

INFERENTIAL RELATIONSHIPS, AMOUNT OF INFORMATION,
COGNITIVE VARIABLES AND THE PERCEPTION OF THE PERSONALITY
OF OTHERS

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ABSTRACT

Among the judgmental processes involved in forming impressions of others beyond the target information is the "predisposition" to make trait inference judgments i.e., judgments based on trait inferential relationships. The purpose of the present study was to investigate the effects of the degree and direction of the inferential relationship between the known characteristics and the judged characteristics of the target person, three amounts of target information and two perceiver cognitive variables on the tendency to make trait inference judgments, on judgmental certainty, and on the judge's "willingness" to make a prediction.

Sixty subjects were trichotomized into high, medium, and low cognitive complexity and cognitive structure groups and were presented with high, medium, and low amounts of target information in the form of personality statements to which six hypothetical persons had allegedly responded true. The subjects were then required to predict how these target persons had answered other personality statements on three tests in two separate tasks. The response statements on the tests were highly or lowly, and positively or negatively related to the target statements. In the first task, subjects were permitted to omit making a prediction on any statement on which they felt they could not predict confidently. The second task required them to make predictions on all the trait statements and to indicate the degree of their judgmental certainty.

Judges made a greater number of trait inference judgments, were more certain and were more willing to make a prediction on high than on low inferential statements. Judges were also more certain and more willing to predict on positive than on negative inferential statements with

four and six redundant target statements rather than with two target statements. There were no perceiver cognitive variable effects.

These findings were interpreted and future research discussed.

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CHAPTER I

Statement of the Problem

A common assumption in psychological theories of person perception is that each individual, in forming impressions of others, has expectancies of certain traits going together. An individual's expectancy of specific trait relationships facilitates his forming overall impressions based on a limited amount of information. From certain known characteristics of a target person, the perceiver infers the presence of other traits which are inferentially related in varying degrees to the known traits. Recent work in the area of trait inferential relationships has indicated that the tendency to assign traits to a target person varies considerably with the magnitude of the inferential relationship in question. The tendency to make trait inference judgments (i.e., judgments corresponding with the direction of the inferential relationship) may be expected to vary not only with the magnitude of the inferential relationship but with the direction of the inferential relationship (i.e., positive or negative) as well. The degree and direction of inferential relationships might also be expected to influence other aspects of the perceptual process such as judgmental certainty and willingness to make a prediction. The amount of target information and various cognitive properties of the perceiver may also be relevant to these aspects of the perceptual process.

Purpose of the Present Study

The purpose of the present study was to investigate the effects of (1) degree of trait inferential relationships between the known characteristics of a target person and the judged characteristics (2) direction of the trait inferential relationships (3) varying amounts of target information and (4) individual perceiver differences in cognitive complexity and

cognitive structure on the tendency to make trait inference judgments in the perception of the personality of others, on judgmental certainty and on the judge's "willingness" to make a prediction.

CHAPTER II

Review of the Literature

In pioneering impression formation in person perception, Asch (1946) formulated that one strives to form an impression of the entire person even when the evidence is meager. Hays (1958), in indicating how this impression is formed, suggested that individual perceivers develop, through experience, conceptions of what traits "go together" in other persons. The implication of these formulations launched investigations into related factors such as trait inferential relationships and the trait inference judgment, the effects of different amounts of target information, and individual differences in the perceiver.

Trait Inferential Relationships and the Trait Inference Judgment

An important distinction has recently been made between trait inferential relationships and trait inference judgments (Lay, 1968). Lay noted that on the basis of known characteristics of a target person, a perceiver may infer the presence or absence of certain other personality traits. These traits are inferentially linked in varying degrees to the known traits. Prior to making a trait inference judgment, therefore, the perceiver must have some views as to which traits are likely to occur jointly in others. Thus involved here are two related but distinct concepts. The first refers to the inferential relationships between traits as viewed by the perceiver and the second to the perceiver's tendency to make his predictions of the personality of others based on these trait inferential relationships.

Originally, trait inference judgments were viewed as artifacts which obscured the measure of perceptual ability variables. The tendency to make such judgments was thought to interfere with the ability to judge actual

behavior (Newcomb, 1931). Later Guilford (1936) named this tendency "the logical error". After abortive attempts on the part of researchers to eliminate such "artifacts", Bruner and Taguiri (1954) advocated the necessity of studying trait inferential relationships as an integral part of person perception, thus lending credence to the study of trait inference judgments as a legitimate source of enquiry rather than as a troublesome artifact.

Work evolving from this concept i.e., trait inferential relationships includes studies of the properties of trait inferential relationships (Bruner, Shapiro & Taguiri, 1958); the trait context in which inferential relationships are made (Shapiro & Taguiri, 1958); perceiver differences in trait inferential relationships (Steiner, 1954); matrices of trait intercorrelations based on familiar and unfamiliar targets (Koltuv, 1962); and the generality of trait intercorrelations over target groups (Secord & Berscheid, 1963). The tendency to associate particular traits with each other was incorporated as the third component in Cronbach's (1955) implicit personality theory.

Some investigators, following Cronbach's suggestion, have attempted to examine the perceiver's implicit assumptions about certain trait relationships by intercorrelating his trait ratings of others. These covariations were seen to reflect the relationships the perceiver expects to find among personality traits. Lay (1968) pointed to this indirect approach as inferior to the direct approach which involves asking judges to indicate the degree to which they expect certain traits to be associated. In the latter approach, a subject is asked to indicate, for example, the likelihood that a person who is "sociable" is also "supporting". Lay criticized Cronbach's approach on two counts. First, it allows no distinction to be made between trait inferential relationships and trait inference judgments either conceptually or operationally. In addition, trait rating covariations are sub-

ject, to a greater degree, to extraneous perceiver predispositions or judgmental processes beyond the trait inference judgment. Thus, the direct method of assessment permits a "purer" measure of expected or perceived trait relationships.

The degree of trait inferential relationships between known and judged trait characteristics derived by direct measures (Lay & Jackson, 1968), were manipulated by Lay (1968) in an attempt to explore the tendency to make trait inference judgments in the perception of the personality of others. Lay and Jackson, in a multidimensional analysis "mapped" relationships between various personality traits obtained from judgments of the likelihood of the joint occurrence of pairs of personality trait adjectives and of the joint endorsement of corresponding pairs of personality statements selected from the Personality Research Form (Jackson, 1967). On any obtained dimension, traits with high values are highly inferentially related, while a trait with a high value and another with a relatively low value are psychologically interpreted as being lowly inferentially related. In Lay's study, judges were asked to predict the responses of various target persons to a number of personality statements which were high or low in their inferential relationship to the target information. The judge's certainty and willingness to make a prediction were also examined. It was reported that judges made more trait inference judgments, were more certain and were more willing to make predictions on high inferential than on low inferential statements. In addition, there was a post hoc suggestion that negative inferential relationships may be more "difficult" than positive ones in that judges appeared to make fewer trait inference judgments, be less certain and be less willing to predict on the negative inferentially related statements than on the positive ones. The author inferred that positive and negative inferential relationships might be regarded as analogous to positive

and negative instances in concept formation (e.g., Bourne, 1966). A positive inferential relationship is indicated where the presence of one trait may be inferred from a knowledge of another; while a negative inferential relationship is indicated when the absence of one trait may be inferred from a knowledge of the other.

The present study intends to pursue this suggestion by investigating the various effects of direction of inferential relationship as well as of degree of inferential relationship.

Amount of Target Information

Bruner (1951) inferred that low grade stimulus information, whether minimal or ambiguous, makes an individual's presuppositions concerning behavioral events more apparent than high grade reliable information. Also, Koltuv (1962) suggested that perceiver biases or predispositions are manifested more readily under conditions where information about the stimulus object is minimal and ambiguous. Some aspects of the person perception literature support this suggestion. For example, "the leniency effect" has been found to occur more frequently when only limited target information is available (Taguiri, 1968). Also, it has been demonstrated that "stereotyping" predominates under these conditions (Gage, 1955). On the other hand, in the previously mentioned study, Lay (1968) using a between subject design found that the predisposition to make trait inference judgments was not related to the level of target information presented to the judges. Neither was judgmental certainty nor willingness to predict. The lack of differences was attributed to the redundant aspects of the increases in information. Despite this finding, it might be expected that more information would have facilitated the readiness with which a perceiver "sees" the inferential relationship. In addition, the increased probability of outcome provided by additional

information can be presumed to make the task of drawing inferences considerably easier (cf. Miller, Heise, & Lichten, 1951). For example, when a subject receives more information which increases the probability that a target person is perceived "orderly", the task of predicting other traits related to "orderliness" could thus be facilitated. It seems reasonable to suppose that this would consequently strengthen his judgmental certainty and willingness to predict and perhaps enable him to be more "accurate" in his trait inference judgments.

In view of these expectations, the present study attempts to investigate the effect of amount of information by the addition of a third level of information and the implementation of a within subject design.

Individual Perceiver Cognitive Differences

A great deal of attention has been focused on the importance of cognitive styles as a factor in the perception of the personality of others (Crockett, 1962; Klein, Barr & Wolitzky, 1967; Levy, 1963; Secord, 1958; Shrauger & Altrocchi, 1964; Taguiri, 1965). More specific interest has been shown in individual differences as measured by the number of independent dimensions used in characterizing others (Bieri, 1961; Kelly, 1955; Tripodi & Bieri, 1963). It has been generally agreed that impressions formed reflect systematic differences in the cognitive process of the perceiver. Of interest in the present study is whether cognitive variables of the judge will be reflected in differences in the number of trait inference judgments, the degree of judgmental certainty and the willingness to make predictions.

Cognitive Complexity. Differentiation (i.e., the number of interpersonal constructs) was first used by Bieri (1955), whose measure of "cognitive complexity" was obtained from responses to the Role Construct

Repertory Test devised by Kelly (1955). This test measured the extent to which the subject's constructs distinguish in different ways a set of individuals who are known to him. A simpler adaptation of the test by Bieri and Blacker (1956) measured the number of constructs or independent dimensions characteristically employed by the subject in describing others and affords a more direct operational measure of his construct differentiation. Since subjects high in cognitive complexity have more available constructs, it is expected they require more information before making a prediction and thus will be less certain and less willing to predict on the basis of little target information than subjects low in cognitive complexity (cf. Nidorf & Crockett, 1964).

Tripodi and Bieri (1963) found that cognitively undifferentiated perceivers made judgments based on less information than cognitively differentiated perceivers. Also, Ware and Harvey (1967) illustrated that greater concreteness in subjects accompanied greater certainty under the condition of little information. In view of these results an interaction between levels of information and individual perceiver differences might be expected.

Cognitive Structure. A relatively novel cognitive variable is Cognitive Structure, introduced by Jackson (1967) in the Personality Research Form (PRF). According to the PRF Manual, "Cognitive Structure" is defined as the degree to which a judge: "Does not like ambiguity or uncertainty in information; wants all questions answered completely; desires to make decisions based on definite knowledge rather than guesses and probabilities." The information seeking and uncertainty factors of the Cognitive Structure trait suggest that subjects differentiated on this trait might differ in their judgmental certainty and willingness to predict.

CHAPTER III

Design of the Study

The present study involved a 3 x 3 x 2 x 2 factorial design. The independent variables were (1) Cognitive Complexity and Cognitive Structure of the perceiver (2) the amount of target information (3) degree of inferential relationship between the known characteristics and judged characteristics of the target person and (4) direction of inferential relationship. Judges were initially trichotomized on the basis of their scores on a Cognitive Complexity test and subsequently on a Cognitive Structure Inventory. All judges were asked to predict the responses of target persons to personality statements which were highly or lowly inferentially related, as well as positively and negatively related to the target information. The amount of target information was varied within subjects along a quantitative dimension only, yielding three conditions, high, medium and low. The dependent variables examined were (1) the tendency to make trait inference judgments (i.e., the number of predictions made in the inferential direction), (2) judgmental certainty and (3) the number of predictions made.

CHAPTER IV

Predictions

The originality of the research that the present study attempts to support emphasizes the highly speculative nature of any predictions in what is primarily intended to be an empirical work.

On the basis of previous findings, it is expected that a high inferential relationship between the target information and the judged personality statements will result in (1) a greater tendency to make trait inference judgments (i.e., to make predictions in the inferential direction) (2) greater judgmental certainty and (3) a greater "willingness" to make a prediction.

As suggested by Lay (1968) negative inferential relationships may be more "difficult" than positive inferential relationships. Judges then might be expected to make fewer trait inference judgments, be less certain, and be less willing to predict on negative than on positive relationships.

In spite of the equivocal literature concerning the amount of information, it is anticipated that the addition of further target information will result in greater judgmental certainty and willingness to predict.

Subjects high in Cognitive Complexity and low in Cognitive Structure are expected to exhibit greater judgmental certainty and willingness to predict.

CHAPTER V

METHOD

Experimental Materials¹

Target Information. Target information was presented in the form of true-keyed personality statements that the target person has supposedly answered true. Under conditions of low information, two statements were presented per target person; under conditions of medium information, four statements were presented and under the high condition, six statements. There were six target persons to be judged, all designated as male. The information statements were selected from four scales of the PRF (Order, Endurance, Play, and Impulsivity), two scales per target. These four scales all had large positive or negative projections on Dimension I of the statement inferential network "mapped" by Lay and Jackson (1968). Values for each of the traits on this dimension generated by male judges is reproduced in Appendix B. The information statements for Target A were selected, in equal numbers, from the Order and Endurance scales and for target B from the Play and Impulsivity scales. There were three versions each of Target A and Target B, two, four and six target statements of each. The statements selected had moderate endorsement frequencies (.45 to .67) and were neutral in desirability. These statistics were drawn from data gathered in the development of the PRF and were made available by D.N. Jackson. The desirability values were based on item - social desirability scale score biserial correlations.

Prediction Stimuli. The total prediction stimuli consisted of one hundred and eight personality statements. Six statements from each of

¹A copy of all experimental materials is presented in Appendix C

TABLE 1

PRF Scales From Which Information and High, Low,
Positive and Negative Inferential Response Statements Were Selected

	<u>Target Information Statements</u>	<u>Response Statements</u>			
		<u>High Inferential</u>		<u>Low Inferential</u>	
		<u>Positive</u>	<u>Negative</u>	<u>Positive</u>	<u>Negative</u>
A	Order, Endurance	Cognitive Structure	Thrill Seeking	Understanding	Succorance
		Social Recognition	Play	Autonomy	Dependence
		Achievement	Impulsivity	Dominance	Abasement
			Change		Affiliation
		Exhibition		Aggression	
B	Play, Impulsivity	Thrill Seeking	Order	Dependence	Understanding
		Change	Cognitive Structure	Succorance	Autonomy
		Exhibition	Endurance	Abasement	Dominance
			Social Recognition	Affiliation	
			Achievement	Aggression	

eighteen content sub-scales of the PRF (Forms A and B) were selected. These statements all had moderate endorsement frequencies (.45 to .55). Three sets of prediction stimuli of thirty-six statements each were prepared. Two content items, one true-keyed and one false-keyed, from each sub-scale were randomly assigned to each of these three sets of prediction stimuli. The degree and the direction of inferential relationship between the target information and the prediction stimuli were systematically varied. Within each questionnaire sixteen statements were low inferential. These statements were drawn equally from the eight scales of the PRF which had small projections on Dimension I of the statement inferential network referred to above. Thus, the inferential relationship between these scales and the scales from which the target information statements were selected was low. In addition, the statements drawn from scales located at the same pole of Dimension I as the information scales were positively inferentially related, and the statements drawn from scales located at the opposite pole negatively related. For example, since Order and Nurturance had minus values on Dimension I, and Affiliation a plus value, the inferential relationship between the Order information and the Nurturance response statements was positive, and between the Order information and the Affiliation response statements, negative. Sixteen statements were high inferential. These statements were drawn equally from eight scales of the PRF which had large projections on Dimension I of the inferential network. These scales were highly inferentially related to the traits from which the target information was selected. The scales from which the information statements and the high and low inferential (positive and negative) response statements were selected are presented in Table 1. Four statements within each set of prediction stimuli were drawn from the same scales as the in-

formation statements, two from each scale. That is, with Target A these response statements were selected from the Order and Endurance scales, and with Target B from the Play and Impulsivity scales. It should be noted that those personality statements which made up the "Same" scale when the target person being judged was Target A became high negative inferential statements with Target B, and vice versa. Similarly, positive inferential (high or low) response statements with Target A became negative inferential statements with Target B. Thus, all statements which were inferentially keyed true (i.e., positive inferential statements) or content keyed true (i.e., "same" scale statements) with Target A were inferentially keyed false with Target B. For example, since Target A information included Endurance statements, response statements drawn from this scale were content-keyed true. In addition, since Cognitive Structure, for example, was positively inferentially related to Target A information, response statements selected from this scale were inferentially keyed true. On the other hand, the inferential relationship between Target B information (Play and Impulsivity) and the Endurance and Cognitive Structure scales was negative. Thus, with Target B, the response statements selected from these latter scales were inferentially keyed false. Further, response statements which were negatively inferentially related to the target information but content-keyed false were inferentially keyed true. There were equal numbers of inferentially true and false keyed statements in each set of predictive stimuli. This procedure resulted in four experimental scales per set: high positive inferential; high negative inferential; low positive inferential; and low negative inferential. One sample response statement from each of the four scales is presented below. In addition, an example of the target information is provided. The judges were asked to predict how

a target person would answer the response statements given that he had answered true to the target statements. The scales from which these statements were drawn and their original keying in the PRF as well as the direction of their inferential keying are shown in parentheses but did not appear in the original questionnaires.

Target A information statements - Person (male)

1. Even when I am feeling quite ill, I will continue working if it is important. (Endurance) (T) F
2. I dislike to be in a cluttered room. (Order) (T) F

Response Statements

High positive inferential

I consistently try to make people think highly of me.

(Social recognition; content keyed true; inferentially keyed true)

High negative inferential

If I had the chance, I would like to move to a different part of the country every few years.

(Change; content keyed true; inferentially keyed false)

Low positive inferential

Most community leaders do a better job than I could possibly do.

(Dominance; content keyed false; inferentially keyed false)

Low negative inferential

I would not like to be married to a protective person.

(Succorance; content keyed false; inferentially keyed true)

The order of the information and response statements within each questionnaire was randomly determined. The pairings of target persons and set of prediction stimuli were systematically ordered to control for order

effects of target and to control for the effects of any particular combination of questionnaire and target. For example, Group I received a combination of Target A paired with questionnaire 3 first, while Group II received it second.

Questionnaire Booklets. Three questionnaire booklets A, B, and C were prepared. Three tests (each consisting of thirty-six of the prediction stimuli) paired with three targets of two, four, and six information statements each, were presented in Questionnaire booklets A and B. Questionnaire booklets A and B differed only as to target person and order of test. The three tests each presented twice and paired with one of the complete range of six target persons were presented in Questionnaire booklet C. The prediction stimuli (i.e., the three tests of thirty-six personality statements) were constant over questionnaire booklets. The subjects were instructed to try to form an impression of the target person, given that this person had responded true to each of the information statements. Their task was to predict how the target person answered the response statements (i.e., true or false). In addition, in Questionnaire booklet C only, the subjects indicated the degree of certainty of each of their predictions. In making their certainty judgments, the subjects used a nine-point scale ranging from "extremely uncertain" to "extremely certain". The dependent variables examined in this Questionnaire booklet were: (1) the number of predictions made in the inferential direction and (2) judgmental certainty. In Questionnaire booklets A and B, rather than make certainty judgments, the subjects were given the following additional instructions. "For some statements, on the basis of the impression you have formed about the person, you may feel that you cannot make a prediction with any degree of confidence. For these statements, rather than circling T or F, place an X in the blank space to the right of the statement.

You may place an X beside as many or as few items as you wish." The dependent variable examined here was the number of predictions made.

Personality Measures²

Cognitive structure. The twenty cognitive structure statements from Form A of the PRF (Jackson, 1967) were randomly interspersed with sixty "filler" items and were administered to all subjects under standard PRF instructions. The possible range of scores was one to twenty.

Cognitive complexity. The Bieri and Blacker (1956) adaptation of the Repertory Test devised by Kelly (1955) was used to measure cognitive complexity in all subjects. This test involves presenting each subject with the names of three persons known to him and asking him to sort the three in such a manner that two persons are perceived as alike or similar in some way and different from the third in the same respect. The stimulus persons used in the present study were:

- (a) Yourself
- (b) Your brother closest to you in age (or person most like a brother)
- (c) Your closest girl friend
- (d) The most successful person whom you know personally
- (e) Someone you know personally whom you admire
- (f) Someone you know personally whom you would like to help or for whom you feel sorry

These six stimulus persons were sorted by each subject in all possible combinations of three, resulting in twenty sorts. The complexity of a subject's perception of others was measured in terms of the number of different per-

²A copy of the Cognitive Tests is presented in Appendix D

ceptions that a subject gave in the twenty sorts. The number of different perceptions or constructs he employed in describing others constituted his Cognitive Complexity score. The greater the number, the more highly differentiated the constructs were taken to be and the more cognitively complex the subject.

Procedure

Session I. (1) All subjects were presented with the Cognitive Structure Inventory (2) Subjects were randomly divided into three groups at the first session and received Questionnaire booklet A in which the combinations of target information and sets of prediction stimuli were arranged in different sequences in order to control for both order effects and any effects due to a particular combination of target information and set of prediction stimuli.

Session II (1) The cognitive Complexity test was assigned to all subjects (2) Questionnaire booklet B was presented to the initial three groups and was in a different sequence than Questionnaire booklet A for each group so that all subjects had made predictions about each target person. At this session, subjects were tested in groups of five to facilitate supervision and questions concerning the Cognitive Complexity Test.

Session III. (1) Questionnaire booklet C was presented to the three groups in the combined sequence each had formerly received in Questionnaire booklets A and B. Thus each subject's certainty ratings were made on the same combination of target and prediction stimuli as his omissions and trait inference judgments.

Subjects

Sixty male university students enrolled in a summer school session of an Introductory Psychology course served as subjects. The age range was 18 to 39 with a mean of 25.

TABLE 2

Mean "Same" Scale Accuracy Score for Judges at each
Level of Cognitive Complexity and Cognitive Structure under
Conditions of High, Medium and Low Information

<u>Cognitive Complexity</u>	<u>Amount of Information</u>			
	<u>High</u>	<u>Medium</u>	<u>Low</u>	<u>Total</u>
High	7.2	7.1	7.4	7.2
Medium	7.1	7.4	7.4	7.3
Low	<u>7.6</u>	<u>7.7</u>	<u>7.5</u>	7.6
Total	7.3	7.4	7.4	
 <u>Cognitive Structure</u>				
High	7.0	7.6	7.7	7.7
Medium	7.4	6.9	7.2	7.2
Low	<u>7.5</u>	<u>7.7</u>	<u>7.5</u>	7.6
Total	7.3	7.4	7.4	

CHAPTER VI

Results and Discussion

"Same" Scale Accuracy Scores

As a means of evaluating the extent to which the target information was correctly received by the judges, "same" scale content scores were obtained for each subject by scoring the judges' true-false predictions on "same" scale statements keyed in the content direction (i.e., as in the PRF). For example, with Target A, this score was derived from predictions on the Order and Endurance response statements. Subjects were trichotomized on the basis of their Cognitive Structure and Cognitive Complexity scores. The mean score for high, medium and low cognitive complexity and cognitive structure judges under conditions of high, medium and low target information is presented in Table 2. The maximum possible score per cell was eight. Thus for the average subject, predictions on at least seven of the "same" scale statements were accurate (i.e., in the content direction), indicating that the target information was correctly received by the judges. "Same" scale content scores were not influenced by the amount of target information given. Thus judges were as able to absorb the target information correctly when given two, four or six statements as characteristic of the target person. Although there was no main effect with either cognitive variable, the cognitive structure x information interaction was significant ($F = 2.77$, $df = 4, 114$, $p < .05$).³ The "same" scale scores were greatest

³All analyses of variance tables appear in Appendix A. All F values stated in the text are taken from the Cognitive Structure Analysis.

TABLE 3

Mean proportion of trait inference judgments within the experimental scales
for judges at each level of cognitive complexity and cognitive structure
under conditions of high, medium and low information

<u>Judges</u>	<u>High Inferential Relationship</u>						<u>Low Inferential Relationship</u>					
	<u>Positive</u>			<u>Negative</u>			<u>Positive</u>			<u>Negative</u>		
	<u>Amount of Information</u>			<u>Amount of Information</u>			<u>Amount of Information</u>			<u>Amount of Information</u>		
<u>Cognitive Complexity</u>	<u>High</u>	<u>Medium</u>	<u>Low</u>	<u>High</u>	<u>Medium</u>	<u>Low</u>	<u>High</u>	<u>Medium</u>	<u>Low</u>	<u>High</u>	<u>Medium</u>	<u>Low</u>
High	.71	.73	.77	.75	.75	.68	.62	.56	.59	.59	.57	.65
Medium	.70	.82	.74	.75	.75	.80	.62	.60	.59	.59	.65	.62
Low	.74	.80	.76	.80	.78	.73	.63	.61	.62	.66	.64	.64
Total	.72	.78	.76	.77	.76	.74	.62	.59	.60	.61	.62	.64
<u>Cognitive Structure</u>												
High	.71	.79	.78	.73	.76	.74	.61	.60	.60	.63	.65	.64
Medium	.70	.79	.72	.75	.73	.70	.65	.59	.59	.64	.61	.66
Low	.74	.77	.77	.80	.79	.76	.60	.59	.61	.57	.60	.62
Total	.72	.78	.76	.76	.76	.74	.62	.59	.60	.61	.62	.64

under the condition of high information for the medium cognitive structure judge only.

Number of Trait Inference Judgments

All statements from each of the four experimental scales (i.e., high positive inferential, high negative inferential, low positive inferential, low negative inferential) were keyed in the inferential direction. Trait inference judgment (TIJ) scores, i.e., the number of predictions made in the inferential direction, were obtained for each subject. These scores were converted into proportions in order to equate for the unequal number of response statements in each of the experimental scales. That is, the TIJ scores for each subject on each scale were divided by the total number of response statements in that scale. Thus the TIJ score on high positive statements was divided by 12, on the high negative statements by 20, and on the low positive and low negative by 16. The mean TIJ scores (in proportions) within each of the four experimental scales for high, medium and low cognitive structure and cognitive complexity judges under conditions of high, medium and low information is presented in Table 3. As expected, TIJ scores were greater on high inferential scales than on low inferential scales ($F = 144.3$, $df = 1, 57$, $p < .001$). That is, there was a greater tendency for predictions on statements which bore a high inferential relationship to the target information to be made in the inferential direction than for predictions on statements which were less highly inferentially related. It would appear that judges tend to base their predictions on the available directional inferential relationships.

There was no significant main effect of direction of inferential relationship. Perhaps the tendency to make trait inference judgments is

indifferent to the direction of the inferential relationship because of the method by which a judge learns to perceive characteristics. A perceiver may learn certain traits of a stimulus person in terms of the traits the stimulus person does not possess, as well as in terms of the traits he does. For example, a perceiver may not know if a target person is "impulsive" and starts by finding out what that person "is not" in order to learn whether he is "impulsive". This learning habit may make the tendency to make trait inference judgments on negative inferential relationships less difficult than was supposed. In addition, the main effect of amount of information was not significant. The amount of information x degree of inferential relationship x direction of inferential relationship interaction was significant ($F = 3.80$, $df = 2, 114$, $p < .05$). High positive inferential TIJ scores were greater than high negative TIJ scores except under the condition of high information. The positive-negative difference with low inferential statements was reversed. That is, TIJ scores on low negative inferential statements were greater than scores on low positive statements except under the condition of high information. The opposite informational effects on high negative and low negative inferential relationships may have been the function of obviousness and subtlety. The added information may have made high negative statements more obvious and low negative statements more confusing and difficult.

There was no significant main effect or interaction of either cognitive variable. In summary, it was found that the number of trait inference judgments was related to the degree of the inferential relationships. On the other hand this variable was not related to the direction of the inferential relationships, to the different amounts of information nor to the judges' cognitive differentiation.

TABLE 4

Mean proportion of judgmental certainty rating (nine-point scale) within the experimental scales for judges at each level of cognitive complexity and cognitive structure under conditions of high, medium and low information

<u>Judges</u>	<u>High Inferential Relationship</u>						<u>Low Inferential Relationship</u>					
	<u>Positive</u>			<u>Negative</u>			<u>Positive</u>			<u>Negative</u>		
	<u>Amount of Information</u>			<u>Amount of Information</u>			<u>Amount of Information</u>			<u>Amount of Information</u>		
<u>Cognitive Complexity</u>	<u>High</u>	<u>Medium</u>	<u>Low</u>	<u>High</u>	<u>Medium</u>	<u>Low</u>	<u>High</u>	<u>Medium</u>	<u>Low</u>	<u>High</u>	<u>Medium</u>	<u>Low</u>
High	6.2	6.1	5.9	6.0	6.0	5.6	5.5	5.4	5.5	5.4	5.4	5.4
Medium	6.5	6.6	6.2	6.5	6.3	6.2	5.9	5.6	5.7	6.0	5.6	5.7
Low	<u>6.2</u>	<u>6.6</u>	<u>6.4</u>	<u>6.3</u>	<u>6.2</u>	<u>5.9</u>	<u>5.6</u>	<u>5.7</u>	<u>5.4</u>	<u>5.4</u>	<u>5.7</u>	<u>5.2</u>
Total	6.3	6.4	6.2	6.3	6.2	5.9	5.7	5.6	5.5	5.6	5.6	5.4
<u>Cognitive Structure</u>												
High	6.4	7.0	6.5	6.5	6.4	6.3	5.9	5.8	6.0	5.9	5.8	5.8
Medium	6.5	6.4	6.1	6.5	6.1	5.8	5.8	5.6	5.7	5.7	5.5	5.7
Low	<u>6.2</u>	<u>6.0</u>	<u>5.8</u>	<u>5.9</u>	<u>6.0</u>	<u>5.5</u>	<u>5.3</u>	<u>5.2</u>	<u>5.0</u>	<u>5.3</u>	<u>5.4</u>	<u>5.0</u>
Total	6.4	6.5	6.1	6.3	6.2	5.9	5.7	5.5	5.6	5.6	5.6	5.5

Judgmental Certainty

The judgmental certainty ratings were assigned a value from one to nine, with the largest value representing extreme certainty. Mean judgmental certainty ratings were obtained for each subject on each experimental scale. The mean judgmental certainty rating within the experimental scales for each level of cognitive complexity and cognitive structure under conditions of high, medium and low information is presented in Table 4. As expected, judgmental certainty was greater on high inferential scales than on low inferential scales ($F = 116.9$, $df = 1, 57$, $p < .001$). The difference was greater with positive statements than with negative statements ($F = 4.0$, $df = 1, 57$, $p < .05$), and was greatest under the condition of medium information ($F = 3.9$, $df = 2, 114$, $p < .05$). Judgmental certainty was greater on positive inferential scales than on negative inferential scales ($F = 11.1$, $df = 1, 57$, $p < .001$). Thus, judges appeared to be less certain of their judgments on negative inferential statements than on positive inferential statements.

The main effect of amount of information was significant, with judges exhibiting greater certainty under conditions of medium and high information than under the condition of low information ($F = 6.5$, $df = 2, 114$, $p < .01$). A Newman-Keuls analysis of the difference between ordered means (Winer, 1962) failed to indicate any significant differences. There was no significant difference between the mean judgmental certainty rating for the medium and high amounts of information. However, the mean judgmental certainty rating for the low amount of information approached the criteria of significant difference from the means for medium and high amounts of information at the .05 level. Again, there was no significant main effect with either cognitive variable although there was a significant

TABLE 5

Mean proportion of predictions within the experimental scales for judges at each level of cognitive complexity and cognitive structure under conditions of high, medium and low information

<u>J</u> <u>Judges</u>	<u>High Inferential Relationship</u>						<u>Low Inferential Relationship</u>					
	<u>Positive</u>			<u>Negative</u>			<u>Positive</u>			<u>Negative</u>		
	<u>Amount of Information</u>			<u>Amount of Information</u>			<u>Amount of Information</u>			<u>Amount of Information</u>		
<u>Cognitive Complexity</u>	<u>High</u>	<u>Medium</u>	<u>Low</u>	<u>High</u>	<u>Medium</u>	<u>Low</u>	<u>High</u>	<u>Medium</u>	<u>Low</u>	<u>High</u>	<u>Medium</u>	<u>Low</u>
High	.84	.87	.78	.83	.82	.81	.77	.79	.78	.75	.73	.71
Medium	.93	.96	.88	.93	.94	.86	.89	.92	.82	.88	.87	.80
Low	<u>.92</u>	<u>.93</u>	<u>.89</u>	<u>.91</u>	<u>.87</u>	<u>.89</u>	<u>.87</u>	<u>.85</u>	<u>.83</u>	<u>.83</u>	<u>.82</u>	<u>.79</u>
Total	.90	.92	.85	.89	.88	.85	.84	.85	.81	.82	.81	.77
<u>Cognitive Structure</u>												
High	.91	.93	.86	.92	.91	.84	.89	.87	.83	.85	.86	.80
Medium	.95	.93	.89	.91	.91	.88	.87	.88	.83	.85	.82	.78
Low	<u>.84</u>	<u>.90</u>	<u>.79</u>	<u>.84</u>	<u>.81</u>	<u>.83</u>	<u>.78</u>	<u>.82</u>	<u>.77</u>	<u>.76</u>	<u>.75</u>	<u>.72</u>
Total	.90	.92	.85	.89	.88	.85	.85	.86	.81	.82	.81	.77

cognitive structure x amount of information x degree of inferential relationship interaction ($F = 2.97$, $df = 4, 114$, $p < .05$).

In summary, subjects made more trait inference judgments and were correspondingly more certain on high inferential statements than on low inferential statements. Judges were also more certain on positive than negative inferential statements although this direction difference was not reflected in their trait inference judgments. As previously noted, negative inferential statements were not more difficult in terms of the number of predictions in the inferential direction. In addition, high and medium amounts of information increased the judges' certainty comparably.

Number of Predictions Made

The number of predictions made within the four experimental scales was obtained for each subject. These scores were converted into proportions by dividing the number of predictions on each scale for each subject by the total number of response statements in each of the scales. Thus the number of predictions on high positive inferential statements was divided by 12, on the high negative by 20 and on the low positive and low negative by 16. The mean number of predictions (in proportions) within the four experimental scales for high, medium and low cognitive structure and cognitive complexity judges under conditions of high, medium and low information is presented in Table 5. As expected, there was a significant main effect for the degree of inferential relationship ($F = 46.0$, $df = 1, 57$, $p < .001$). Judges were more willing to make a prediction on high inferential statements than on low inferential statements. This difference in willingness to predict was greater

with negative inferential statements than with positive inferential statements ($F = 4.3$, $df = 1, 57$, $p \leq .05$). Apparently the presence of a low inferential relationship results in an increase in the judge's unwillingness which is further magnified by the negative direction of the relationship. Judges were also more willing to make a prediction on positive inferential statements than on negative statements ($F = 16.4$, $df = 1, 57$, $p < .001$).

Thus as with judgmental certainty, both the degree and direction of inferential relationships affected the willingness to make predictions.

A main effect of amount of information was found ($F = 10.0$, $df = 2, 114$, $p < .001$). A Newman-Keuls analysis of the difference between ordered means showed that the total mean number of predictions for the low amount of information differed significantly from both the medium and high amount of information means at the .05 level. There was no significant difference, however, between the means for the medium and high amounts of information. As with judgmental certainty, then, the willingness to predict increased with the greater amounts of information.

In summary, judges made more trait inference judgments, were more certain of their judgments and were more willing to predict on high inferential statements than on low inferential statements. Also judges were more certain of their predictions and more willing to predict on positive inferentially related response statements than on negative ones. In addition an increment in the amount of information increased the judges' certainty and willingness to predict. There were no effects attributable to the cognitive variables for any of the dependent measures.

CHAPTER VII

Summary and Conclusions

Degree of Inferential Relationship

In the present study, judges made more trait inference judgments when the inferential relationships between the target information and the personality characteristics about which the judgments were made, was high, rather than low. In addition, judges were more certain of their predictions, and indeed, more willing to make a prediction, when implicit information of a high inferential nature was available. These results parallel those of Lay (1968) and strengthen previous indications that the degree of trait relationships is an important factor in impression formation. Lay (1968) has already pointed out the implications of this finding for the study of accuracy of perception.

Direction of Inferential Relationship

Positive and negative relationships failed to influence trait inference judgments but did influence judgmental certainty and willingness to predict. It would appear that judges were as capable of making negative inferences as positive ones in terms of the direction of their prediction in spite of the "difficulty" of the task as reflected by their greater uncertainty and unwillingness on the negative than on the positive inferentially related statements. As mentioned previously, however, the "difficulty may not have been as great as supposed. This leads to the speculation that judgmental certainty and willingness to predict may be especially sensitive to "difficulty" of this kind.

Amount of Information

Judges were less certain and less willing to predict when presented with two rather than four or six target statements, but made no less trait inference judgments under this condition. It is important to note that though the additional target statements may not have added to the connotative value of the information, they may have provided a "sense of security" for the judges. Although the quality of the information was the same and four or six target statements "told" them nothing more than two, perhaps the quantitative aspect of having "more" statements made the judges "feel more secure" and subsequently more certain and more willing to predict. The redundancy of the information seemed to have an effect in spite of providing no additional meaning. As hypothesized, it is also possible that the additional information made the judges recognize more readily that the target person was indeed "orderly" and thus made the task easier. If this were the case, then judgmental certainty and willingness to predict can again be seen to be sensitive to the difficulty or ease of task. This finding is inconsistent with Lay (1968) in which there was no significant main effect of information on these variables. The between-subject design of Lay's study compared to the within-subject design of the present study may account for the different findings. Another contributing factor may be the discrepancy between the nature of the respective subject populations.

Cognitive Variables

Two alternate explanations for the lack of cognitive variable effects may be proposed. The first concerns the lack of cognitive variable

effects on all three dependent variables. Whether the judge is high, medium or low in cognitive complexity and cognitive structure is perhaps simply unrelated to his tendency to make trait inference judgments, his judgmental certainty and his willingness to predict. On the other hand, there may be a relationship between these cognitive levels and the judge's certainty and his willingness to predict and not his tendency to make trait inference judgments. If this were the case, a second explanation is that the hypothesized interaction between the cognitive variables and amount of information may have been obscured by the redundancy of the additional information. It was expected that high cognitive complexity judges, having more available constructs would require more information before making a prediction and thus would be less certain and less willing to predict on little information than low cognitive complexity judges. Also, it was expected that high cognitive structure judges, disliking ambiguity and uncertainty in information and desiring to make decisions based on definite knowledge, would be more certain and more willing to predict on more target information. What was overlooked is that in both cases an increase in information may not have simply been a greater amount but a greater amount of relevant, non-redundant information. Further research is necessary to determine whether this is the case.

CHAPTER VIII

Some Suggestions for Further Research

The speculative nature of the preceding discussion leads to different avenues of research.

Degree of Inferential Relationship

In the present study, degree of inferential relationship was manipulated in terms of only two levels, high and low. In future investigations, a more refined division of degree of inferential relationship is required. A linear relationship might then be expected between the degree of trait inferential relationships and the tendency to make trait inference judgments, extremity of trait characteristic ratings, judgmental certainty and willingness to predict.

Direction of Inferential Relationship

Although judges made no fewer trait inference judgments on negative than on positive inferential statements, the degree to which various traits are viewed as characteristic of a target may be related to the direction of the inferential relationships in question. For example, judges could be instructed to rate a particular target described as "orderly". Ratings could be made on a number of trait adjectives using a nine point scale ranging from "extremely uncharacteristic" to "extremely characteristic". While the positive inferentially related trait adjective "persistent" may be rated as characteristic of the target, and the negative inferentially related adjective "impulsivity" as uncharacteristic of the target, it is possible that the positively related adjective may be seen as more characteristic than the negatively related trait is seen as uncharacteristic.

Target Information

In order to test the speculation that the addition of a certain amount of information will indeed provide the added "security" for the judges, a controlled manipulation of both redundant and non-redundant information could be undertaken. A comparison of the effects of increased connotative information, increased redundant information and added ambivalent information could be made in order to examine their effects on judgmental certainty and willingness to predict. If, as posited, the judge's "sense of security" is in part a function of the relative difficulty of the judgmental task, then it would be expected the effects of different amounts of information would be least under the condition of ambivalent information, unless mere quantity of information was in itself sufficient for this "sense of security".

Individual Perceiver Differences

Despite a lack of particular cognitive variable effects in the present study, an investigation into other types of perceiver factors which may affect the predisposition to make trait inference judgments is warranted. Koltuv (1962) and Lay (1968) have been alert to the connotative aspect of making trait inferences. The connotative aspect leads to the expectation that subjects with different verbal intelligence might exhibit different trait inference judgment behavior.

Of interest too, is whether perceiver variables related to certainty and willingness to predict react similarly to the degree and direction of inferentially related statements and to different amounts of information. For example, subjects differentiated on a measure of "self-esteem", "confidence" or in terms of "acquiescence", might exhibit predictable differences

in judgmental certainty and willingness to predict.

Lastly, an examination of sex differences in the various aspects of the perception of the personality of others is desirable. Lay (1968) reported that female judges made more trait inference judgments and were more judgmentally certain than male judges. In his study, however, both male and female subjects judged male targets only. Consequently, the results may be due to the dyads formed in terms of the sex of the target person. An examination of alternate dyads is desirable to further investigate possible sex differences in these judgmental processes.

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APPENDIX A
ANALYSES OF VARIANCE TABLES

TABLE 1

Analyses of Variance of "Same" Scale Accuracy Scores for Judges in
Ranks of Cognitive Complexity under Conditions of
High, Medium and Low Information

<u>Source</u>	<u>DF</u>	<u>MS</u>	<u>F</u>
BT S's	59		
Cognitive Complexity (A)	2	2.52	1.45
S's W	57	1.73	
W S's	120	.47	.56
Amount of Information (B)	2	.41	.49
A x B	4	.83	
B x S's	114		

TABLE II

Analyses of Variance of "Same" Scale Accuracy Scores for Judges
in Ranks of Cognitive Structure under Conditions
of High, Medium and Low Information

<u>Source</u>	<u>DF</u>	<u>MS</u>	<u>F</u>
BT S's	59		
Cognitive Structure (A)	2	2.72	1.58
S's W	57	1.72	
W S's	120		
Amount of Information	2	.47	.60
A x B	4	2.13	2.77*
B x S's	114	.77	

*p < .05

APPENDIX B

Scale Values on Dimension I of the
Statement Inferential Network
Mapped by Lay and Jackson (1968)
for Male Judges

TABLE III

Analyses of Variance of Trait Inferential Judgments Within the Experimental Scales for High, Medium, and Low Cognitive Complexity Judges under Conditions of High, Medium, and Low Information

<u>Source</u>	<u>DF</u>	<u>MS</u>	<u>F</u>
BT S's	59		
Cognitive Complexity (A)	2	.07	1.94
S's W	57	.04	
W S's	660		
Amount of Information (B)	2	.01	.44
AB	4	.03	1.73
B x S's	114	.01	
High-Low Inferential Relationship (C)	1	3.43	133.30***
AC	2	.03	
Positive-Negative Inferential Relationship (D)	1	.01	.82
AD	2	.00	.20
D x S's	57	.02	
BC	2	.03	3.04
ABC	4	.01	.84
BC x S's	114	.01	
BD	2	.00	.26
ABD	4	.01	1.14
BD x S's	114	.01	
CD	1	.01	.95
ACD	2	.00	.11
CD x S's	57	.01	
BCD	2	.06	4.03*
ABCD	4	.03	1.86
BCD x S's	114	.02	

*p < .05

***p < .001

TABLE IV

Analysis of Variance of Trait Inference Judgments Within the Experimental Scales for High, Medium, and Low Cognitive Structure Judges under Conditions of High, Medium, and Low Information

<u>Source</u>	<u>DF</u>	<u>MS</u>	<u>F</u>
BT S's	52		
Cognitive Structure (A)	2	.01	.17
S's W	57	.04	
W S's	660		
Amount of Information (B)	2	.01	.42
AB	4	.01	.75
B x S's	114	.01	
High-Low Inferential Relationship (C)	1	3.43	144.27***
AC	2	.06	2.49
C x S's	57	.02	
Positive-Negative Inferential Relationship (D)	1	.01	.82
AD	2	.00	.01
D x S's	57	.02	
BC	2	.03	3.11
ABC	4	.02	1.49
BC x S's	114	.01	
BD	2	.00	.25
ABD	4	.01	.49
BD x S's	114	.01	
CD	1	.01	1.02
ACD	2	.03	2.34
CD x S's	57	.01	
BCD	2	.06	3.80*
ABCD	4	.00	.11
BCD x S's	114	.02	

*p < .05.

***p < .001

Analysis of Variance of Judgmental Certainty Ratings Within the Experimental Scale for High, Medium and Low Cognitive Complexity Judges under Conditions of High, Medium and Low Information

<u>Source</u>	<u>DF</u>	<u>MS</u>	<u>F</u>
BT S's	59		
Cognitive Complexity (A)	2	6.95	.44
S's W	57	15.57	
W S's	660		
Amount of Information (B)	2	3.83	6.36**
AB	4	.66	1.10
B x S's	114	.60	
High-Low Inferential Relationship (C)	1	75.99	117.45***
AC	2	.74	1.13
C x S's	57	.65	
Positive-Negative Inferential Relationship (D)	1	2.42	10.33***
AD	2	.16	.66
D x S's	57	.23	
BC	2	.81	3.14*
ABC	4	.36	1.40
BC x S's	114	.26	
BD	2	.22	.78
ABD	4	.14	.50
BD x S's	114	.27	
CD	1	1.05	3.00
ACD	2	.05	.15
CD x S's	57	.35	
BCD	2	.33	1.38
ABCD	4	.08	.35
BCD x S's	114	.24	

*p < .05

**p < .01

***p < .001

TABLE VI

Analysis of Variance of Judgmental Certainty Ratings Within the Experimental Scales for High, Medium and Low Cognitive Structure Judges under Conditions of High, Medium and Low Information

<u>Source</u>	<u>DF</u>	<u>MS</u>	<u>F</u>
BT S's	59		
Cognitive Structure (A)	2	26.13	1.75
S's W	57	14.87	
W S's	660		
Amount of Information (B)	2	3.56	6.51**
AB	4	1.27	2.32
B x S's	114	.55	
High-Low Inferential Relationship (C)	1	73.67	116.921***
AC	2	.24	.38
C x S's	57	.63	
Positive-Negative Inferential Relationship (D)	1	2.36	11.09***
AD	2	.07	.31
D x S's	57	.21	
BC	2	.94	3.90*
ABC	4	.72	2.97*
BC x S's	114	.24	
BD	2	.18	.75
ABD	4	.48	1.98
BD x S's	114	.24	
CD	1	1.35	4.02*
ACD	2	.06	.16
CD x S's	57	.33	
BCD	2	.37	1.61
ABCD	4	.19	.82
BCD x S's	114	.23	

* $p < .05$

** $p < .01$

*** $p < .001$

TABLE VII

Analysis of Variance of Number of Predictions Made Within the Experimental Scales for High, Medium and Low Cognitive Complexity Judges under Conditions of High, Medium and Low Information

<u>Source</u>	<u>DF</u>	<u>MS</u>	<u>F</u>
BT S's	59		
Cognitive Complexity (A)	2	.63	2.15
S's W	57	.29	
W S's	660		
Amount of Information (B)	2	.17	10.34***
AB	4	.02	1.45
B x S's	114	.02	
High-Low Inferential Relationships (C)	1	.72	45.27***
AC	2	.01	.53
C x S's	57	.02	
Positive-Negative Inferential Relationships (D)	1	.13	16.33***
AD	2	.00	.36
D x S's	57	.01	
BC	2	.00	.14
ABC	4	.00	.79
BC x S's	114	.01	
BD	2	.01	2.84
ABD	4	.00	.24
BD x S's	114	.00	
CD	1	.03	4.36*
ACD	2	.00	.39
CD x S's	57	.00	
BCD	2	.00	1.16
ABCD	4	.00	.92
BCD x S's	114	.00	

*p < .05

***p < .001

TABLE VIII

Analysis of Variance of Number or Predictions made Within the Experimental Scales for High, Medium and Low Cognitive Structure Judges under Conditions of High, Medium and Low Information

<u>Source</u>	<u>DF</u>	<u>MS</u>	<u>F</u>
BT S's	59		
Cognitive Complexity (A)	2	.40	1.34
S's W	57	.30	
W S's	660		
Amount of Information (B)	2	.17	9.99***
AB	4	.01	.44
B x S's	114	.02	
High-Low Inferential Relationships (C)	1	.72	46.00***
AC	2	.02	1.00
C x S's	57	.02	
Positive-Negative Inferential Relationships (D)	1	.13	16.38***
AD	2	.00	.42
D x S's	57	.01	
BC	2	.00	.14
ABC	4	.00	.07
BC x S's	114	.01	
BD	2	.01	3.04
ABD	4	.01	2.27
BD x S's	114	.00	
CD	1	.03	4.32*
ACD	2	.00	.11
DC x S's	57	.00	
BCD	2	.01	1.18
ABCD	4	.01	1.48
BCD x S's	114	.01	

*p < .05

***p < .001

Scale Values on Dimension I of the Statement Inferential
Network Mapped by Lay and Jackson (1968)
for Male Judges

<u>PRF Scale</u>	<u>Scale Values</u>
Affiliation	.40
Nurturance	-.51
Dominance	-.11
Harmavoidance	1.42
Play	1.60
Exhibition	.86
Achievement	-.95
Sentience	.65
Autonomy	-.31
Abasement	.06
Impulsivity	1.84
Social Recognition	-1.29
Change	.71
Social Desirability	-.78
Understanding	-.59
Succorance	.01
Order	-1.18
Aggression	.63
Cognitive Structure	-1.47
Defendence	.02
Endurance	-1.02

APPENDIX C
Experimental Materials

Instructions for Questionnaires A and B

DEPARTMENT OF PSYCHOLOGY

University of Manitoba

Instructions

This survey is part of a basic research program in personality and the ability to judge the personality of others. Your task will be to predict how others answer various personality statements.

Personality questionnaires have been administered to other university students, including the persons about whom you will be asked to make your predictions. Information about each person to be judged is presented on the following pages. This information is given in the form of personality statements that the person has answered TRUE (e.g., I truly enjoy myself at social functions (T) F). Read the statements. Then, with the knowledge that this person has answered TRUE to these statements, try to form an impression of the person. Your task will be to predict how this person answered other personality statements. These statements are found in the response booklet. If you feel that this person answered a statement TRUE then you would circle the T to the right of the statement; if you feel that this person answered a statement FALSE, then you would circle the F. For some statements, on the basis of the impression you have formed about the person, you may feel that you cannot make a prediction with any degree of confidence. For these statements, rather than circling T or F, place an X in the blank space to the right of the statement. You may place an X beside as many or as few items as you wish.

Make certain that the person indicated on the information sheet (e.g. Person B) corresponds to the person indicated at the top of the page in the response booklet (i.e., Person B). When you have finished making your predictions about the first person, go on to the next person. Please make sure that you have rated all three persons.¹

If at any time you do not understand the instructions, please tell the experimenter. If you have any comments or questions regarding the study, please feel free to write them on the back of the answer sheet. We will be glad to discuss them with you. Thank you for your cooperation.

¹In Questionnaire C the instructions read: "Please make sure that you have rated all six persons."

Instructions for Questionnaire C

DEPARTMENT OF PSYCHOLOGY

University of Manitoba

Instructions

This survey is part of a basic research program in personality and the ability to judge the personality of others. Your task will be to predict how others answer various personality statements.

Personality questionnaires have been administered to other university students, including the persons about whom you will be asked to make your predictions. Information about each person to be judged is presented on the following pages. This information is given in the form of personality statements that the person has answered TRUE (e.g., I truly enjoy myself at social functions. T F). Read the statements. Then, with the knowledge that this person has answered TRUE to these statements, try to form an impression of the person. Your task will be to predict how this person answered other personality statements. These statements are found in the response booklet. If you feel that this person answered a statement TRUE then you would circle the T to the right of the statement; if you feel that this person answered a statement FALSE, then you would circle the F. In addition, for each statement, you are to indicate the degree of certainty of your judgment. Use the nine-point scale shown below as a guide in making your certainty ratings. This scale ranges from extremely uncertain (number 1) through to extremely certain (number 9). Thus, if you are extremely certain of a particular judgment, you would place a 9 in the space to the right of the statement, if you are extremely uncertain of your judgment you would place a 1 in the space provided. Please try to use all 9 categories in making your certainty ratings.

extremely <u>uncertain</u>										extremely certain		
1	2	3	4	5	6	7	8	9				
e.g.	Loyalty	to	my	friends	is	quite	important	to	me	T	F	<u>7</u>

Remember, for each statement in the response booklet you are to predict whether the person answered the statement TRUE or FALSE, and then indicate the degree of certainty of your judgment.

Make certain that the person indicated on the information sheet (e.g., Person B) corresponds to the person indicated at the top of the page in the response booklet (i.e., Person B). When you have finished making your predictions about the first person, go on to the next person. Please make sure that you have rated both persons.

If at any time you do not understand the instructions, please tell the experimenter. If you have any comments or questions regarding the study, please feel free to write them on the back of the answer sheet. We will be glad to discuss them with you. Thank you for your cooperation.

Information Statements for Targets A and B
Under Conditions of High, Medium and Low Information

Target A - Low Information

- | | | |
|--|---|---|
| 1. Even when I am feeling quite ill, I will continue working if it is important. | T | F |
| 2. I dislike to be in a room that is cluttered | T | F |

Target A - Medium Information

- | | | |
|--|---|---|
| 1. I keep all my important documents in one safe place | T | F |
| 2. Often I continue to work on a task after everyone else has given up. | T | F |
| 3. If I want to know the answer to a certain question, I sometimes look for it for days. | T | F |
| 4. When writing something, I keep my pencils sharpened. | T | F |

Target A - High Information

- | | | |
|--|---|---|
| 1. If I remove an object from a shelf, I always replace it when I have finished with it. | T | F |
| 2. When I am working outdoors I finish what I have to do even if it's growing dark. | T | F |
| 3. A messy desk is inexcusable. | T | F |
| 4. When I am going somewhere I usually find my exact route by using a map. | T | F |
| 5. I am more concerned with finishing what I start than is the average person. | T | F |
| 6. I rarely let interruption interfere with an important job. | T | F |

Target B - Low Information

- | | | |
|---|---|---|
| 1. I enjoy children's games. | T | F |
| 2. I often say the first thing that comes into my head. | T | F |

Target B - Medium Information

- | | | |
|---|---|---|
| 1. The people I know who say the first thing they think of are some of my most interesting acquaintances. | T | F |
| 2. I often do daring things on the spur of the moment. | T | F |
| 3. I pride myself on being able to see the funny side of every situation. | T | F |
| 4. I spend a good deal of my time just having fun. | T | F |

Target B - High Information

- | | | |
|---|---|---|
| 1. I like to watch television comedies. | T | F |
| 2. I enjoy arguments that require good quick thinking more than knowledge. | T | F |
| 3. It seems that emotion has more influence over me than does calm meditation. | T | F |
| 4. I like to go "out on the town" as often as I can. | T | F |
| 5. When I go to the store, I often come home with things I had not intended to buy. | T | F |
| 6. I try to make my work into a game. | T | F |

Response Statements

TEST I

1. I often do daring things on the spur of the moment. T F _____
2. One of my greatest incentives to work is the promise of a good time when I am through. T F _____
3. I seldom try to call attention to myself. T F _____
4. Adventures where I am on my own are a little frightening to me. T F _____
5. Most of my friends are serious-minded people. T F _____
6. I try to get out of jobs that would require using dangerous tools or machinery. T F _____
7. I would never start a fight with someone. T F _____
8. If people want a job done which requires patience, they ask me. T F _____
9. Often I would rather be alone than with a group of friends. T T _____
10. If I am depressed I go to friends who can snap me out of it. T F _____
11. I would not like to be married to a protective person. T F _____
12. I would rather be a business man than a philosopher. T F _____
13. I am not one of those people who blurt things out without thinking. T F _____
14. I seek out positions of authority. T F _____
15. When I was in school, I would speak up as soon as I thought I knew the answer to a question. T F _____
16. My favorite part of school was working on research and independent projects. T F _____
17. When I find a good way to do something, I avoid experimenting with new ways. T F _____
18. I constantly try to make people think highly of me. T F _____
19. I would never deliberately call attention to any of my weaknesses. T F _____

20. I can feel comfortable even when I have a number of questions in mind for which I have no good answer. T F _____
21. I keep very close track of my money and finances so that I will know how much I can spend if anything unexpected comes up. T F _____
22. I am not really very certain what I want to do or how to go about doing it. T F _____
23. I would enjoy exploring an old deserted house at night. T F _____
24. Most community leaders do a better job than I could possibly do. T F _____
25. I spend a lot of time visiting friends. T F _____
26. I feel comfortable in a somewhat disorganized room. T F _____
27. People who try to regulate my conduct with rules are a bother. T F _____
28. It is usually quite easy for me to admit I am wrong. T F _____
29. If I get tired while playing a game, I generally stop playing. T F _____
30. When I am irritated, I let it be known. T F _____
31. If I had the chance, I would like to move to a different part of the country every few years. T F _____
32. I would work just as hard whether or not I had to earn a living. T F _____
33. If I have done something well, I don't bother to call it to other people's attention. T F _____
34. I sometimes take the blame for things that aren't really my fault in order to make someone else feel better. T F _____
35. When writing something, I keep my pencils sharpened. T F _____
36. I am guard against people who might try to make a big thing of my mistakes. T F _____

TEST II

1. I am more of a listener than a talker. T F _____
2. I don't like to go near trucks carrying explosive materials. T F _____
3. If someone hurts me, I just try to forget about it. T F _____
4. I go out of my way to meet people. T F _____
5. If I ever think that I am in danger, my first reaction is to look for help from someone. T F _____
6. I believe in working toward the future rather than spending my time in fun now. T F _____
7. I would like to be alone and my own boss. T F _____
8. If I find a good brand of clothing, I stick to it. T F _____
9. I am more concerned with finishing what I start than is the average person. T F _____
10. When I don't like what someone is doing, I try to keep my complaints to myself. T F _____
11. I would rather be paid on the basis of how many hours I have worked than by how much work I have done. T F _____
12. I would never pass up something that sounded like fun just because it was a little bit hazardous. T F _____
13. If I have a problem, I like to work it out alone. T F _____
14. Sometimes I take a long time starting a project because I don't get everything together ahead of time. T F _____
15. At a party, I enjoy entertaining others. T F _____
16. When I get to a hard place in my work I usually stop and go back to it later. T F _____
17. It upsets me to go into a situation without knowing what I can expect from it. T F _____
18. Sometimes I just want to hit someone T F _____
19. My goal is to do at least a little bit more than anyone else has done before. T F _____

20. I would like the type of work which would keep me constantly on the move. T F _____
21. I think I would enjoy studying most of my life so I could learn of as many things as possible. T F _____
22. If I start one activity, I stay with it until it is finished. T F _____
23. I like to go "out on the town" as often as I can. T F _____
24. I am quite effective in getting others to agree with me. T F _____
25. When I am going somewhere I usually find my exact route by using a map. T F _____
26. I read more books that deal with practical matters than books that deal with basic ideas in philosophy and science. T F _____
27. I seldom organize my activities so completely that I can tell what I will be doing at some future time. T F _____
28. Often I stop in the middle of one activity in order to start something else. T F _____
29. I like to do whatever is proper. T F _____
30. I don't mind having my mistakes pointed out to me at times when other people can hear. T F _____
31. I will not go out of my way to behave in an approved way. T F _____
32. When I see someone I know from a distance, I don't go out of my way to say "Hello". T F _____
33. I remember my failures more easily than my successes. T F _____
34. Social status is important to me. T F _____
35. I don't like being an errand boy for others, even my friends. T F _____
36. I seldom let a critical comment pass without saying something in my own defense. T F _____

TEST III

1. I think it would be fun to be a test pilot for experimental jet planes. T F _____
2. I believe that being able to stand alone is a true sign of greatness. T F _____
3. I think it is better to be quiet than assertive. T F _____
4. I often say the first thing that comes into my head. T F _____
5. I remember my failures more easily than my successes. T F _____
6. The person I marry won't have to spend much time taking care of me. T F _____
7. I find it necessary to keep only general accounts rather than detailed ones. T F _____
8. I don't keep a very accurate account of my financial resources. T F _____
9. I don't believe in sticking to something when there is little chance of success. T F _____
10. I get a kick out of seeing someone I dislike appear foolish in front of others. T F _____
11. I seldom feel like hitting anyone. T F _____
12. I don't like to try new products until they have been proved to be good. T F _____
13. I don't try to "keep up with the Joneses." T F _____
14. Several people have embarrassed me publicly but I always take it like a good sport. T F _____
15. I am not really bothered by learning something incompletely. T F _____
16. I am careful to consider all pros and cons before taking action. T F _____
17. I am more at home in an intellectual discussion than in a discussion of sports. T F _____
18. I find that I can think better when I have the advice of others. T F _____

19. I tend to react strongly to remarks which find fault with my personal appearance. T F _____
20. I am quite independent of the people I know. T F _____
21. "A place for everything and everything in its place" is the way I like to live. T F _____
22. I watch the news reports on television more often than the comedy programs. T F _____
23. I would rather be an accountant than a theoretical mathematician. T F _____
24. Often I continue to work on a task after everyone else has given up. T F _____
25. When someone gives me street directions I usually ask several questions and repeat the directions to make sure I have everything clearly in mind. T F _____
26. The main joy in my life is going new places and seeing new sights. T F _____
27. What my friends think is extremely important in helping me shape my own thoughts. T F _____
28. I would never allow someone to blame me for something which was not my fault. T F _____
29. I do not recall ever saying something shocking just to call attention to myself. T F _____
30. I would like to play a part in making laws. T F _____
31. I pride myself on being able to see the funny side of every situation. T F _____
32. When someone presents me with strong arguments, I usually try to settle on some middle ground. T F _____
33. I like to be in the spotlight. T F _____
34. I prefer to be paid on the basis of how much work I have done rather than how many hours I have worked. T F _____
35. I am often disorganized. T F _____
36. I think it would be best to marry someone who is more mature and less dependent than I. T F _____

APPENDIX D

Cognitive Tests

Bieri and Blacker Cognitive Complexity Test

Before you are six cards. On the cards put the names of the following people in the order:

Card

- A. Yourself
- B. Your brother closest to you in age (or person most like a brother.)
- C. Your closest girl friend.
- D. The most successful person whom you know personally.
- E. Someone you know personally whom you admire.
- F. Someone you know personally whom you would like to help or for whom you feel sorry.

Do not use any name twice. If two are the same person (e.g., your brother is also the most successful person you know) in the second case use the name of the next person you can think of that fits the category (e.g., the second most successful person you know).

Then, taking the cards in threes in the order shown on the sheet provided, write down in which way two of each three people are the same and the third different.¹

<u>e.g.</u>	<u>Same</u>	<u>Different</u>	<u>2 are Similar Because</u>	<u>1 is Different Because</u>
ACD	AD	C	Sincere	Insincere
DEF	DE	F	Unkind	Kind

Are there any questions?

¹The sheet provided had the 20 possible combinations of threes.

Instructions for the Cognitive Structure Inventory

PERSONALITY RESEARCH FORM

Form A

DIRECTIONS

On the following pages you will find a series of statements which a person might use to describe himself. Read each statement and decide whether or not it describes you. Then indicate your answer on the separate answer sheet.

If you agree with a statement or decide that it does describe you, answer TRUE. If you disagree with a statement or feel that it is not descriptive of you, answer FALSE.

In marking your answers on the answer sheet, be sure that the number of the statement you have just read is the same as the number on the answer sheet.

Answer every statement either TRUE or FALSE, even if you are not completely sure of your answer.

True and False Keyed Response Statements for
Cognitive Structure

<u>Statements</u>	<u>Keyed</u>
1. I don't keep a very accurate account of my financial resources.	False
2. I like the adventure of going into a new situation without knowing what might happen.	False
3. I very seldom make detailed plans.	False
4. I like to be with people who are unpredictable.	False
5. Before I ask a question, I figure out exactly what I know already and what it is that I need to find out.	True
6. I would never make anything without having a good idea of what the finished product should look like.	True
7. I won't answer a person's question until I am very clear as to what he is asking.	False
8. When I need one thing at the store I get it without thinking what else I may need soon.	False
9. I don't like situations that are uncertain.	True
10. Each day I check the weather report so I will know what to wear.	True
11. I have no use for theories which are only good guesses and are not closely tied to facts.	True
12. Once in a while I like to take a chance on something that isn't sure such as gambling.	False
13. It upsets me to go into a situation without knowing what I can expect of it.	True
14. When I take a vacation I like to go without detailed plans or time schedules.	False
15. My work is carefully planned and organized before it is begun.	True
16. When I talk to a doctor, I want him to give me a detailed explanation of any illness I have.	True
17. It doesn't bother me to put aside what I have been doing without finishing it.	False
18. I don't enjoy confused conversations where people are unsure of what they mean to say.	True
19. I tend to start right in on a new task without spending much time thinking about the best way to proceed.	False
20. I live from day to day without trying to fit my activities into a pattern.	False