manipulation can also be a determinant of selective exposure.

## REFERENCES

Anderson, C. G. A developmental study of dogmatism during adolescence with reference to sex differences. Journal of Abnormal and Social Psychology, 1962, 65, 132-135.

Brehm, J. W. Increasing cognitive dissonance by a fait-accompli. Journal of Abnormal and Social Psychology, 1959, 58, 379-382.

Brehm, J. W., & Cohen, A. R. Explorations in cognitive dissonance. New York: Wiley, 1962.

Brock, T. C. Commitment to exposure as a determinant of information receptivity. Journal of Personality and Social Psychology, 1965, 2, 10-19.

Brock, T. C., & Balloun, J. L. Behavioral receptivity to dissonant information. Journal of Personality and Social Psychology, 1967, 6, 413-428.

Canon, L. K. Self-confidence and selective exposure to information. In L. Festinger (Ed.), Conflict, decision, and dissonance. Stanford, Calif.: Stanford Univer. Press, 1964. Pp. 83-95.

Clarke, P., & James, J. The effects of situation, attitude intensity and personality on information seeking. Sociometry, 1967, 30, 235-245.

Cohen, A. R. Attitude change and social influence. New York: Basic Books, 1964.

Corfield, V. The role of arousal and cognitive complexity in susceptibility to social influence. Unpublished doctoral dissertation, University of Alberta, 1967.

Crano, W. D., & Schroder, H. M. Complexity of attitude structure and processes of conflict resolution. Journal of Personality and Social Psychology, 1967, 5, 110-114.

Feather, N. T. Cigarette smoking and lung cancer: A study of cognitive dissonance. Australian Journal of Psychology, 1962, 14, 55-64.

Feather, N. T. Cognitive dissonance, sensitivity and evaluation. Journal of Abnormal and Social Psychology, 1963, 66, 157-163.

Feather, N. T. A structural balance approach to the analysis of communication effects. In L. Berkowitz (Ed.), Advances in experimental social psychology, Vol. 3. New York: Academic Press, 1967. (a)

Feather, N. T. An expectancy-value model of information-seeking behavior. Psychological Reviews, 1967, 74, 342-360. (b)

Festinger, L. A theory of cognitive dissonance. Evanston, Ill: Row, Peterson, 1957.

Festinger, L. Conflict, decision, and dissonance. Stanford, Calif.: Stanford Univer. Press, 1964.

Fishbein, M. (Ed). Readings in attitude theory and measurement. New York: Wiley, 1967.

Freedman, J. L. Confidence, utility, and selective exposure to information: A partial replication. Journal of Personality and Social Psychology, 1965, 2, 778-780.

Freedman, J. L., & Sears, D. O. Selective exposure. In L. Berkowitz (Ed.), Advances in experimental social psychology, Vol. 2. New York: Academic Press, 1965. Pp. 57-97.

Harvey, O. J. Some situational and cognitive determinants of dissonance resolution. Journal of Personality and Social Psychology, 1965, 1, 349-355.

Harvey, O. J. System structure, flexibility,and creativity. In O. J. Harvey (Ed.), Experience, structure and adaptability. New York: Springer, 1966.

Harvey, O. J., & Ware, Robert. Personality differences in dissonance resolution. Journal of Personality and Social Psychology, 1967, 7, 227-230.

Hovland, C. I. (Ed.) The order of presentation in persuasion. New Haven: Yale Univer. Press, 1957.

Hovland, C. I. Reconciling conflicting results from experimental and survey studies of attitude change. American Psychologist, 1959, 14, 8-17.

Hovland, C. I., & Janis, I. L. (Eds.). Personality and persuasibility. New Haven: Yale Univer. Press, 1959.

Hunt, M. F. Jr., & Miller, G. R. Open-and closed-mindedness, belief-discrepant communication behavior, and tolerance for cognitive inconsistency. Journal of Personality and Social Psychology, 1968, 8, 35-37.

Insko, C. A. Theories of attitude change. New York: Appleton-Century-Crofts, 1967.

Karlins, M., & Lamm, H. Information search as function of conceptual structure in a complex problem-solving task. Journal of Personality and Social Psychology, 1967, 5, 456-459.

Katz, D. (Ed.). Special issue on attitude change. Public Opinion Quarterly, 1960, 24 (2).

Kiesler, C. A., & Sakumura, J. A test of a model for commitment. Journal of Personality and Social Psychology, 1966, 3, 349-353.

Klapper, J. The effects of mass communication. New York: Free Press, 1960.

Kleck, R. E., & Wheaton, J. Dogmatism and responses to opinion-consistent and opinion-inconsistent information. Journal of Personality and Social Psychology, 1967, 5, 249-252.

Lipsit, S. M., Lazarsfeld, P. F., Barton, A. H., & Linz, J. The Psychology of voting: An analysis of political behavior. In G. Lindzey (Ed.), Handbook of social psychology. Vol. II.

Lowin, A. Approach and avoidance: Alternate modes of selective exposure to information. Journal of Personality and Social Psychology, 1967, 6, 1-9.

MacNeil, L. Cognitive Complexity, sensory deprivation and preference for information. Unpublished Master's thesis, University of Alberta, 1969.

Mills, J. Avoidance of dissonant information. Journal of Personality and Social Psychology, 1965, 2, 589-593. (a)

Mills, J. Effect of certainty about a decision upon post decision exposure to consonant and dissonant information. Journal of Personality and Social Psychology, 1965, 2, 749-752. (b)

Mills, J., Aronson, E., and Robinson, H. Selectivity in exposure to information. Journal of Abnormal and Social Psychology, 1959, 59, 250-253.

Mills, J., & Ross, A. Effects of commitment and certainty upon interest in supporting information. Journal of Abnormal and Social Psychology, 1964, 68, 552-555.

Newcomb, T. M., Koenig, K., Flacks, R., & Warwick, D. P. Persistence and change. New York: Wiley, 1967.

Orne, M. T. On the social psychology of the social psychology experiment. With particular reference to demand characteristics and their implications. American Psychologist, 1962, 17, 776-783.

Rhine, R. J. The 1964 presidential election and curves of information seeking and avoiding. Journal of Personality and Social Psychology, 1967, 5, 416-423. (a)

Rhine, R. J. Some problems in dissonance theory research on information selectivity. Psychological Bulletin, 1967, 68, 21-28. (b)

Rokeach, M. The open and closed mind. New York: Basic Books, 1960.

Rosnow, R. L., & Robinson, E. J. Experiments in persuasion. New York: Academic, 1967.

Rundquist, E. A., & Sletto, R. F. Reprinted in M. E. Shaw & J. M. Wright (Eds.) Scales for the measurement of attitudes. New York: McGraw-Hill, 1967, Pp. 251-253.

Sampson, P. General linear hypothesis. Unpublished program, Health Sciences Computing Facility, University of California, Los Angeles, California, 1967.

Schroder, H. M., Driver, M. J., & Streufert, S. Human information processing. New York: Holt, Rinehart, Winston, 1967.

Sears, D. O. Biased indoctrination and selectivity of exposure to new information. Sociometry, 1965, 28, 363-376.

Sears, D. O. Opinion formation and information preferences in an adversary situation. Journal of Experimental Social Psychology, 1966, 2, 103-142.

Sears, D. O., & Freedman, J. L. Commitment, information utility, and selective exposure. USN tech. Rep. (ONR) Nonr -233 (54) NR 171-350, No. 12 August, 1963.

Sears, D. O., & Freedman, J. L. Effects of expected familiarity with arguments upon opinion change and selective exposure. Journal of Personality and Social Psychology, 1965, 2, 420-426.

Sherif, M. & Hovland, C. I. Social judgement. New Haven: Yale Univer. Press, 1961.

Sherif, C. W., & Sherif, M. (Eds.). Attitude, ego involvement, and change. New York: Wiley, 1967.

Sherif, C. W., Sherif, M., & Nebergall, R. Attitude and attitude change. Philadelphia: Saunders, 1965.

Steiner, I. D. Receptivity to supportive versus non-supportive communications. Journal of Abnormal and Social Psychology, 1962, 65, 266-267.

Streufert, S. Conceptual structure, communicator importance, and interpersonal attitudes toward conforming and deviating group members. Journal of Personality and Social Psychology, 1966, 4, 100-103.

Thurstone, L. L. Attitude toward punishment of criminals. Reprinted in M. E. Shaw & J. M. Wright (Eds.) Scales for the measurement of attitudes. New York: McGraw-Hill, 1967, Pp. 162-165.

Tuckman, B. W. Integrative complexity: Its measurement and relation to creativity. Educational and Psychological Measurement, 1966, 26, 369-382. (a)

Tuckman, B. W. Interpersonal probing and revealing and systems of integrative complexity. Journal of Personality and Social Psychology, 1966, 3, 655-664.

Ware, R., & Harvey, O. J. A cognitive determinant of impression formation. Journal of Personality and Social Psychology, 1967, 5, 38-44.

# APPENDIX A

## INDIVIDUAL - TOPICAL INVENTORY

(Form A)

NAME _____ SCHOOL _____

### INSTRUCTIONS

You will be given some situations and topics to which we would like you to respond. The responses are given in pairs. You are to choose one response from each pair. Choose the response that most closely fits your opinion or feeling and indicate your choice by circling the letter "A" or "B" corresponding to the response chosen. Always choose one member of each pair. Never choose both members of the pair and do not skip over any of the pairs. If you agree with both, choose the one you agree with most strongly. If you do not agree with either, choose the one you find the least disagreeable of the two.

Example:

Here is an example of the way the questions will be asked and the way they should be answered. The manner in which you will indicate your choice between the two given responses is illustrated below:

When I am confused . . .

| Pair No. | | |
|---|---|---|
| (i) | A | B |
| | I try to find a solution and end the confusion. | I completely ignore the fact I am confused. |
| (ii) | A | B |
| | I break out into a nervous sweat. | I remain calm at all times. |

How to respond:

First: Decide which response you agree with most.

Second: Indicate which response you agree with most by circling the identifying letter. Thus, if in comparing the first pair of statements, you agree with the statement, "I try to find a solution and end the confusion," more than with the statement, "I completely ignore the fact that I am confused," you would circle the letter "A" (above the chosen statement). Having chosen one (never both, never neither statement

from the first pair of statements, you would then move on to the second pair. If, in considering the second pair, you find that you agree more with the statement, "I remain calm at all times," (as compared to the statement, "I break out into a nervous sweat"), you would circle the letter "B".

On the pages that follow there are 36 different pairs of responses. There are six pairs on a page. You are to select one response from each pair, the one that more accurately shows your opinion or feeling and record your choice by circling the letter indicating the statement chosen. Be frank and indicate, in each case, your true feeling or opinion or the reaction which you actually would make in the situation. Do not indicate how you should feel or act; rather, indicate how you do feel and act.

Make sure that you are aware of the situation or topic that each pair of responses refers to. You will find the situation or topic identified at the top of each page. All items on the page refer to the situation or topic appearing at the top of that page.

When you are finished, your paper should contain 36 circles. Check back and make sure that you have made 36 choices, no more no less.

Remember: (1) Respond only once for each pair; that is, choose one member of the pair, never both, never neither. Indicate your choice by circling either "A" or "B".

(2) When you are finished you should have made 36 circles.

Work at your own rate of speed but work straight through the inventory without stopping. Once you have completed a page do not return to it.

YOU MAY BEGIN

1. Imagine that someone has criticized you. Choose the response from each pair that comes closest to your feelings about such criticism. Indicate your choice by circling either "A" or "B".

When I am criticized . . . .

| Pair No. | A | B |
|---|---|---|
| (1) | I try to take the criticism, think about it, and value it for what it is worth. Unjustified criticism is as helpful as justified criticism in discovering what other people's standards are. | I try to accept the criticism but often find that it is not justified. People are too quick to criticize something because it doesn't fit their standards. |
| (2) | I try to determine whether I was right or wrong. I examine my behavior to see if it was abnormal. Criticism usually indicates that I have acted badly and tends to make me aware of my own bad points. | It could possibly be that there is some misunderstanding about something I did or said. After we both explain our viewpoints, we can probably reach some sort of compromise. |
| (3) | I listen to what the person says and try to accept it. At any rate, I will compare it to my own way of thinking and try to understand what it means. | I feel that either I'm not right, or the person who is criticizing me is not right. I have a talk with that person to see what's right or wrong. |
| (4) | I usually do not take it with good humor. Although, at times, constructive criticism is very good, I don't always think that the criticizer knows what he is talking about. | At first I feel that it is unfair and that I know what I am doing, but later I realize that the person criticizing me was right and I am thankful for his advice. I realize that he is just trying to better my actions. |
| (5) | I try to ask myself what advantages this viewpoint has over mine. Sometimes both views have their advantages and it is better to combine them. Criticism usually helps me to learn better ways of dealing with others. | I am very thankful. Often I can't see my own errors because I am too engrossed in my work at the time. An outsider can judge and help me correct the errors. Criticism in everyday life usually hurts my feelings, but I know it is for my own good. |
| (6) | It often has little or no effect on me. I don't mind constructive criticism too much, but I dislike destructive criticism. Destructive criticism should be ignored. | I try to accept and consider the criticism. Sometimes it has caused me to change myself; at other times I have felt that the criticism didn't really make much sense. |

2. Imagine that you are in doubt. Choose the response from each pair that comes closest to your feelings about such doubt. Indicate your choice by circling either "A" or "B".

When I am in doubt . . . .

| A | Pair No. | B |
|---|---|---|
| I become uncomfortable. Doubt can cause confusion and make one do a poor job. When one is in doubt he should ask and be sure of himself. | (7) | I find myself wanting to remove the doubt, but this often takes time. I may ask for help or advice if I feel that my questions won't bother the other person. |
| I don't get too upset about it. I don't like to ask someone else unless I have to. It's better to discover the correct answer on your own. | (8) | I usually go to someone who knows the correct answer to my question. Sometimes I go to a book which will set me straight by removing the doubt. |
| I first try to reason things out and check over the facts. Often I approach others to get ideas that will provide a solution. | (9) | I think things over, ask questions, and see what I can come up with. Often several answers are reasonable and it may be difficult to settle on one. |
| I realize that I'll have to decide on the correct answer on my own. Others try to be helpful, but often do not give me the right advice. I like to judge for myself. | (10) | I usually try to find out what others think, especially my friends. They may not know the answer, but they often give me some good ideas. |
| I look over the problem and try to see why there is a doubt. I try to figure things out. Sometimes I just have to wait awhile for an answer to come to me. | (11) | I try to get some definite information as soon as possible. Doubt can be bad it if lasts too long. It's better to be sure of yourself. |
| I consider what is best in the given situation. Although one should not rush himself when in doubt, he should certainly try to discover the right answer. | (12) | I act according to the situation. Sometimes doubt can be more serious than at other times and many of our serious doubts must go unanswered. |

3. Imagine that a friend has acted differently toward you. Choose the response from each pair that comes closest to your feelings about such an action. Indicate your choice by circling either "A" or "B".

When a friend acts differently toward me . . . .

| A | Pair No. | B |
|---|---|---|
| I am not terribly surprised because people can act in many different ways. We are different people and I can't expect to understand all his reasons for acting in different ways. | (13) | I am usually somewhat surprised but it doesn't bother me very much. I usually act the way I feel towards others. People worry too much about others' actions and reactions. |
| I find out why. If I have done something wrong I will try to straighten out the situation. If I think he's wrong, I expect him to clear things up. | (14) | I feel that I may have caused him to act in a different way. Of course, he may have other reasons for acting differently which would come out in time. |
| I first wonder what the trouble is. I try to look at it from his viewpoint and see if I might be doing something to make him act differently toward me. | (15) | It is probably because he has had a bad day, which would explain this different behavior; in other cases he may just be a changeable kind of person. |
| It is probably just because something is bothering him. I might try to cheer him up or to help him out. If these things didn't work I would just wait for him to get over it. | (16) | I try to understand what his different actions mean. I can learn more about my friend if I try to figure out why he does things. Sometimes the reasons may not be very clear. |
| There has to be a definite reason. I try to find out this reason, and then act accordingly. If I'm right I'll let him know it. If he's wrong, he should apologize. | (17) | I usually let him go his way and I go mine. If a friend wants to act differently that's his business, but it's my business if I don't want to be around when he's that way. |
| I don't get excited. People change and this may cause differences. It is important to have friends, but you can't expect them to always be the same. | (18) | I like to get things back to normal as soon as possible. It isn't right for friends to have differences between them. Whoever is at fault should straighten himself out. |

4. Think about the topic of people in general. Choose the response from each pair that comes closest to your thoughts about people. Indicate your choice by circling either "A" or "B".

This I believe about people . . . .

| A | Pair No. | B |
|---|---|---|
| Whatever differences may exist between persons, they can usually get along if they really want to. Although their ideas may not agree, they probably still have something in common. | (19) | People can learn from those who have different ideas. Other people usually have some information or have had some experience which is interesting and can add to one's knowledge. |
| People can act in all sorts of ways. No single way is always best, although at certain times a particular action might be wiser than others. | (20) | Each person should be able to decide the correct thing for himself. There are always a few choices to be made and the individual himself is in the best position to pick the right one. |
| Some people think they know what's best for others and try to give advice. These people shouldn't make suggestions unless asked for help. | (21) | There are certain definite ways in which people should act. Some don't know what the standards are and therefore need to be straightened out. |
| I can tell if I am going to get along with a person very soon after meeting him. Most people act either one way or another and usually it is not difficult to say what they are like. | (22) | It's hard for me to say what a person is like until I've known him a long time. People are not easy to understand and often act in unpredictable ways. |
| People have an outside appearance that usually isn't anything like what can be found on the inside, if you search long and hard enough. | (23) | Each person is an individual. Although some people have more good or bad points than others, no one has the right to change them. |
| People can be put into categories on the basis of what they're really like. Knowing the way a person really is helps you to get along with him better. | (24) | People are unlike one another in many respects. You can get along with people better and better understand them if you are aware of the differences. |

5. Think about the general topic of leaders. Choose the response from each pair that comes closest to your thoughts about leaders. Indicate your choice by circling either "A" or "B".

Leaders . . . .

| A | Pair No. | B |
|---|---|---|
| Leaders do not always make the right decisions. In such cases, it is wise for a man to look out for his own welfare. | (25) | Leaders are necessary in all cases. If a leader cannot make the right decisions another should be found who can. |
| Leaders cannot provide all the answers. They are like other people--they have to try to figure out what action is necessary and learn from their mistakes. | (26) | Leaders make decisions sometimes without being sure of themselves. We should try to understand this and think of ways to help them out. |
| I like a leader who is aware of how the group feels about things. Such a leader would not lead any two groups in exactly the same way. | (27) | A person should be able to put his confidence in a leader and feel that the leader can make the right decision in a difficult situation. |
| There are times when a leader shouldn't make decisions for those under him. The leader has the power to decide things, but each man has certain rights also. | (28) | A leader should give those under him some opportunity to make decisions, when possible. At times the leader is not the best judge of a situation and should be willing to accept what others have to say. |
| Some leaders are good, others are quite poor. Good leaders are those who know what is right for the men under them. These leaders deserve the respect of every man. | (29) | Leaders cannot be judged easily. Many things go to make up good leadership. Most people fall short in some way or another, but that is to be expected. |
| Leaders are needed more at certain times than at others. Even though people can work out many of their own problems, a leader can sometimes give valuable advice. | (30) | Some people need leaders to make their decisions. I prefer to be an individual and decide for myself, when possible. Most leaders won't let you do this. |

6. Imagine that someone has found fault with you. Choose the response from each pair that comes closest to your feelings about such a situation. Indicate your choice by circling either "A" or "B".

When other people find fault with me . . . .

| A | Pair No. | B |
|---|---|---|
| It means that someone dislikes something I'm doing. People who find fault with others are not always correct. Each person has his own ideas about what's right. | (31) | It means that someone has noticed something and feels he must speak out. It may be that we don't agree about a certain thing. Although we both have our own ideas, we can talk about it. |
| I first wonder if they are serious and why they have found fault with me. I then try to consider what they've said and make changes if it will help. | (32) | If enough people point out the same fault, there must be something to it. I try to rid myself of the fault, especially if the criticizers are people "in-the-know." |
| They have noticed something about me of which I am not aware. Although criticism may be hard to take, it is often helpful. | (33) | They are telling me something they feel is correct. Often they may have a good point which can help me in my own thinking. At least it's worthwhile to consider it. |
| I may accept what is said or I may not. It depends upon who is pointing out the fault. Sometimes it's best to just stay out of sight. | (34) | I accept what is said if it is worth-while, but sometimes I don't feel like changing anything. I usually question the person. |
| I like to find out what it means; since people are different from one another, it could mean almost anything. A few people just like to find fault with others but there's usually something to be learned. | (35) | There is something to be changed. Either I am doing something wrong or else they don't like what I'm doing. Whoever is at fault should be informed so that the situation can be set straight. |
| I don't mind if their remarks are meant to be helpful, but there are too many people who find fault just to give you a hard time. | (36) | It often means that they're trying to be disagreeable. People get this way when they've had a bad day. I try to examine their remarks in terms of what's behind them. |

CHECK AND MAKE SURE THAT YOU'VE CHOSEN ONE MEMBER OF EACH PAIR
(A TOTAL OF 36 CIRCLES)

# Individual Topical Inventory Scoring Key

| Pair No. | System | | Pair No. | System | |
|---|---|---|---|---|---|
| | A | B | | A | B |
| 1 | 3 | 2 | 19 | 3 | 4 |
| 2 | 1 | 4 | 20 | 4 | 2 |
| 3 | 3 | 1 | 21 | 2 | 1 |
| 4 | 2 | 1 | 22 | 1 | 4 |
| 5 | 4 | 3 | 23 | 3 | 2 |
| 6 | 2 | 4 | 24 | 1 | 3 |
| 7 | 1 | 3 | 25 | 2 | 1 |
| 8 | 2 | 1 | 26 | 4 | 3 |
| 9 | 3 | 4 | 27 | 3 | 1 |
| 10 | 2 | 3 | 28 | 2 | 4 |
| 11 | 4 | 1 | 29 | 1 | 4 |
| 12 | 2 | 4 | 30 | 3 | 2 |
| 13 | 4 | 2 | 31 | 2 | 4 |
| 14 | 1 | 3 | 32 | 3 | 1 |
| 15 | 3 | 2 | 33 | 3 | 4 |
| 16 | 3 | 4 | 34 | 1 | 2 |
| 17 | 1 | 2 | 35 | 4 | 1 |
| 18 | 4 | 1 | 36 | 2 | 3 |

## Norms For Individual Topical Inventory

(Obtained from 461 Naval Trainees - Tuckman)

| Decile | Systems | | | |
|---|---|---|---|---|
| | I | II | III | IV |
| 10 | 13+ | 12+ | 12+ | 13+ |
| 9 | 12 | 11 | 11 | 12 |
| 8 | 11 | 10 | 10 | 11 |
| 7 | 10-11 | 9 | 9-10 | 10-11 |
| 6 | 9- | 8- | 8- | 9- |

System Scoring:

If S scores 9th or 10th Decile in one system and 8th or lower in all others, classify him in his highest system.

If nesessary, Ss who score 8th Decile in one system and 6th or lower in all others may also be classified in highest scoring system.

## APPENDIX B

### ATTITUDE TOWARD PUNISHMENT OF CRIMINALS

Name_____

This is a study of attitudes toward punishment of criminals. On these pages you will find a number of statements expressing different attitudes toward punishment of criminals.

Put a check mark if you agree with the statement.

Put a cross if you disagree with the statement.

Try to indicate either agreement or disagreement for each statement. If you simply cannot decide about a statement you may mark it with a question mark. This is not an examination. There are no right or wrong answers to these statements. This is simply a study of people's attitudes toward the punishment of criminals. Please indicate your own convictions by a check mark when you agree and by a cross when you disagree.

1. A person should be imprisoned only for serious offences.
2. It is wrong for society to make any of its members suffer.
3. Hard prison life will keep men from committing crime.
4. Some criminals do not benefit from punishment.
5. Most prisons are schools of crime.
6. We should not consider the comfort of a prisoner.
7. A criminal will go straight only when he finds that prison life is hard.
8. No punishment can reduce crime.
9. Prison influence is degenerating.
10. Only habitual criminals should be punished.
11. We should employ corporal punishment in dealing with all criminals.
12. I have no opinion about the treatment of crime.
13. Punishment of criminals is a disgrace to civilized society.

14. Solitary confinement will make the criminal penitent.
15. It is advantageous to society to spare certain criminals.
16. Only humane treatment can cure criminals.
17. Harsh imprisonment merely embitters a criminal.
18. No leniency should be shown to convicts.
19. Many petty offenders become dangerous criminals after a prison term.
20. Failure to punish the criminal encourages crime.
21. Only by extreme brutal punishment can we cure the criminal.
22. The more severely a man is punished, the greater criminal he becomes.
23. A criminal should be punished first and then reformed.
24. One way to deter men from crime is to make them suffer.
25. Punishment is wasteful of human life.
26. A bread and water diet in prison will cure the criminal.
27. Brutal treatment of a criminal makes him more dangerous.
28. A jail sentence will cure many criminals of further offences.
29. Prison inmates should be put in irons.
30. We should consider the individual in treating crime.
31. Even the most vicious criminal should not be harmed.
32. It is fair for society to punish those who offend against it.
33. Humane treatment inspires the criminal to be good.
34. Some punishment is necessary in dealing with the criminal.

## APPENDIX C

### THE LAW SCALE

Name _____

READ EACH ITEM CAREFULLY AND UNDERLINE QUICKLY THE PHRASE WHICH BEST EXPRESSES YOUR FEELING ABOUT THE STATEMENT. Wherever possible, let your own personal experience determine your answer. Do not spend much time on any item. If in doubt, underline the phrase which seems most nearly to express your present feeling about the statement. WORK RAPIDLY. Be sure to answer every item.

1. The law protects property rights at the expense of human rights.

   Strongly Agree Agree Undecided Disagree Strongly Disagree

2. A person should obey only those laws that seem reasonable.

   Strongly Agree Agree Undecided Disagree Strongly Disagree

3. It is all right to evade the law if you do not actually violate it.

   Strongly Agree Agree Undecided Disagree Strongly Disagree

4. The sentences of judges in court are determined by their prejudices.

   Strongly Agree Agree Undecided Disagree Strongly Disagree

5. On the whole, judges are honest.

   Strongly Agree Agree Undecided Disagree Strongly Disagree

6. Juries seldom understand a case well enough to make a really just decision.

   Strongly Agree Agree Undecided Disagree Strongly Disagree

7. On the whole, policemen are honest.

   Strongly Agree Agree Undecided Disagree Strongly Disagree

8. A man should obey the laws no matter how much they interfere with his personal ambitions.

   Strongly Agree Agree Undecided Disagree Strongly Disagree

9. Court decisions are almost always just.

   Strongly Agree Agree Undecided Disagree Strongly Disagree

10. In the courts a poor man will receive as fair treatment as a millionaire.

    Strongly Agree Agree Undecided Disagree Strongly Disagree

11. Personal circumstances should never be considered as an excuse for law breaking.

Strongly Agree Agree Undecided Disagree Strongly Disagree

12. A man should tell the truth in court, regardless of consequences.

Strongly Agree Agree Undecided Disagree Strongly Disagree

13. A person who reports minor law violations is only a trouble-maker.

Strongly Agree Agree Undecided Disagree Strongly Disagree

14. A person is justified in giving false testimony to protect a friend on trial.

Strongly Agree Agree Undecided Disagree Strongly Disagree

15. A hungry man has a right to steal.

Strongly Agree Agree Undecided Disagree Strongly Disagree

16. All laws should be strictly obeyed because they <u>are</u> laws.

Strongly Agree Agree Undecided Disagree Strongly Disagree

17. Laws are so often made for the benefit of small selfish groups that a man cannot respect the law.

Strongly Agree Agree Undecided Disagree Strongly Disagree

18. Almost anything can be fixed up in the courts if you have enough money.

Strongly Agree Agree Undecided Disagree Strongly Disagree

19. It is difficult to break the law and keep one's self-respect.

Strongly Agree Agree Undecided Disagree Strongly Disagree

20. On the whole, lawyers are honest.

Strongly Agree Agree Undecided Disagree Strongly Disagree

21. Violators of the law are nearly always detected and punished.

Strongly Agree Agree Undecided Disagree Strongly Disagree

22. It is all right for a person to break the law if he doesn't get caught.

Strongly Agree Agree Undecided Disagree Strongly Disagree.

## APPENDIX D

John Burdick, age 19, has been charged with non-capital murder in the stabbing death of his father, William Burdick, age 44. William Burdick, a carpenter by trade, had been unemployed at the time.

John (Johnny) Burdick finished grade ten and quit school after three months of grade eleven. He was a below average student. From the time he quit school up to the time of the death of his father, he had been employed in a succession of jobs, working as a "pump man" in a service station, as a delivery truck driver, as an unskilled laborer, and as a gardener. At the time of his father's death, Johnny was unemployed and had been so for the previous three months.

Johnny and his father had engaged in a number of arguments about Johnny's lack of employment. Witnesses at the trial testified that Mr. Burdick had often criticized Johnny for being "too lazy to go out and work" and also for "being too stupid to finish school." Mrs. Burdick usually refrained from commenting, witnesses testified.

On the day of the stabbing (a Saturday) the defendent had slept until early afternoon. When he got out of bed his father immediately began to harass him in the manner mentioned above. His father is also reported to have said that if his son didn't start "paying his way around here (the house)" or "doing something to help around the house", he would be "kicked out." This harassment continued until the defendent went out to see a friend. When the defendent returned for the evening meal, the harassment began again. During the meal, the deceased accused the defendent of stealing money from him. A heated argument developed and, according to Mrs. Burdick's testimony, the deceased began waving his dinner knife around. He still had it in his hand when the defendent tried to

push his way out of the house. During what Mrs. Burdick described as a "shoving match", Mr. Burdick fell on the knife, stabbing himself in the heart. Death was almost instantaneous.

The prosecution's case was based mostly on two witnesses one of whom was an acquaintance of the defendent. This witness testified that the defendent had, on several occasions, stated that he "hated his old man's guts" and that he would like to "cut them out." The second witness for the prosecution was a police expert who testified that the angle of entry of the knife made it unlikely that the deceased could have been holding it at the time of entry. On cross examination, he stated that although it was unlikely, there was a slight possibility that the deceased had held the knife as it entered his body.

## APPENDIX E

## VERDICT FORM

CIRCLE THE WORD WHICH INDICATES YOUR VERDICT:

I believe that Johnny Burdick is INNOCENT/GUILTY of non-capital murder.

Signature _____

## APPENDIX F

Name _____

Circle the number of the statement which describes you best:

1. I am very certain that Johnny Burdick should be acquitted of non-capital murder.
2. I am quite certain that Johnny Burdick should be acquitted of non-capital murder.
3. I think that Johnny Burdick should be acquitted of non-capital murder.
4. I am completely uncertain.
5. I think that Johnny Burdick should be convicted of non-capital murder.
6. I am quite certain that Johnny Burdick should be convicted of non-capital murder.
7. I am very certain that Johnny Burdick should be convicted of non-capital murder.

Read each statement carefully and underline the phrase which best expresses your feeling about the item:

1. Johnny Burdick should clearly be acquitted of non-capital murder.
   Strongly Agree  Agree  Undecided  Disagree  Strongly Disagree
2. Johnny Burdick should clearly be convicted of non-capital murder.
   Strongly Agree  Agree  Undecided  Disagree  Strongly Disagree

## APPENDIX G

Suppose you are in a jury and some of the jury members are opposed to the verdict you have chosen. In ten minutes or less, write a paragraph to indicate which aspects of the case influenced you most in your decision and which might convince someone else to change his or her d cision to agree with yours.

When you have completed your paragraph, sign your name at the bottom. In a later part of this experiment, you will tape record your paragraph. This recording will be played to a group of subjects in an experiment which is related to this one.

Signature _____

Suppose you are in a jury and some of the jury members are opposed to the verdict you have chosen. In ten minutes or less, write a paragraph to indicate which aspects of the case influenced you most in your decision and which might convince someone else to change his or her decision to agree with yours.

## APPENDIX H

Name _____

Please underline one of the following three statements:

1. Yes, I will stay for Dr. Hamilton's part of the study.
2. I would like to stay for Dr. Hamilton's part of the study, but I can't spare the time.
3. No, I do not want to stay for Dr. Hamilton's part of the study.

If you underlined either number one or number two, please read the following:

As you were told, Dr. Hamilton has written a short aricle about some aspects of the trial which were not covered in the summary which you read. He has tested the article on a group of students and found that it changed their decisions 50% of the time. That is, it has an even chance of changing a person's decision.

As was mentioned, he is interested in how willing you are to read this article. Even if you cannot spare the time to stay, please take a few seconds to answer the questions below.

a. Aside from your curiosity about its contents, how willing or unwilling are you or would you be to read the article? (Circle one number)

1. Extremely unwilling
2. Very unwilling
3. Unwilling
4. Slightly unwilling
5. Neither willing nor unwilling
6. Slightly willing
7. Willing
8. Very willing
9. Extremely willing

b. Aside from your willingness to read it, how curious are you or would you be about the contents of the article? (Circle one number)

1. Not curious at all
2. Very slightly curious
3. Slightly curious
4. Curious
5. Very curious
6. Extremely curious

# APPENDIX I

## CONSIDERATIONS FAVORING CONVICTION

The transcript of the trial of the crown versus John Burdick reveals several inconsistencies in the testimony of the key defence witness, Mrs. Burdick. At one point she testified that she had heard her husband and her son fighting (implying that she was not in a position to see them fighting). At another point she testified to seeing them fighting. Also there was evidence presented which indicated that Mrs. Burdick and her son were very close and that Mrs. Burdick always took her son's side in arguments between the boy and his father. It seems very possible then that the account given by Mrs. Burdick was a fabrication which she made up to protect her son.

Another point is that the expert witness who testified that the wound in the body indicated that the knife had to have been held in the left hand of the deceased and at an angle which would have made it difficult for the deceased to have been holding it at all. The fact that the knife seems to have been held in the left hand of the deceased (if he held it at all) is important because when a right handed person waves something around in an argument, he is likely to be waving with his right hand and not his left hand. The deceased was right handed.

On the basis of this analysis, it seems that the defence's allegation that the death was accidental was definitely not supported. Furthermore, the defendent had motive and opportunity to kill his father.

WHEN YOU HAVE FINISHED READING THIS,

PLEASE TURN IT FACE DOWN ON THE DESK.

## CONSIDERATIONS FAVORING ACQUITTAL

In the case of the crown versus John Burdick it is evident that the evidence presented by the prosecution was of a weak and circumstantial nature. The basis of the prosecution's case is that the defendent had made statements that he would like to kill his father, and that the knife could not have been held by the deceased and must therefore have been held by the defendent. This is truly circumstantial evidence of the weakest sort! The police witness who testified about the position of the knife even admitted that it was possible that the knife had been held by the deceased.

Another consideration is the testimony of Mrs. Burdick. The prosecution made a point of trying to see if Mrs. Burdick had often favored her son over her husband in arguments. Likely it was hoped that some doubt could be cast on her testimony. However, this approach backfired on the prosecution in that Mrs. Burdick and two other witnesses testified that she always stood by her husband in arguments with the defendent.

Finally the prosecution witness who testified that the defendent had made statements about killing his father was hesitant and unsure in testifying, especially when he was asked where and when these statements had been made. It is very conceivable that his testimony was false.

On the basis of this analysis, it seems that there is reasonable doubt to the prosecution's allegation that Johnny Burdick murdered his father.

WHEN YOU HAVE FINISHED READING THIS,

PLEASE TURN IT FACE DOWN ON THE DESK.

# APPENDIX J

Name _____

These are some statements about the information which you have just read. Please read each item and underline the phrase which best expresses your feeling about the statement. Do not spend much time on any item - indicate your first impression.

1. The author of this information favored the verdict of innocent.

   Strongly Agree Agree Undecided Disagree Strongly Disagree

2. The author of this information was well informed.

   Strongly Agree Agree Undecided Disagree Strongly Disagree

3. The author's arguments were clear.

   Strongly Agree Agree Undecided Disagree Strongly Disagree

4. The author's approach was biased.

   Strongly Agree Agree Undecided Disagree Strongly Disagree

5. The author's conclusions were valid.

   Strongly Agree Agree Undecided Disagree Strongly Disagree

6. The author's conclusions were reasonable.

   Strongly Agree Agree Undecided Disagree Strongly Disagree

7. The author's conclusions were justified by the facts.

   Strongly Agree Agree Undecided Disagree Strongly Disagree

8. The information was interesting.

   Strongly Agree Agree Undecided Disagree Strongly Disagree

## APPENDIX K

## SECOND VERDICT FORM

CIRCLE THE WORD WHICH INDICATES YOUR VERDICT:

I believe that Johnny Burdick is INNOCENT/GUILTY of non-capital murder.

Signature _____

## APPENDIX L

Name _____

Circle the number of the statement which describes you best:

1. I am very certain that Johnny Burdick should be acquitted of non-capital murder.
2. I am quite certain that Johnny Burdick should be acquitted of non-capital murder.
3. I think that Johnny Burdick should be acquitted of non-capital murder.
4. I am completely uncertain.
5. I think that Johnny Burdick should be convicted of non-capital murder.
6. I am quite certain that Johnny Burdick should be convicted of non-capital murder.
7. I am very certain that Johnny Burdick should be convicted of non-capital murder.

Read each statement carefully and underline the phrase which best expresses your feeling about the item:

1. Johnny Burdick should clearly be acquitted of non-capital murder.
   Strongly Agree Agree Undecided Disagree Strongly Disagree
2. Johnny Burdick should clearly be convicted of non-capital murder.
   Strongly Agree Agree Undecided Disagree Strongly Disagree

# APPENDIX M

## MEMORY TEST*

1. Where did the author get his information about the trial?

2. The author pointed out that some of the testimony might have been false.

   a) Whose testimony did he doubt?

   b) What reasons were given for doubting the testimony?

3. The author made use of some of the testimony of an expert witness.

   a) What was the testimony?

   b) How did he make use of it to gain support for his conclusions?

*(Conviction Article)

MEMORY TEST*

1. As the author sees it, what was the basis of the prosecution's case?

2. The author discusses or mentions several witnesses.

   a) How many?

   b) Who were they?

3. The author accepts some testimony and rejects other testimony.

   a) Whose testimony does he accept?

   b) Whose testimony does he reject?

*(Acquittal Article)

# APPENDIX N

Try to recall how you felt when you were told about the new information. For each item underline the phrase which best describes your feelings.

1. Very Comfortable Comfortable Slightly Comfortable
   Slightly Uncomfortable Uncomfortable Very Uncomfortable

2. Very Anxious Anxious Slightly Anxious
   Slightly Calm Calm Very Calm

3. Very Bored Bored Slightly Bored
   Slightly Interested Interested Very Interested

4. Very Tense Tense Slightly Tense Slightly Relaxed Relaxed
   Very Relaxed

5. Very Pleased Pleased Slightly Pleased
   Slightly Annoyed Annoyed Very Annoyed

Please answer the following questions in your own words.

6. Were you able to separate your curiosity from your willingness to read the new information?

7. Did the experimenter have any effect on your willingness to read the new information? On any other aspect of the experiment?

8. How would you rate this experiment's interest value compared to other experiments in which you have served?

9. Do you have any other comments?

# APPENDIX O

Key: Variable A : Cognitive Complexity

Variable B : Commitment

Variable C : 10% versus 50% (Discrepancy)

## TABLE 1

Analysis of variance of willingness scores
N=67 (All subjects)

| Source | df | MS | F | P |
|---|---|---|---|---|
| A | 1 | 16.27769 | 7.66463 | .01 |
| B | 1 | 18.74403 | 8.82595 | .01 |
| C | 1 | 0.00775 | 0.00365 | ns* |
| AB | 1 | 6.60425 | 3.10972 | .10 |
| AC | 1 | 0.42716 | 0.20114 | ns |
| BC | 1 | 0.00577 | 0.00272 | ns |
| ABC | 1 | 0.51235 | 0.24125 | ns |
| Error | 59 | 2.12374 | | |

## TABLE 2

Analysis of variance of willingness scores
N=59 (Innocent verdicts only)

| Source | df | MS | F | P |
|---|---|---|---|---|
| A | 1 | 19.18500 | 8.52666 | .01 |
| B | 1 | 22.95081 | 10.20036 | .005 |
| C | 1 | 0.16862 | 0.07494 | ns |
| AB | 1 | 8.06674 | 3.58522 | .10 |
| AC | 1 | 0.85363 | 0.37939 | ns |
| BC | 1 | 0.26347 | 0.11710 | ns |
| ABC | 1 | 0.67447 | 0.29977 | ns |
| Error | 51 | 2.25000 | | |

TABLE 3

Analysis of variance of willingness scores
N=56 (All subjects who stayed)

| Source | df | MS | F | P |
|---|---|---|---|---|
| A | 1 | 10.40421 | 5.25107 | .05 |
| B | 1 | 9.30113 | 4.69434 | .10 |
| C | 1 | 0.21698 | 0.10951 | ns |
| AB | 1 | 3.63744 | 1.83584 | ns |
| AC | 1 | 0.14283 | 0.07209 | ns |
| BC | 1 | 0.53215 | 0.26858 | ns |
| ABC | 1 | 0.41164 | 0.20776 | ns |
| Error | 48 | 1.98135 | | |

TABLE 4

Analysis of variance of willingness scores
N=50 (Subjects voting innocent and staying)

| Source | df | MS | F | P |
|---|---|---|---|---|
| A | 1 | 11.44186 | 5.37208 | .05 |
| B | 1 | 13.05904 | 6.13136 | .025 |
| C | 1 | 0.33632 | 0.15791 | ns |
| AB | 1 | 5.25735 | 2.46838 | ns |
| AC | 1 | 0.06236 | 0.02928 | ns |
| BC | 1 | 0.03374 | 0.01584 | ns |
| ABC | 1 | 0.12185 | 0.05712 | ns |
| Error | 42 | 2.12988 | | |

TABLE 5

Analysis of variance of time
N=56 (All subjects staying)

| Source | df | MS | F | P |
|---|---|---|---|---|
| A | 1 | 13171.76953 | 3.41023 | .10 |
| B | 1 | 34.34450 | 0.00889 | ns |
| C | 1 | 1008.23730 | 0.26104 | ns |
| AB | 1 | 5929.76953 | 1.53525 | ns |
| AC | 1 | 4632.96484 | 1.19950 | ns |
| BC | 1 | 10270.14062 | 2.65899 | ns |
| ABC | 1 | 5254.75000 | 1.36048 | ns |
| Error | 48 | 3862.42310 | | |

TABLE 6

Analysis of variance of time
N=50 (Subjects voting innocent and staying)

| Source | df | MS | F | P |
|---|---|---|---|---|
| A | 1 | 18516.44922 | 5.00642 | .05 |
| B | 1 | 105.37811 | 0.02849 | ns |
| C | 1 | 708.13184 | 0.19146 | ns |
| AB | 1 | 4707.79297 | 1.27288 | ns |
| AC | 1 | 3560.86279 | 0.96278 | ns |
| BC | 1 | 17552.04687 | 4.74567 | .05 |
| ABC | 1 | 1013.55078 | 0.27404 | ns |
| Error | 42 | 3698.53711 | | |

TABLE 7

Analysis of variance of evaluation scores
N=56 (All subjects staying)

| Source | df | MS | F | P |
|---|---|---|---|---|
| A | 1 | 6.66550 | 0.59620 | ns |
| B | 1 | 0.10151 | 0.00908 | ns |
| C | 1 | 1.23123 | 0.11013 | ns |
| AB | 1 | 2.97506 | 0.26610 | ns |
| AC | 1 | 41.58849 | 3.71988 | .10 |
| BC | 1 | 2.97506 | 0.26610 | ns |
| ABC | 1 | 8.09649 | 0.72419 | ns |
| Error | 48 | 11.18006 | | |

TABLE 8

Analysis of variance of evaluation
N=50 (Subjects voting innocent and staying)

| Source | df | MS | F | P |
|---|---|---|---|---|
| A | 1 | 9.93155 | 0.90185 | ns |
| B | 1 | 0.76211 | 0.06920 | ns |
| C | 1 | 1.36932 | 0.12434 | ns |
| AB | 1 | 0.13344 | 0.01212 | ns |
| AC | 1 | 36.14264 | 3.28199 | .10 |
| BC | 1 | 4.45749 | 0.40477 | ns |
| ABC | 1 | 4.40535 | 0.40004 | ns |
| Error | 42 | 11.01241 | | |

TABLE 9

Analysis of variance of memory scores
N=50 (Subjects voting innocent and staying)

| Source | df | MS | F | P |
|---|---|---|---|---|
| A | 1 | 0.00522 | 0.00117 | ns |
| B | 1 | 0.01288 | 0.00288 | ns |
| C | 1 | 4.21682 | 0.94271 | ns |
| AB | 1 | 1.99857 | 0.44680 | ns |
| AC | 1 | 18.87309 | 4.21927 | .05 |
| BC | 1 | 0.17900 | 0.04002 | ns |
| ABC | 1 | 6.70851 | 1.49975 | ns |
| Error | 42 | 4.47307 | | |

# APPENDIX P

## Correlation Matrix
N=67 df=65

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| 1. | Cognitive complexity | | | | | | | |
| | 1.000 | .320 | .163 | -.006 | -.041 | .030 | -.141 | .006 |
| 2. | Willingness | | | | | | | |
| | | 1.000 | .421 | -.237 | -.182 | .209 | -.354 | .016 |
| 3. | Curiosity | | | | | | | |
| | | | 1.000 | -.080 | -.029 | .257 | -.231 | -.144 |
| 4. | Attitude toward punishment of criminals | | | | | | | |
| | | | | 1.000 | .317 | .108 | .050 | -.214 |
| 5. | Law scale | | | | | | | |
| | | | | | 1.000 | -.004 | .002 | .149 |
| 6. | Certainty | | | | | | | |
| | | | | | | 1.000 | -.241 | -.285 |
| 7. | Stay or leave (1=stay, 2=leave) | | | | | | | |
| | | | | | | | 1.000 | .085 |
| 8. | Innocent or guilty (1=innocent, 2=guilty) | | | | | | | |
| | | | | | | | | 1.000 |

Correlation Matrix
N=55 df=53
(Subjects staying)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Cognitive complexity | 1.000 | .301 | .129 | .223 | .090 | .021 | .055 | .032 | -.092 | -.039 | .143 | -.023 |
| 2. Willingness | | 1.000 | .389 | .053 | .118 | -.083 | .380 | -.183 | -.165 | .039 | .109 | -.054 |
| 3. Curiosity | | | 1.000 | -.130 | .118 | .064 | .358 | -.063 | .033 | .149 | .236 | -.092 |
| 4. Time | | | | 1.000 | -.346 | .153 | .098 | .191 | .047 | .32 | .017 | -.058 |
| 5. Evaluation | | | | | 1.000 | .061 | .372 | -.180 | -.152 | -.081 | -.108 | .015 |
| 6. Certainty change | | | | | | 1.000 | .211 | .046 | .007 | .487 | .318 | -.103 |
| 7. Verdict change | | | | | | | 1.000 | -.117 | -.049 | -.029 | .166 | -.124 |
| 8. Attitude toward punishment of criminals | | | | | | | | 1.000 | .332 | .196 | .019 | -.123 |
| 9. Law scale | | | | | | | | | 1.000 | .012 | -.082 | -.112 |
| 10. Certainty | | | | | | | | | | 1.000 | .487 | -.045 |
| 11. Innocent or Guilty (Highs are innocent choosers) | | | | | | | | | | | 1.000 | -.101 |
| 12. Memory | | | | | | | | | | | | 1.000 |

*Correlations in this column are for N=49, df=47

# APPENDIX Q

## Raw Data

### Key for Dependent Variables

| Variable Number | Description of Variable |
|---|---|

#### Main Dependent Variables

1. Leave-Stay behavior (1 = stay, 2 = leave)
2. Willingness
3. Curiosity
4. Time spent reading article (seconds)
5. Evaluation of article (Sum of scores on item Numbers 2 to 8)
6. Memory for content of article (Subjects who voted innocent only)

#### Secondary Dependent Variables

7. Attitude Toward Punishment of Criminals score
8. The Law Scale score
9. Verdict (1 = innocent, 2 = guilty)
10. Certainty rating regarding first verdict (Deviation from uncertainty choice)
11. Second certainty rating
12. First attitude toward innocent verdict (Sum of two statements scored toward positive attitude)
13. Second attitude toward innocent verdict

### Key for Independent Variables

$A_1$ Concrete subjects
$A_2$ Abstract subjects

$B_1$ Low Commitment
$B_2$ High Commitment

$C_1$ 10% Information
$C_2$ 50% Information

Table 1

Raw Data for Group $A_1$ $B_1$ $C_1$

| | Subject Number | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Variable No. | | | | | | | | |
| 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 |
| 2 | 9 | 7 | 8 | 8 | 6 | 7 | 8 | 7 |
| 3 | 5 | 5 | 4 | 5 | 3 | 6 | 5 | 4 |
| 4 | 141 | 112 | 248 | 107 | | 143 | 76 | 165 |
| 5 | 20 | 18 | 24 | 23 | | 22 | 29 | 25 |
| 6 | 8 | 6 | 7 | 6 | | 7 | 8 | 9 |
| 7 | 3.75 | 7.85 | 3.3 | 4.8 | 3.75 | 3.1 | 4.1 | 7.0 |
| 8 | 80 | 74 | 58 | 75 | 75 | 65 | 79 | 78 |
| 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 10 | 1 | 3 | 2 | 1 | 1 | 1 | 2 | 2 |
| 11 | 1 | 3 | 1 | 1 | | 0 | 2 | 2 |
| 12 | 8 | 8 | 9 | 9 | 8 | 9 | 8 | 8 |
| 13 | 6 | 8 | 8 | 7 | | 6 | 8 | 8 |

Table 2

Raw Data for Group $A_1$ $B_1$ $C_2$

| | Subject Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Variable No. | | | | | | | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 |
| 2 | 8 | 7 | 9 | 8 | 7 | 7 | 7 | 8 | 7 |
| 3 | 5 | 4 | 6 | 6 | 4 | 4 | 4 | 5 | 5 |
| 4 | 70 | 132 | 78 | 50 | 109 | 113 | | | 196 |
| 5 | 28 | 20 | 27 | 26 | 21 | 28 | | | 19 |
| 6 | 5 | 10 | 2 | 7 | 6 | - | | | - |
| 7 | 2.9 | 2.9 | 4.8 | 4.8 | 5.4 | 4.1 | 3.4 | 5.6 | 3.3 |
| 8 | 65 | 84 | 68 | 93 | 73 | 76 | 67 | 75 | 69 |
| 9 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 |
| 10 | 3 | 3 | 2 | 1 | 2 | 1 | 2 | 2 | 1 |
| 11 | 2 | 3 | 2 | 1 | 1 | 1 | | | 1 |
| 12 | 10 | 10 | 8 | 8 | 8 | 4 | 8 | 8 | 4 |
| 13 | 8 | 10 | 4 | 4 | 8 | 8 | | | -* |

*Subject failed to complete question regarding attitude toward innocent verdict.

Table 3

Raw Data for Group $A_1$ $B_2$ $C_1$

| | Subject Number | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Variable No. | | | | | | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 6 | 7 | 7 | 2 | 9 | 2 | 7 | 8 |
| 3 | 4 | 5 | 4 | 5 | 4 | 2 | 5 | 5 |
| 4 | 119 | 108 | 246 | 110 | 93 | 51 | 67 | 123 |
| 5 | 23 | 23 | 26 | 20 | 19 | 22 | 25 | 28 |
| 6 | 5 | 8 | - | 5 | 6 | 5 | 8 | 7 |
| 7 | 5.3 | 4.35 | 4.6 | 5.6 | 4.35 | 4.6 | 3.1 | 4.35 |
| 8 | 74 | 71 | 84 | 94 | 65 | 79 | 50 | 62 |
| 9 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 |
| 10 | 6 | 1 | 6 | 2 | 2 | 0 | 2 | 1 |
| 11 | 0 | 7 | 1 | 2 | 2 | 0 | 2 | 1 |
| 12 | 8 | 9 | 6 | 9 | 8 | 6 | 8 | 8 |
| 13 | 6 | 7 | 1 | 9 | 8 | 10 | 8 | 8 |

Table 4

Raw Data for Group $A_1$ $B_2$ $C_2$

| | Subject Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Variable No. | | | | | | | | | |
| 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 2 |
| 2 | 8 | 2 | 4 | 7 | 7 | 8 | 8 | 3 | 4 |
| 3 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 2 | 5 |
| 4 | 99 | 82 | | | 106 | 77 | 113 | | |
| 5 | 28 | 28 | | | 22 | 28 | 19 | | |
| 6 | 5 | 6 | | | 10 | - | 4 | | |
| 7 | 3.75 | 5.5 | 5.15 | 4.35 | 3.1 | 4.8 | 3.15 | 6.6 | 4.0 |
| 8 | 77 | 72 | 78 | 54 | 66 | 87 | 75 | 81 | 73 |
| 9 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 |
| 10 | 2 | 2 | 1 | 1 | 3 | 1 | 1 | 0 | 1 |
| 11 | 2 | 1 | | | 3 | 2 | 1 | | |
| 12 | 8 | 9 | 8 | 8 | 10 | 6 | 9 | 6 | 8 |
| 13 | 8 | 8 | | | 10 | 8 | 8 | | |

Table 5

Raw Data for Group $A_2$ $B_1$ $C_1$

| | Subject Number | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Variable No. | | | | | | | | |
| 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 9 | 7 | 7 | 8 | 8 | 9 | 7 | 8 |
| 3 | 5 | 5 | 4 | 5 | 5 | 4 | 5 | 6 |
| 4 | 135 | | 374 | 136 | 90 | 122 | 106 | 109 |
| 5 | 20 | | 21 | 29 | 25 | 28 | 27 | 26 |
| 6 | 5 | | 4 | 7 | 3 | 3 | 8 | 4 |
| 7 | 5.3 | 4.7 | 4.6 | 4.1 | 5.5 | 3.15 | 3.2 | 4.0 |
| 8 | 91 | 72 | 72 | 78 | 80 | 59 | 77 | 60 |
| 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 10 | 2 | 2 | 2 | 3 | 1 | 1 | 3 | 2 |
| 11 | 2 | | 1 | 1 | 1 | 1 | 2 | 1 |
| 12 | 8 | 8 | 8 | -* | 8 | 9 | 9 | 9 |
| 13 | 8 | | 8 | -* | 8 | 4 | 9 | 8 |

*Subject did not respond on this item.

Table 6

Raw Data for Group $A_2$ $B_1$ $C_2$

| | Subject Number | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Variable No. | | | | | | | | | | |
| 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 9 | 7 | 8 | 8 | 7 | 9 | 7 | 8 | 8 | 8 |
| 3 | 5 | 4 | 5 | 5 | 4 | 6 | 4 | 5 | 5 | 5 |
| 4 | 172 | | 97 | 145 | 125 | 97 | 117 | 107 | 111 | 72 |
| 5 | 24 | | 27 | 27 | 22 | 24 | 27 | 16 | 27 | 25 |
| 6 | 4 | | 10 | 7 | - | 5 | 10 | 7 | - | 10 |
| 7 | 4.6 | 3.65 | 3.75 | 5.7 | 3.1 | 4.7 | 4.1 | 4.35 | 3.65 | 4.7 |
| 8 | 69 | 64 | 70 | 78 | 77 | 63 | 58 | 67 | 69 | 73 |
| 9 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 |
| 10 | 1 | 1 | 1 | 1 | 0 | 2 | 1 | 1 | 2 | 3 |
| 11 | 1 | | 1 | 1 | 0 | 2 | 1 | 1 | 2 | 1 |
| 12 | 9 | 5 | 9 | 8 | 6 | 9 | 8 | 9 | 4 | 10 |
| 13 | 8 | | 4 | 4 | 6 | 9 | 8 | 8 | 4 | 8 |

Table 7

Raw Data for Group $A_2$ $B_2$ $C_1$

| | Subject Number | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Variable No. | | | | | | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 3* |
| 2 | 7 | 8 | 8 | 7 | 8 | 5 | 8 | |
| 3 | 4 | 5 | 5 | 4 | 4 | 5 | 5 | |
| 4 | 175 | 90 | 123 | 177 | 91 | | 115 | |
| 5 | 25 | 28 | 25 | 24 | 28 | | 26 | |
| 6 | 8 | 6 | 4 | 7 | 5 | | 7 | |
| 7 | 4.35 | 3.15 | 3.4 | 5.7 | 4.35 | 5.8 | 6.6 | 3.1 |
| 8 | 78 | 62 | 80 | 68 | 64 | 77 | 79 | 52 |
| 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 10 | 1 | 1 | 1 | 3 | 2 | 1 | 2 | 1 |
| 11 | 1 | 1 | 1 | 2 | 1 | | 2 | |
| 12 | 8 | 8 | 9 | 10 | 8 | 9 | 8 | 8 |
| 13 | 8 | 4 | 8 | 8 | 6 | | 8 | |

*See footnote on page 23.

Table 8

Raw Data for Group $A_2$ $B_2$ $C_2$

| | Subject Number | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Variable No. | | | | | | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 |
| 2 | 7 | 7 | 7 | 8 | 9 | 7 | 8 | 8 |
| 3 | 5 | 5 | 5 | 5 | 6 | 4 | 4 | 6 |
| 4 | 105 | 193 | 354 | 261 | 181 | | 116 | 88 |
| 5 | 23 | 21 | 19 | 21 | 24 | | 24 | 27 |
| 6 | 5 | 10 | 5 | 8 | 4 | | 7 | 11 |
| 7 | 3.75 | 4.1 | 6.6 | 5.7 | 4.0 | 3.3 | 5.8 | 3.15 |
| 8 | 73 | 64 | 74 | 80 | 94 | 88 | 74 | 66 |
| 9 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 |
| 10 | 2 | 1 | 3 | 2 | 3 | 1 | 1 | 1 |
| 11 | 2 | 1 | 2 | 2 | 1 | | 1 | 1 |
| 12 | 8 | 8 | 9 | 9 | 10 | 4 | 8 | 8 |
| 13 | 8 | 8 | 8 | 9 | 7 | | 7 | 8 |

# APPENDIX R

## PILOT STUDY

The pilot study, done prior to the research presented in the main body of this report, was identical in design to the later study except in three ways. Although there were two levels of conceptual structure in the pilot study, the concrete subjects could not be selected from the most extremely concrete group as identified by the selection instrument (Tuckman, 1966) because it was desirable to conserve these subjects for the main study. Thus the next to the most concrete subjects were used in pilot work. These were the System II subjects. The abstract subjects (System IV subjects) were selected from the same pool from which subjects were selected for the main study.

The second difference was in the number of levels of discrepancy employed in pilot work. Pilot subjects were offered the opportunity to read information which either had a 10%, a 50%, or a 90% chance of changing their attitudes, whereas the main study lacked the 90% condition.

The third difference was the nature of the commitment manipulation. This manipulation in the main study is described on page 19. In the pilot study high commitment subjects were told, prior to giving their first verdicts, that their verdicts and corresponding levels of confidence would be compared to their responses to attitude questionnaires which they had filled out at the start of the experiment. Low commitment subjects were simply asked to indicate their verdicts.

The hypotheses advanced for the pilot study were the same as the first five hypotheses advanced for the main study and summarized on

pages 12 and 13. In addition it was hypothesized that subjects' selective exposure would follow a non-monotonic curve with most selectivity at the 50% level of discrepancy.

The design of the pilot study comprised the two levels of conceptual structure, two levels of commitment and three levels of information discrepancy. Eight of the twelve cells had two subjects while four of the cells had one subject. The configuration was as follows:

| | | Concrete | Abstract |
|---|---|---|---|
| Low Commitment | 10% | 2 | 2 |
| | 50% | 2 | 1 |
| | 90% | 1 | 2 |
| High Commitment | 10% | 2 | 1 |
| | 50% | 1 | 2 |
| | 90% | 2 | 2 |

The first hypothesis was that concrete (System II) subjects would show more selectivity than would abstract (System IV) subjects. None of the subjects in the pilot study left when given the opportunity. Mean willingness for concrete subjects was 6.5 compared to 6.8 for abstract subjects ($t = 1.41$, $df = 18$, $p < .10$ one tail test). There was no significant difference between concrete and abstract subjects on the time measure. Since 20% of the pilot sample chose the guilty verdict and thus read a different counter-communication, no analyses were done on memory data.

Subjects were asked to evaluate the article which they read. As expected, concrete subjects had a lower evaluation than did abstract subjects ($t = 2.27$, $df = 18$, $p$ .025). That this occurred in the pilot study and not in the main study may have been due to the difference

between the concrete subjects in the two studies. System II subjects have been characterized as being negatively independent (Tuckman, 1966), and their negativistic tendencies may have been reflected in the lowered evaluations.

The two hypotheses which were advanced regarding commitment, that increased commitment would produce more selective exposure and that there would be an interaction between commitment and conceptual structure, were not supported. However trends in the willingness data supported both hypotheses. Finally the prediction that selective exposure would be non-monotonically related to level of discrepancy was not supported.