

THE RELATIONSHIP BETWEEN OPEN AND  
CLOSED BELIEF SYSTEMS AND ACCURACY AND  
AFFECT IN INTERPERSONAL PERCEPTION

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## **ABSTRACT**

### **THE RELATIONSHIP BETWEEN OPEN AND CLOSED BELIEF SYSTEMS AND ACCURACY AND AFFECT IN INTERPERSONAL PERCEPTION**

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The purpose of this study was to test some of the implications of the theory of open and closed belief systems in the affective interpersonal area. The majority of the research under the framework of this theory has been concerned with differences between open and closed belief systems in conceptual, perceptual, ideological and esthetic spheres of activity.

In an attempt to widen the applicability of the theory to the area of interpersonal perception three general hypotheses were formulated. (1) People with relatively closed belief systems will be less accurate in understanding the feelings of others than people with relatively open belief systems. They will also be less accepting of them. (2) The differences found in hypothesis one will be markedly accentuated when information is presented about the others which pictures them as having an alien (incongruent) belief system from that of the subjects. (3) Under a condition of anxiety the accuracy and acceptance scores of the groups will again

be differentially affected, with the relatively closed people becoming less accurate and less accepting of the others than the relatively open people.

Ninety-six subjects who had scored at the extreme ends of the dogmatism scale, the measure of open and closed belief systems, were exposed to six brief filmed interviews of people they had never seen before. After the film viewing the subjects were asked to postdict how the interviewees had responded to personality questionnaires, and were also asked to rate the interviewees on a like-dislike dimension.

The incongruent situation was set up by first determining the subjects' beliefs on a series of issues. These issues were tapped by means of filler questions inserted in a random fashion within the Dogmatism Scale. Prior to each film presentation the subjects were told that certain of the interviewees professed strong beliefs which were known on the basis of their responses to the filler questions, to be either extremely incongruent or congruent to those of the subjects.

The anxiety condition was evoked by instructions to the subjects to the effect that accuracy in judging others was related to intelligence. As a further measure the subjects were also told during the course of their judging that their scores were poor and inaccurate.

The presentation of conditions (congruence-incongruence anxiety-non anxiety) occurred in a counterbalanced order. Thus both the closed and open groups were equally exposed to all the experimental conditions, with the order of presentation of each variable controlled.

No significant differences were found between the groups in age, intelligence as measured by the CQT, and in similarity to the interviewees.

The results of the experiment were analyzed by the analysis of variance technique. It was found that relatively closed subjects were significantly less accurate in their ability to perceive and understand the film personalities than were relatively open subjects. The closed subjects were also more rejecting of the film persons than were open subjects.

The introduction of the belief incongruence condition resulted in the predicted differential decrease in accuracy judgment scores of the closed as compared to the open subjects, but not to a significant extent. When the reason for this lack of predicted significance was explored further it was discovered that the incongruence variable was significant only for females. This sex difference was posited as the probable reason for the lack of significance of this interaction. It was also found that females were generally

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more accurate in their interpersonal judgments than males.

The anxiety variable had no important effect on any of the conditions in this experiment. This was explained primarily as due to lack of adequate control over the intended effect of the anxiety instructions on the subjects.

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By

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To my mother and my father,  
and to my wife Vickala,  
all of whom helped in more ways  
than they are aware of

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## CHAPTER I

### INTRODUCTION

This study is concerned with the relationship between open and closed belief systems with reference to accuracy and affect in interpersonal perception. The idea for this evolved from Rokeach's theory (42) and is an extension and test of some of its implications in the affective interpersonal area. Although the model is a cognitive one, it does not restrict itself solely to the study of cognitive behavior. The theory states that the belief organization is a counterpart of the affective state and can be thought of as isomorphic with it. Operating within a theoretical model (that will be explained in the ensuing pages) Rokeach has constructed a scale, which by tapping the cognitive belief pattern, differentiates among people according to whether they are relatively "open" or "closed" to their experiences. The scale indicates how, through the study of people's cognitive structures (their belief systems), valid inferences can be made regarding their underlying emotional state.

The majority of the research on the open and closed mind has been in the area of conceptual, perceptual and

ideological spheres of activity. This study will be an attempt to determine how a person's emotional needs, as reflected in his cognitive structure, manifests itself in the area of encountering new people, and in understanding what kind of people they are.

In day to day living it is quite obvious that some people seem to be less aware of social nuances than others. This must be due, at least partially, to certain kinds of closedness, "blind spots"--that have an emotional origin.

In this vein, three broad hypotheses will be investigated. The first is: People with relatively closed systems (as measured by the dogmatism scale) will be less accurate in understanding (and thus in predicting) the feelings of "new" others, than people with relatively open belief systems. They will also, on the whole be less accepting of them. The second is: The differences found in hypothesis one will be markedly accentuated when information is presented about the viewed subjects which pictures them as having a different and alien belief system from the viewers. That is, the information will have a pronounced differential effect on the two groups. Closed people will become more "emotionally blind" so that their accuracy of understanding will be markedly diminished, as compared to the open minded people. The closed people will also manifest markedly more rejection of the "new"

others as a result of this information. The third general hypothesis is: That under a condition of anxiety the differential accuracy of prediction of both groups will also be affected, with the closed people again more adversely affected in their accuracy judgments than the open group.

Before going any further, an understanding of the aspects of the theory pertinent to this research should be presented.

### Theory of Belief Systems

The cornerstone of the conceptual model is the assumption that the structure of people's beliefs are organized into two interdependent parts: a belief system and several disbelief subsystems, collectively called the disbelief system. The belief system contains or represents all the beliefs that a person has or accepts as true of his world. This includes unconscious, pre-conscious, and conscious ideas, sets, and expectancies that the person has, or those that can be inferred about him regardless whether he is aware of them. The disbelief subsystems are conceived as representing all the unconscious, pre-conscious and conscious ideas, sets, and expectancies which are felt as false and rejected, with regard to a person's total view of the world.

As an example of the interdependent functioning of the belief-disbelief system, let us view the beliefs of two hypothetical people. To make the issue clear, the people will be presented in rather extreme form, but it must be remembered that "openness-closedness" is a relative or continuous dimension.

Person number one believes that an extreme form of conservative oriented Republican government is the "only right" kind of government (belief system). Therefore, in his disbelief subsystems are lumped such holders of different beliefs, as communists, socialists, "progressive capitalists," and even Democrats. All these systems are seen as alien and wrong in one degree or another. A second person, also a Republican, can accept with a relatively greater degree of openness or flexibility that other philosophies of government have something of relevance or truth in them. The lines of his disbelief system are much less tightly drawn, and he would not be as totally rejecting of the other points of view.

Thus the interrelatedness of the belief to the disbelief system can be seen. The more absolute one is in holding to his belief system and no other as the one and only truth, the greater is the magnitude of total rejection toward all other ways of believing or toward systems with different

points of view (disbelief systems). This holds not only toward political ideas and philosophies but toward any kind of belief or experience that is different (new) from one's own belief experience rubric. There can be dogmatic socialists, Freudians, even dogmatic "solid state" physicists, as well as dogmatic conservatives.

Following the logic regarding the interrelatedness of the belief to the disbelief system; the belief-disbelief system (which contains both parts) is conceptualized as having several other properties. It may vary in the amount of differentiation, that is, in terms of the relative amount of knowledge possessed. This pertains especially to knowledge about disbelief subsystems. Thus it would be assumed that the person in example number two above would know more about the different political theories than person number one, who would tend more to lump them all together as bad and unqualifiedly reject them.

Another way belief systems may vary is in the property of isolation. This refers to the degree of communication between parts of the belief-disbelief system. An important aspect of this is the accentuation of differences, with the minimization of any relatedness or similarity between belief and disbelief systems. This serves the purpose of distancing or isolating the belief from the disbelief systems. In the

example cited, person number one would tend to see only differences between Republicans and Democrats, and any similarities would be minimized or eliminated. He might be more prone than person number two to "see" and accentuate irrelevant differences to buttress his own reasoning.

From the examples it can be seen that the theory stresses the importance of formal or structural similarities (of belief systems) that cut across many different ideas or contents. The scale, as an outgrowth of the theory, therefore, measures the way one's cognitive structure is organized, rather than specifically what one believes. It should also indicate the manner in which other types of experiences are approached, since, as stated earlier, the belief organization is a counterpart of a more enduring effective state.

Finally, it is important to note that "openness" and "closedness" are extremes on a continuum. A basic property of all belief systems, regardless of the degree to which they are open or closed, is that the experiencing of ideas and people is organized along lines of belief congruence. That is, ideas and people are more easily accepted as their perceived similarity with the person who is experiencing them increases. It is only as the belief system is at the closed end of the continuum that the range of what is accepted and what is rejected becomes significantly narrower and more restricted.

There are other dimensions of the conceptual model, but for purposes of the present study the relevant ones have been noted. (For a fuller discussion see The Open and Closed Mind (42)).

Before discussing the research stemming from the theory of belief systems relevant to this study, we will first review other investigations bearing on the relationship between personality structure and accuracy of interpersonal perception. Following this, the literature on methodological difficulties in the study of interpersonal perception will be surveyed.

## CHAPTER II

### REVIEW OF THE LITERATURE

#### Research Under Other Frameworks

The idea that there are certain personality types that tend to simplify their perceptual world, and thus operate less effectively in their appraisal of other personalities was shown by Gollin (23). He presented a film in which a woman engaged in two major behavioral themes--promiscuity and kindness. When the subjects were asked to state their impressions of the woman's personality, three kinds of characteristics emerged. One group of subjects attempted to account for the different behaviors by an interrelationship statement, another enumerated the two behaviors but did not interrelate them within a total personality, and the third formed a simplified impression, characterizing the woman as either nice or immoral. The three impressions were named respectively, related, aggregate or simplified.

Obviously the latter group by eliminating from its consideration a clearly present aspect of the film person's personality, could only have a less than accurate understanding of the total personality. The group of subjects who

described the personality by an interrelationship statement would appear to be, at the least, taking more significant reality aspects of the film person into awareness, and thus increasing their chances for accurate appraisal.

In a later study (24) the same author used a Rokeach task, where ten terms were presented to the aforementioned film subjects: Buddhism, Capitalism, Catholicism, Christianity, Communism, Democracy, Fascism, Judaism, Protestantism, and Socialism. He found significant positive relationships between subjects who formed related impressions to the film personality and those who formed hierarchic concepts of the terms. (By hierarchic is meant organizing the sub-groups into a category such as social institutions, ways of believing, etc.) The other two groups formed non-hierarchic concepts or only described or named the religious or political terms.

Here we see a relation between the simplifying of a cognitive task and a more affectively toned interpersonal one. In both situations one group could tolerate and integrate disparate features of the stimuli (both terms and film), and another group could not.

Though these differences in the organization of perceptions indicate differences in cognitive structures among the three groups, they were not tied to any more unified theory. That is, from the studies as presented, one could

not predict what kind of personality or what kind of cognitive structure would tend to simplify their milieu and what kind would tend to see the greater complexities involved.

An attempt to determine the kinds of personality variables involved in accuracy of interpersonal perception from a more unified theory has been done in some of the research under the framework of the "Authoritarian Personality." For example, E. E. Jones (29), using tapes of the voices of a superior on navy recruits divided into authoritarians and non-authoritarians by the F scale, found:

. . . that the authoritarians respond more to the stimulus person's position in the military hierarchy than to his personal qualities, whereas the non-authoritarians are more sensitive to the psychological cues in all their subtlety.

In another study in the same vein Scodel and Mussen (48) placed authoritarian and non-authoritarian people (F scale) in an interview situation with each other and predicted that authoritarians would perceive non-authoritarians as similar to them, whereas the non-authoritarians would be more accurate in their ratings. Their predictions were borne out. The rationale was that the authoritarians tend to place people in stereotyped categories in a conventionalized, non-personalized manner. In this case, the "placing" was due to in-group needs, based less on the qualities of the person as experienced, but on needs "carried into" the situation.

Else Frenkel-Brunswik (18, 19) studied the personality characteristics and home backgrounds of authoritarian and prejudiced people. Her investigations help clarify some of the reasons for the authoritarian's lesser capacity to accurately evaluate others.

She found that authoritarian-oriented people are unable to tolerate good and bad qualities in the same person (intolerance of ambiguity); they tend to make black-white judgments, reject and accept people in an unqualified manner, and arrive at premature closure in ambiguous situations. These characterological mechanisms result in a simplifying and misperception of the psychological world and, more specifically, the world of interpersonal perception. It would seem, therefore, that certain types of personalities characterized by certain types of defences are less successful in their ability to understand and predict how others feel.

#### Research Under the Open-Closed Belief System Framework

These investigations which began in 1951 have recently been put into book form in The Open and Closed Mind (42). Only those studies most pertinent to the present research will be reported here.

In one group of studies the assumption was that knowledge of the formal properties of people's belief systems (the manner rather than the content of the beliefs) would lead to the ability to make predictions with regard to how cognitive, perceptual, and esthetic types of problems and experiences would be approached.

Mikol (35) found that people with more closed belief systems were less able to understand and appreciate new modern music and its composers (example--Schoenberg as compared to Brahms), than were people with more open belief systems. They were unreceptive or closed to the differentness or newness of the musical experience, although no difference between the two groups was found with reference to their appreciation of more conventional music.

Analogous results were found in an experiment by Levy and Rokeach (32) in which significant differences appeared in the length of time necessary for open and closed subjects to synthesize and form new perceptual systems. No differences were found between the groups in analytic ability. The task was to locate simple figures within more complex designs in the Gottschaldt embedded figures test.

The groups did differ in the tasks requiring synthesis, that is, the integration of the perceptual stimuli into a new field. Using the Kohs blocks (from the Wechsler Bellevue

Intelligence Scale) the subjects had to reproduce a standard design with four blocks, and then reconstruct it again using nine or sixteen blocks, with the colors reversed and the blocks rotated 90 degrees. In this task the subjects had to imagine or infer how the reconstructed design would look before it was reconstructed

It would seem that the ability to break down the initial sets, and then synthesize them into a new percept, and the ability to go beyond the immediately "given," are important distinctions between open and closed people.

Thus, one can ask if the closed subjects (as compared to the open subjects) are unreceptive to the "newness" of the musical experience; would they not also be unreceptive to the "newness" of the experience of unfamiliar people and thus be less capable of "feeling" or empathizing with them? If the closed subjects have greater difficulty in synthesizing ideas and going beyond the immediately given, would they not also be less able to infer other attitudes and feelings of people after seeing a small segment of their behavior?

The present research deals not only with the relationship of personality to accuracy of interpersonal perception, but also with the effect of belief incongruence on these two variables. Does belief incongruence affect the accepting

and rejecting attitudes of closed more than open people?

In one study (43) the six major Christian religions (Catholic, Episcopal, Lutheran, Presbyterian, Methodist and Baptist) were ranked by students and clergy of these six denominations in terms of each religion's similarity to the other five. Then the subjects stated their preferences for the religions on an attitude scale.

Two important findings emerged: (1) The more dissimilar the faith, the more it was rejected by all the subjects or clergy; and (2) when members of the different religions were classified into high and low scorers on the Dogmatism scale, it was found that closed subjects rejected every disbelief subsystem along the similarity continuum to a greater extent than the open subjects.

This second result is related to another study (46) where it was found that subjects who manifested greater rejection of Negroes also scored higher in total rejection of whites. That is, contrary to the idea that the more one villifies the out-group the more the in-group is glorified, the results showed a positive correlation between the two. The authors state that a "generalized misanthropy syndrome" was in evidence in some kinds of people.

A third important aspect of this investigation has to do with the dynamics of belief systems, specifically with

reference to the differential effect of anxiety on the accuracy of interpersonal perception of the closed and open subjects. A reasonable inference is that a closed belief system is a manifestation on the cognitive level of a network of defenses against anxiety.

Operating under this assumption Rokeach and Kemp (44) hypothesized that relatively closed people should be manifestly more anxious than relatively open people, and found significant positive correlations between dogmatism and anxiety (Welsh Anxiety Scale) among English subjects. They also predicted that closed subjects had more early experiences of anxiety, and found that high dogmatics (as compared to low dogmatics) showed significantly more anxiety symptoms in childhood (via a questionnaire method), such as thumbsucking, nailbiting, bed wetting, temper tantrums, etc. In line with Else Frenkel-Brunswik's work, the high dogmatics revealed more glorifications of parents, with less ability to express any kind of ambivalence toward them.

If it was indicated that an increased level of anxiety leads to distortions of one kind or another in perception, then it would follow that in a stressful or anxious situation those people with a higher initial level of anxiety will be disproportionately affected, and consequently less accurate in their perceptions.

In two experiments by Smock (49, 50) on the perception of incompletely formed and ambiguous figures, he found that increased stress resulted in a need to preserve a "familiar" perceptual field, and a clear tendency toward premature closure. (Avoiding the ambiguity of the stimulus situation by making a definitive response before adequate information is available.)

Since the underlying level of anxiety of the closed subjects has been shown to be greater than for the open subjects, it should follow that when both groups are equally exposed to anxiety arousing conditions, the closed subjects should be more affected and thus less accurate in their perceptions.

#### Studies of Interpersonal Perception

There is a vast literature on attempts to study interpersonal perception (references in 4, 53). Only those more recent studies bearing on the methodological difficulties involved in interpersonal perception and especially those presumed to be involved in this particular research will be described.

A perusal of these studies points up three consistently mentioned problem areas inherent in interpersonal perception experiments. These can be listed as:

Generality; whether in fact a general ability to accurately estimate the feelings of others, across people and measuring instruments, does exist.

Similarity; if the success of one judging group over another cannot be attributed to mere similarity between them and the stimulus object persons,--and the consequent projection of that similarity, thus achieving a spuriously high "empathy" score.

Stereotypy; the fact that some studies have pointed up the presence of an internal stereotype of the stimulus person of which the judge is unaware. The operation of this stereotype makes it difficult to determine to what extent the judgments are based on utilizable cues for the stimulus person.

Generality: Crow and Hammond (11) question if such a generalized trait exists. They asked senior medical students who watched films of medical patients being interviewed to predict how the patients would respond to various types of measures. (Estimation of response to personality inventories, estimation of group opinion, and estimation of ratings within small groups.) The scores were intercorrelated to determine whether or not subjects who were good (or poor) on one measure, were good or poor on other measures. The results were essentially negative, i.e., the authors found no general

ability across instruments.

Gage, Leavitt and Stone (22) using sound movies of fifth grade boys and girls, asked judges to predict each child's response (yes or no) to 100 questions of a personality inventory, and found that reliability over children, or generality, was insignificant. They state that accuracy was determined by the judge's chance interaction with specific characteristics of the child. That is, if the child's own responses were favorable to himself, and if the judge had a favorable impression of the child, then, and only then, would the judge be accurate.

Kelly and Fiske (31), as part of a battery of tests to determine the qualities necessary for future success of graduate students in clinical psychology, asked psychology trainees to predict inventory responses of two patients that the authors had diagnosed. The accuracies achieved in judging each patient were below significance.

Though these studies point to a lack of the generality of this trait, the conflicting evidence of its presence in other studies to be discussed calls for an explanation. Undoubtedly some of the contradictions found may be partly due to low reliability of the criterion instruments. It also may stem from the different types of judgments that are asked of the judges, the different traits being judged

and the different types of subjects.

For example, Cline (7) points out the methodological differences between Crow's work and his own. He states:

Crow and Hammond used a wider variety of tasks, including some, such as sociometric measures which seem only remotely related to what would usually be meant by accuracy of interpersonal perception.

In the study by Gage, he asked adults to make judgments about fifth graders. Olden (38, 34) points out the difficulties with regard to "accurate empathizing," attendant on the introduction of age and maturational factors when the stimulus person is below adolescence.

The fact that some authors (8, 13) have been discovering personality correlates of this ability points to their success in finding this more generalized trait.

Cline (6) used a sound film of college students in a job interview. All of the judges performed statistically better than chance in predicting how the interviewees responded to personality questionnaires. Also, the composite of scores of two of the three scales for each judge yielded a significant intercorrelation, indicating generality over instruments. . . . The author concluded that the judges "made predictions based on differential cues, and a real evaluation of the personalities in the film."

Taguiri, Blake and Bruner (54) got three discussion

groups together. After twelve sessions the participants were asked to express their likes and dislikes of other members, and to guess who liked them. The authors then constructed a chance robot, so that each subject had a corresponding robot with an equal number of choices, its preferences allocated to the group at random. They found that the perceptual accuracy of the subjects was significantly better than the matched robots.

Estes (16) reports that his ten best judges in a test of ability to rate the traits of persons depicted in short movies were consistently more accurate than the ten poorest judges, on all 23 variables for all eight film subjects. The criterion of accuracy was the ratings of clinical psychologists.

Dymond (14) found that the capable judges tended to show less variation in the accuracy with which they could judge subjects' self-ratings than did the poorer judges. The good judges seemed to show consistency in ability to judge irrespective of the type of subject or the type of quality being judged. (In this study, the issue of similarity was not dealt with;--details in the next section.)

Gage (20) assembled judges and brought students before them one at a time. The students went through a series of activities such as drawing on the blackboard,

telling stories of their experiences, etc. The judges then predicted the responses of the subjects to interest inventory items. The judges' accuracy scores were significantly better than chance.

Both groups of studies are representative of the conflicting results in this area. Gage and Cronbach (21) in a review of the problems in this field point out that the inconsistent results obtained are a function, not only of the low reliability of the measures and the lack of standardization of tasks and subjects, but also that the criterion for classifying the investigations has never been spelled out explicitly enough. They suggest two continua for classifying investigations; (a) degree of acquaintance between the interviewee and judge, and on this basis, (b) degree of extrapolation of judgments.

From a review of much of the material in this area, Allport's statement (1) still seems to have much validity. He said that the ability to judge others is neither entirely general nor entirely specific.

It would be unreasonable to expect a judge of people to be uniformly successful in estimating every quality of every person. . . . It seems more of an error, however, to consider the ability entirely specific than to consider it entirely general.

Similarity: Basic problems revolving around the similarity issue arose from criticism of Dymond's work on "measuring" empathic ability. She has completed various studies in this area, but her first work which precipitated the methodological objections was, "A Scale for the Measurement of Empathic Ability" (12).

She had groups of people who "interacted" over a period of time. Then they made judgments about themselves and others in the group. The measure of empathic ability was derived by calculating how closely a person's predictions of another's self-rating, and his own self-rating as he thinks the other would rate him--correspond with the actual score of that person. She found that the number right on each of the two types of predictions was significantly higher than chance.

Bender and Hastorf (3) point out that in Dymond's work, if the subject and ratee have similar self-feelings, the subjects who project this similarity are given spuriously high empathic ability scores. They attempted to eliminate this with what they called a "refined empathy" score. This involves subtracting the deviation between the subject's predictions and object's responses (raw empathy) from his (the subject's) projection score.

They found that the refined empathy score is not

correlated with similarity whereas the raw empathy score is. This result points to the necessity of equating subjects on similarity, else the empathy score loses much of its validity.

Halpern's study (25) achieved results similar to those already noted regarding the possible confounding effect of similarity, but he interprets it differently. He states:

The close relation between similarity and predictive skill means that there is greater likelihood that a person would recognize feelings in others that he has known himself.

He goes on to say that people with broader psychological experiences and more open personality structures are better able to experience a wider variety of feelings across different types of people. He feels that similarity should not be "partialled" out of empathy studies, as it is a very crucial part of them and deserves investigation in its own right. This may be so, but in line with Cronbach's suggestions, the degree of similarity between subject and ratee should in some way be noted beforehand.

In the study mentioned above by Taguiri, Blake and Bruner (54), they found that the subjects perceived the feelings of others in accordance with their own feelings toward them far in excess of chance. . . . So, in fact, all of the studies implicitly or explicitly point to the importance and possible confounding aspect of similarity and its attribution

to the rated persons in interpersonal perception studies.

Stereotypy: As a further outgrowth of Dymond's work, Lundgren and Robinson (35) readministered Dymond's scale to a similarly comprised group of subjects. As a result of their study they posed this question: Is the person who is doing the rating responding to his awareness of specific others, or is he attributing his own acceptance of some generalized cultural norm, some stereotyped concept of how most people should or do act, on to the people that he is rating?

They state that persons might show up as good empathizers if they conform closely to cultural norms and tend, then, to perceive others as conforming also. A spuriously high accuracy score is then obtained if the other stimulus persons are, in fact, similarly conventional.

Gage (20) obtained results pointing to the operation of internal stereotypes affecting the interpersonal perception process. As noted before, subjects engaged in expressive behavior before a group of judges who then predicted their responses to personality inventory items. A second group of judges made their predictions before seeing the subjects, and again after seeing them. The accuracy of the judges who knew something about the subjects (i.e., undergraduate social sciences majors or similar limited information), and

made predictions on that basis, was higher before than after they saw the subjects.

In other words, their cultural stereotype was more effective than their empirical observations of the stimulus persons.

Crow (11) similarly found that response sets (composed of three types of stereotype scores) were more consistent over time than more generalized accuracy scores where the stereotype factor was not taken into account. From this study the author maintains that, "accuracy of perception free of stereotype response sets had yet to be established."

Cronbach (10) has found that stereotype accuracy was one element that should be partialled out of more global interpersonal accuracy scores or measures. Thus one can have a judge predict responses of several subjects, get the average of the response on each item, and the average of the judge's prediction on that item. Then one would have an average profile of responses, and an average predicted profile. The distance between them is a way of attaining a measure of stereotype accuracy. By techniques such as these it is possible to obtain measures which result in a finer analysis and partialling out of the stereotype component.

On the other hand, Cline (6), found that when he asked subjects to fill out questionnaires about the film subjects

before they saw the film, he obtained significant differences in accuracy in favor of the viewing condition. He said this was not based on crude internal stereotypes, but on what the subjects (college men) were really like.

Dymond (14) using Q sorts, where counselors predicted how their counselees would respond, found that the closer the subject's self-sort was to the cultural stereotype, the easier the prediction; but she also found that even when the subject was atypical, some counselors could spot this and shift their predictions from this stereotype.

From the gamut of studies in this area, it would appear that although the stereotype basis for judgments seems to play an important part in the process of interpersonal perception, a judge may be accurate because he has an accurate stereotype, or because he can predict differences in the way individual people will respond based on utilizable cues emanating from the stimulus person, or a combination of both of these.

## CHAPTER III

### STATEMENT OF THE PROBLEM

Just as those people with relatively closed belief systems manifested a "generalized misanthropy" syndrome resulting in a greater degree of rejection of others than people with relatively open belief systems, so is it presumed that they have the type of underlying personality structure which would result in an over-all lesser awareness of the new experience of others. That is, because of closed peoples' need for avoidance of ambiguities, their world of interpersonal perception is much less differentiated, and thus the subtle nuances of interpersonal experience, the "fine" discriminations of the feelings of others is missed or lost. One aim of the present study, then, is to explore this presumption.

The next area for investigation has to do with the differential effect of belief incongruence on closed and open people. The theory of belief systems states that the more closed the system, the greater is the magnitude of rejection of all disbelief subsystems.

Why should knowledge that some specific beliefs of

another person are different than one's own affect estimations of the personality of that other person in areas totally unrelated to the beliefs, if it were not for the setting into motion of some irrational motivation? The fact that a person believes, say, in agnosticism, should not result in a negative preconception of his personality as a whole (by a religious person for example), unless in fact the agnostic does display obnoxious traits. But since closed people reject different beliefs and the bearers of those beliefs to a greater extent than do open people, this preconceived negative set is predicted to result in more distortions of the closed subjects' perceptions.

The lessened accuracy in perception of the closed people stemming from irrational sources is pointed up by Rokeach (42), he says:

The more open one's belief system, the more should evaluating and acting on information proceed independently on its own merits, in accord with the inner structural requirements of the situation. Also the more open the belief system the more should the person be governed in his actions by internal self-actualizing forces, and less by irrational forces. . . . Conversely, the more closed the belief system, the more difficult it should be to distinguish between information received about the world and information received about the source (p. 58).

Finally, the effect of anxiety on the two groups will be investigated. The theoretical model views belief systems not only as a way of ordering one's experiences, but

also as a way of filtering information so as to render harmless that which threatens the ego. Relatively closed people need a more rigid "filtering system" than relatively open people because the specific content of their primitive beliefs (to a greater extent than for open people), is of the world as a threatening and insecure place. The inferred higher level of anxiety stemming from this was borne out in Kemp's study. This anxiety can be seen as an important dynamic reason behind differences in the formal qualities of closed and open belief systems.

It is proposed that when this greater reservoir of anxiety is tapped, it will result in the increased activation of those structural qualities which led to their formation in the first place. Consequently, it is presumed that a tighter "drawing in" and narrowing of the life space of the closed people (as compared to the open people) to all potentially threatening stimuli will occur. This will result in decreased accuracy in the judging of others by the closed people, to a greater extent than by the open people.

### Hypotheses

In all experimental conditions people with relatively closed belief systems will be less accurate than people with relatively open belief systems in judging others.

The introduction of belief incongruence will decrease the accuracy of the relatively closed subjects. However, it will have little effect on the accuracy of the relatively open subjects.

The introduction of an anxiety condition will decrease the accuracy of the relatively closed subjects. The accuracy of the relatively open subjects will also be adversely affected, but to a lesser degree.

In all experimental conditions people with relatively closed belief systems will be more rejecting of others than will the relatively open subjects.

In the condition of belief incongruence people with relatively closed belief systems will manifest a greater amount of rejection of others than will the relatively open subjects.

## CHAPTER IV

### METHOD

#### Scales

The rationale for the five scales used in this research and their description are presented below.

##### Dogmatism Scale

This was the instrument used to measure the degree to which belief systems are open or closed. The theory behind its construction has already been discussed. The scale itself consists of forty items on which the subjects agree or disagree, on a six point continuum ranging from plus three (agree very much) to minus three (disagree very much) (Appendix A). For a fuller discussion of the characteristics of this scale see Rokeach (41), who reports split half reliabilities of .78 and .81. Vidulich (55) reports a split half reliability of .78. These reliabilities are sufficiently high to indicate the use of this scale in this research.

##### Filler Items

Thirty-four items were randomly interspersed within the Dogmatism Scale, giving a total of seventy-four items on

both instruments combined. The purpose of these filler items was to determine the beliefs of the subjects most strongly subscribed to. This permitted setting up the conditions of congruence and incongruence.

Items were constructed from seventeen issues deemed to be of current interest to college students. Two items were constructed for each issue to obtain a more reliable measure of the subjects' attitude on that issue, and to obviate as much as possible any biasing due to response set. Thus each one of the seventeen items whose content was expressed in a positive manner also had a "mate" that was written in a negative way (Appendix A). This was admittedly difficult to do, because in rewriting the items it was almost never possible to obtain precisely the opposite meaning. A sample pair is presented below:

"A communist victory would not be so great a disaster as the extermination of all human life from the H bomb"; and its mate: "It would be preferable to die in an H bomb attack than to live under communism."

Some of the seventeen issues were obtained from the attitude scale in Thurstone's The Measurement of Attitude (55), Changing Values in College, by P. E. Jacob (27), and from Research Methods in Social Relations, by Selitz, Jahoda, Deutsch and Cook (47). Issues also evolved through discussions with college students, and associates of the researcher.

Of the seventeen issues, one was chosen as the basis for setting up the congruent situation, and a second as the basis for the incongruent situation. The selection of the two issues was based on the largest percentage of subjects disagreeing with a particular issue (incongruence), and the largest percentage of subjects agreeing with a particular issue (congruence).

For the incongruent situation the issue which met these specifications was:

"Things would be much easier for us all if our government would make all those decisions that we have to make for ourselves."

Over ninety-nine percent of the high dogmatics disagreed with this, with a mean score of minus 2.68 out of a possible total of minus three. Over ninety-nine percent of the low dogmatics disagreed with this with a mean score of minus 2.94.

The congruent issue selected was:

"Homosexuals need understanding of their problem more than anything else."

Eighty-nine percent of the high dogmatics agreed with this, with a mean score of plus 2.46 out of a possible total of plus three. Ninety-six percent of the low dogmatics agreed with this with a mean score of plus 2.53.

The small number of subjects (ten) expressing opinions

contrary to the rest were not asked to participate further in the experiment.

#### Criterion Instrument and Accuracy Scale

A set of films and a scale based on these films constituted the criterion instruments for measuring accuracy of interpersonal perception in this study. Accuracy was primarily defined as the extent to which the judges (subjects) were able to understand or "feel themselves into" the personality of the film people, and thus predict the film persons' response to the scale.

A sound color film method developed by Cline (7, 8, 9) was used because it has the advantage of capturing a "dynamic and complex interpersonal situation which holds all cues constant for all who will make future judgments of the people in the film" (7, p. 2).

The film and accuracy judging instruments have evolved over four years of research in the area of interpersonal perception. The scale has been constantly revised, attaining successively higher reliabilities. The average reliability of the scale was found to be .71 (8, 9).

The film and scale were constructed in this way. Sound motion pictures of a spontaneous interview situation (people passing by a supermarket) were taken. The interviewees

represented a cross section of adults in the Salt Lake City, Utah, metropolitan area (ages seventeen to sixty-five).

A standard interview format was used, which briefly probed the following areas: (a) personality strengths and weaknesses, (b) personal values, (c) hobbies and activities, (d) self-concept, (e) temper, and (f) reactions to the interview. The interviewees were told that it was a research studying judging ability and were given a five dollar merchandise order for participating. Each interview lasted about five minutes.

The number of films finally used was reduced from the original twenty-five to six, on the basis of how well they discriminated between good and poorer judges. There were three males and three females in the final six films used in their research.

After the filming the interviewees responded to a series of scales which tapped, in much greater detail than in the brief interview situation, their feelings about themselves, their attitudes and their behaviors. Close relatives and friends were also contacted and asked to rate the interviewee on other scales (Appendix B). The criteria for judging interpersonal accuracy was derived from the responses to these scales.

Each one of the ultimately selected "right" criterion

answers were responses that the interviewee (or relatives and friends) had selected on three separate occasions over a period of six months. Items which were not consistently answered the same way were discarded. The researchers also took "great pains" (7, p. 8) to control for social desirability on items, wherever possible.

In Cline's original work, six separate sub-scales were used, and the subject's task in each one was to determine, after viewing one interview, which of the two or three alternative attitudes or behaviors the interviewee (or relatives and friends) has chosen as true of the film person. A sample item from one of the sub-scales is presented below.

"Which one adjective from each of the (20) pairs did Mr. W. choose as being descriptive of himself; (frank - dreamy)."

It was found though, that this approach involved a very complicated scoring system, as there were different scoring measures for different scales. It also was more prone to elicit the projection of stereotypes (40).

A more simplified version of the scale has been constructed by Dr. H. C. Smith and W. J. Peiper in 1960 at Michigan State University. Cline's data was still used but all the sub-scales were combined into one instrument. The judges were now required to predict which of three film persons expressed or exhibited a particular attitude or

behavior. That is, instead of an absolute judgment about one person, the judges were required to make a comparative judgment after seeing three film persons. Sample item: "Which of the three interviewees chose the word arrogant, in the pair (arrogant - apathetic) as approximating the better description of him (or her) self." Only one of the three had consistently chosen that word as being self-descriptive.

The entire scale consisted of one hundred, forty-nine items. Seventy-four pertained to the first three interviewees, and seventy-five pertained to the second three interviewees (Appendix C).

Cline's original scales and the modified one were both used by Wakeley in an unpublished doctoral thesis on "The Effects of Specific Training on Accuracy in Judging Others" (57). He found the modified scale to be more sensitive than the original one, attaining consistently significant differences on the former, and none on the latter. He also found that the modified scale was more reliable than the Cline instrument (.66 to .79) and had a higher internal consistency (.41 to .55) (57, p. 19). Therefore, the modified Cline scale by Smith and Peiper was chosen as the criterion accuracy instrument in the present research.

### Like-Dislike Scale

This is a nine point rating scale where the subjects rate the film people with respect to their positive or negative feelings toward them. "One" means "I can't see myself being friends with such a person," and "nine" means "I can very easily see myself being friends with such a person" (Appendix D). This same scale was used in an aforementioned study (46), where subjects reacted to race and/or belief congruent and incongruent stimuli in terms of that scale.

### Similarity Scale

This is a fifty item true-false scale based on the MMPI, which was originally administered to the film interviewees by Cline as part of his test battery. It was administered to all the subjects in this study to evaluate the "actual" similarity between the judges and the interviewees (Appendix E).

### Design and Procedure

Students in beginning psychology courses at Michigan State University were given the Dogmatism Scale with filler questions, followed by the Similarity Scale. The scales were administered with the following instructions:

### General Instructions

"Today for about fifty minutes I would like you to fill out some personality questionnaires. Their main purpose is to obtain some idea of your feelings and attitudes;--as the aim of this research is to try to understand university students a little better. Please answer all the questions as honestly as you can. What you put down has absolutely no connection with your grade in this class or your standing in school. In about three weeks as a further part of this study you will be contacted again to view a film and asked to give your reactions to it. At that time I will give you more details as to what this research is all about. When it is completed I will let you know what I have found out. Are there any questions?"

### Dogmatism Scale Instructions

"The following is a study of what the general public thinks and feels about a number of important social and personal questions. The best answer to each statement is your personal opinion. We have tried to cover many different and opposing points of view; you may find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others; and perhaps uncertain about others; whether you agree or disagree with any statement, you can be sure that many people feel the same as you do."

### Similarity Scale Instructions

"The next questionnaire has to do with your feelings about yourself, your behavior and your attitudes."

### Testing Procedure

One hundred and twenty-eight of the extreme scorers on the Dogmatism Scale were invited to participate in the second part of the experiment (viewing and reacting to the film). These were divided into sixty-four high dogmatic

and sixty-four low dogmatic subjects. The high and low dogmatic groups were evenly divided with regard to sex. The subjects were then randomly assigned to either an anxious or a non-anxious condition.

The subjects were then exposed to the congruence and incongruence situations. Congruence refers to the labelling or depiction of a film interviewee as having a belief similar to that which the majority of subjects admitted to on the filler items. Incongruence refers to the labelling or depiction of a film interviewee as having a belief dissimilar to that which the subjects admitted to on the filler item.

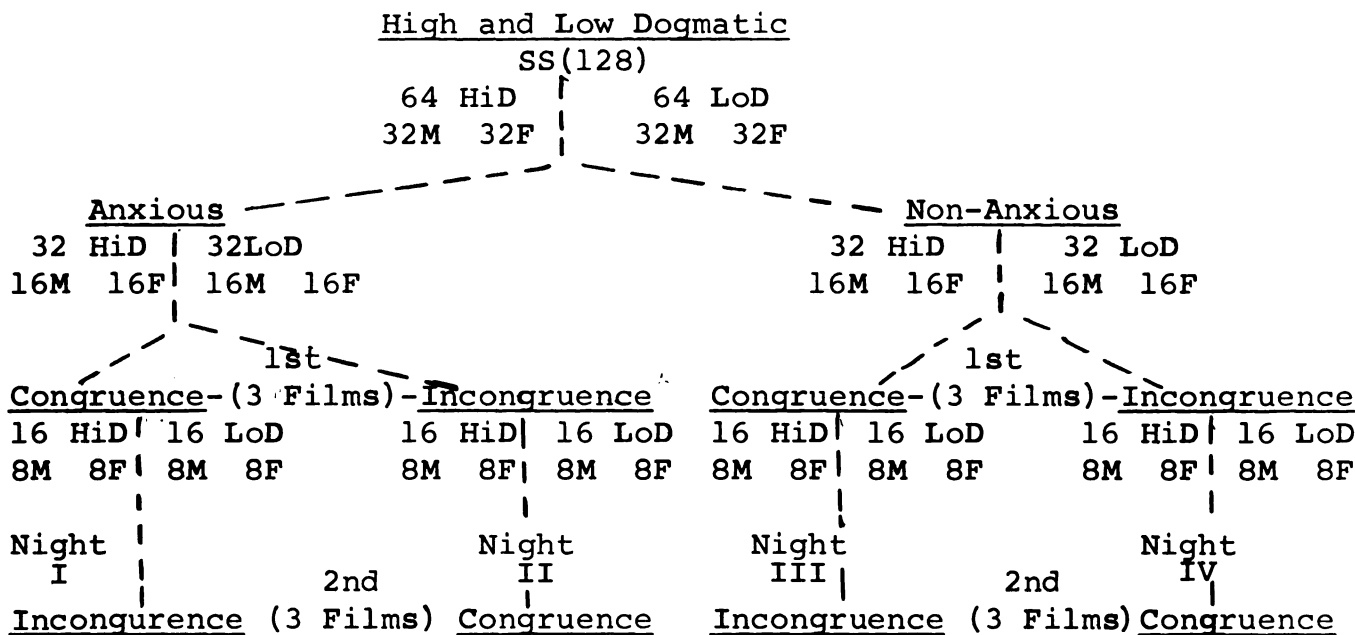
In each of the anxiety and non-anxiety conditions half the subjects were placed in a belief congruent, viewed first, condition, and half in a belief incongruent condition viewed first, for the first three film interviews. The film was then stopped, and the subjects were asked to rate the interviewees on the Accuracy and Like-Dislike Scales. In the second three interviews this order was reversed. That is, the film people depicted as congruent were now presented as incongruent, and the film people depicted as incongruent were now presented as congruent.

On any one testing night sixteen subjects were invited; eight high dogmatics comprised of four males and four females, and eight low dogmatics comprised of four

males and four females. On succeeding nights similarly comprised groups of different subjects viewed the films until all the experimental conditions were run through in a counterbalanced order.

The presentation of conditions was in the following order: Night one - Anxiety, Belief Congruence first, Belief Incongruence second; Night two - Anxiety, Belief Incongruence first, Belief Congruence second; Night three - Non Anxiety, Belief Congruence first, Belief Incongruence second; Night four - Non Anxiety, Belief Incongruence first, Belief Congruence second.

The diagram below possibly illustrates the design more graphically.



As can be seen it was possible to complete the entire testing on four nights. Due to the small projection room, however, the number of testing nights was doubled, with nights five through eight a replication of nights one through four.

Therefore, the data from night five was a replication of night one and so the two were pooled, as was the data from nights two and six, three and seven, and four and eight. Thus the number of subjects tested each night was exactly half of that shown in diagram one, or sixteen instead of thirty-two.

The testing was done during the Winter term, 1962.

#### Pre-Film Instructions Regarding Congruence and Incongruence

"You are going to see a film of some people being interviewed. It is part of one of the regular Gallup Poll interviews\* you probably all have heard of; only in this case the interviews were also filmed. I have been able to borrow the films from the Gallup people to further my own research on how persons understand other persons. . . . When the film is over I will give you some questionnaires and will ask you to try to put yourself in the film persons' or interviewees' shoes, so to speak, and to fill out the forms as you think or feel they would. Also, in some other questions you will be asked to rate them as an outside observer, as you think their close friends and relations might rate them.

Let me explain a little more about these films. They are as I said, part of an actual Gallup Poll interview. They are also used in the training of new interviewers for the Gallup organization. Therefore, for training purposes they conducted these interviews in a little different manner than usual. They first asked very broad types of questions so that when the beginning interviewer or trainee viewed the film he could get a general idea of the interviewees' personality. Later, the interviewee was asked his opinion about the specific issue in the poll. . . . The task of the trainee was to figure out from watching the first general questioning part of the film, how the interviewees would feel

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\*(A slight ruse was here perpetrated on the subjects for purposes of making the congruence-incongruence conditions more believable. The subjects were later informed of this, and told the real purpose of the experiment.)

about the specific issue the Gallup Poll people were investigating.

Since my research is not in the area of polls, I am going to let you see the film, and I am going to tell you how the interviewees answered on the particular issue in the poll. The reason for this is that I am interested in seeing in how much depth you can understand the people; therefore, I want to give you all the information about them that I can."

At this time the first three film people were described as strong believers in one of the two issues previously determined as having the most positive (congruent) or negative (incongruent) valence for the subjects.

#### Belief Congruent Instructions

"Now the first topic had to do with how people feel about other troubled people. All three of the people you will see in the film felt very strongly, that understanding, rather than any punishing attitude was one of the most important things that homosexuals needed with regard to their problem."

#### Belief Incongruence Instructions

"A second topic in the poll had to do with government responsibility and control over our lives. All three interviewees here felt very strongly that they never wanted to bother with the task of making decisions for themselves. They stated that they felt very strongly that the government should be in a position to make all such decisions for them."

#### Instructions for the Anxiety Condition

The same as the pre-film anxiety instructions except that two further statements will be added:

"By the way you might be interested in knowing why I came to a university for subjects for this research and not just out to the general public. Well it has been discovered that the way one judges or 'figures out' people is highly related to intelligence. That is, the more accurate you are in your predictions the higher your intelligence. The less accurate you are the lower your intelligence,-- something like an IQ test. And so I came to a university because university students are known to be brighter than those not having gone that far in school. And high scores are important in this experiment."

As the first questionnaire was first being filled out, a quick perusal of their papers was followed by:

"It's rather surprising but your scores so far are very poor, much less accurate than those of a group of high school students who were tested last week."\*

### Subjects

Of the 591 subjects to whom the Dogmatism Scale was initially administered, 128 extreme high and low scorers were asked to participate in the film viewing. The data of 96 of these 128 invited subjects was used in the final analysis. An additional four subjects (two high and two low dogmatic, comprised of one male and one female for each group) were invited on each of the eight testing nights, as attrition insurance. Thus the data in the results are based

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\*The two slight deceptions carried off here, (1) the high relation of intelligence to the accuracy of interpersonal perception; (2) the subjects doing poorer than high school students, were later corrected when the subjects were informed of the real purpose of the experiment.

on twelve subjects for eight nights for a total N of ninety-six. Of those nights where more than twelve subjects showed up, the data of the least extreme scorers on the Dogmatism Scale were discarded. (The scores of seventeen subjects were thus discarded.)

The high and low dogmatic subjects were equated on age, intelligence (as measured by their College Qualification Test scores), and similarity (as measured by the Similarity Scale).

As can be seen from Table 1 there is practically no difference between the high and low dogmatic groups on age and similarity. There is a slight but non-significant difference between the groups on intelligence, with the low dogmatics slightly superior to the high dogmatics. The high dogmatics mean score is 125.15, and the low dogmatics mean score is 128.06 (Table 2).

Table 1. Age and similarity scores of the high and low dogmatic groups.

| Group         | N  | Age   |      | Similarity Scores |      |
|---------------|----|-------|------|-------------------|------|
|               |    | Mean  | S.D. | Mean              | S.D. |
| High Dogmatic | 48 | 18.79 | 1.64 | 30.82             | 4.28 |
| Low Dogmatic  | 48 | 18.94 | 1.60 | 30.44             | 4.39 |
| p             |    | N.S.  |      | N.S.              |      |

Table 2. CQT scores of the high and low dogmatic groups.

| Group         | N   | Mean   | S.D.  |
|---------------|-----|--------|-------|
| High Dogmatic | 41* | 125.15 | 23.16 |
| Low Dogmatic  | 41* | 128.06 | 26.31 |
| p             |     | N.S.   |       |

\*41 out of 48 available scores.

## CHAPTER V

### RESULTS

#### Accuracy Scale

Table 3 summarizes the results of the analysis of variance of the accuracy judgments. The null hypothesis of no difference between the closed and open subjects with regard to their accuracy in perceiving others is rejected ( $p < .02$ ). Reference to Table 4 indicates that the means are in the predicted direction. That is, the mean of the accuracy scores of the relatively closed subjects is lower than the mean of the accuracy scores of the relatively open subjects.

The congruence-incongruence variable was also found to be significant ( $p < .05$ ), indicating the adverse effect of the belief incongruent condition on the accuracy scores of both groups.

The interaction between dogmatism and congruence was not found to be significant. The  $F$  of 2.55 is significant at only the .20 level (Table 3). Although this does not meet the generally accepted standards for statistical significance, the difference in means was in the predicted direction. That is, the accuracy scores of the closed

Table 3. Summary of analysis of variance of accuracy scores.

| Source                   | Sum of Squares | DF  | Mean Squares | F    | P     |
|--------------------------|----------------|-----|--------------|------|-------|
| <b>Between Subjects:</b> |                |     |              |      |       |
| Dogmatism (D)            | 259.0          | 1   | 259.0        | 6.91 | < .02 |
| Anxiety (A)              | 37.6           | 1   | 37.6         | 1.00 |       |
| Sex (S)                  | 112.5          | 1   | 112.5        | 3.00 | < .10 |
| Order (O)                | 3.8            | 1   | 3.8          |      |       |
| DA                       | 4.4            | 1   | 4.4          |      |       |
| DS                       | .9             | 1   | .9           |      |       |
| DO                       | 14.6           | 1   | 14.6         |      |       |
| AS                       | 68.9           | 1   | 68.9         | 1.84 |       |
| AO                       | 12.5           | 1   | 12.5         |      |       |
| SO                       | 39.4           | 1   | 39.4         | 1.05 |       |
| DAS                      | 3.3            | 1   | 3.3          |      |       |
| DAO                      | 3.8            | 1   | 3.8          |      |       |
| DSO                      | 6.4            | 1   | 6.4          |      |       |
| ASO                      | 112.6          | 1   | 112.6        | 3.00 | < .10 |
| DASO                     | 166.8          | 1   | 166.8        | 4.45 | < .05 |
| Error (between)          | 2999.1         | 80  | 37.5         |      |       |
| <b>Within Subjects:</b>  |                |     |              |      |       |
| Congruence (C)           | 84.0           | 1   | 84.0         | 4.56 | < .05 |
| DC                       | 47.0           | 1   | 47.0         | 2.55 | < .20 |
| AC                       | 8.8            | 1   | 8.8          |      |       |
| SC                       | 0.0            | 1   | 0.0          |      |       |
| OC                       | 41.2           | 1   | 41.2         | 2.24 |       |
| DAC                      | 2.3            | 1   | 2.3          |      |       |
| DSC                      | 81.4           | 1   | 81.4         | 4.42 | < .05 |
| DOC                      | .1             | 1   | .1           |      |       |
| ASC                      | .3             | 1   | .3           |      |       |
| AOC                      | 24.8           | 1   | 24.8         | 1.35 |       |
| SOC                      | 19.5           | 1   | 19.5         | 1.06 |       |
| DASC                     | 8.6            | 1   | 8.6          |      |       |
| DAOC                     | 18.1           | 1   | 18.1         | 1.00 |       |
| ASOC                     | 2.6            | 1   | 2.6          |      |       |
| DSOC                     | 37.5           | 1   | 37.5         | 2.04 |       |
| DASOC                    | .9             | 1   | .9           |      |       |
| Error (within)           | 1469.4         | 80  | 18.4         |      |       |
| Total                    | 5692.1         | 191 |              |      |       |

Table 4. Means and standard deviations for main effects of analysis of variance of accuracy scores.

| Source      | Mean | Standard Deviation |
|-------------|------|--------------------|
| Dogmatism   |      |                    |
| High        | 36.2 | 5.69               |
| Low         | 38.5 | 4.98               |
| Congruence  |      |                    |
| Congruent   | 38.1 | 5.20               |
| Incongruent | 36.7 | 5.65               |
| Sex         |      |                    |
| Male        | 36.6 | 5.51               |
| Female      | 38.2 | 6.33               |
| Anxiety     |      |                    |
| Anxious     | 37.0 | 5.37               |
| Non-Anxious | 37.8 | 5.54               |
| Order       |      |                    |
| First Set   | 37.5 | 5.96               |
| Second Set  | 37.3 | 4.93               |

Table 5. Interaction of dogmatism with congruence (accuracy scores).

|              | High D | Low D |
|--------------|--------|-------|
| Congruence   | 37.39  | 38.72 |
| Incongruence | 35.08  | 38.39 |

subjects, to a greater extent than the open subjects, were affected in an adverse way in the belief incongruent condition, resulting in lowered scores for that group (Table 5).

The null hypothesis could not be rejected with regard to the main effect of anxiety. Also, although it was predicted that the accuracy of the closed subjects would be more affected by anxiety than would that of the open subjects, the non-significant dogmatism by anxiety interaction failed to support this prediction.

Although no hypothesis was made with regard to sex and accuracy, it can be seen (Table 3) that a sex difference was found ( $p < .10$ ), with females attaining higher accuracy scores than males (Table 4). Similar findings have been reported by other investigators (5, 13, 28, 30), indicating slight to significant superiorities of females over males in accuracy of interpersonal perception.

Two of the twenty-six interactions were significant at the .05 level. The two were: Dogmatism by Sex by Congruence, and Dogmatism by Anxiety by Sex by Order (Table 3). Such significant interactions indicate that some caution should be exercised in the interpretation of the significant main effects reported above.

Let us look at the third order interaction, Dogmatism by Sex by Congruence, comparing Dogmatism against Sex and

Congruence (Table 6). From this table we can see that in the belief incongruent condition the discrepancy between high and low female dogmatics is much larger than the discrepancy between high and low dogmatic males. It can also be seen that the female high dogmatics' accuracy scores decrease from the congruence to the incongruence condition, while the female low dogmatics' scores increase from congruence to incongruence. Both the closed and open male's scores however, decrease in accuracy from congruence to incongruence.

It is this non-unidirectionality between the sexes within the congruence-incongruence condition that more than likely accounts for the failure of significance of the predicted Dogmatism by Congruence interaction.

Table 7 presents the means of the more complex Dogmatism by Anxiety by Sex by Order interaction. It is to be noted that five out of the eight pairs of means are in the expected direction, with open subjects attaining higher accuracy scores than closed subjects. On two of the eight means there is no essential difference between the groups, and one pair is in the "wrong" direction, but only slightly so.

Further examination of the means summarizing this interaction led to no clear interpretation. It indicates, again, that the relations among these factors were not the

Table 6. Dogmatism compared against sex and congruence  
(means of accuracy scores).

|                      | High D | Low D |
|----------------------|--------|-------|
| Male, Congruence     | 36.04  | 38.54 |
| Male, Incongruence   | 35.04  | 36.91 |
| Female, Congruence   | 38.75  | 38.91 |
| Female, Incongruence | 35.12  | 39.87 |

Table 7. Dogmatism compared against anxiety, sex, and order  
(means of accuracy scores).

|                                        | High D | Low D |
|----------------------------------------|--------|-------|
| Anx., Male, Cong. 1st-Incong. 2nd      | 34.33  | 39.41 |
| Anx., Male, Incong. 1st-Cong. 2nd      | 36.50  | 36.91 |
| Anx., Female, Cong. 1st-Incong. 2nd    | 36.91  | 38.75 |
| Anx., Female, Incong. 1st-Cong. 2nd    | 34.83  | 38.00 |
| NonAnx., Male, Cong. 1st-Incong. 2nd   | 38.58  | 37.41 |
| NonAnx., Male, Incong. 1st-Cong 2nd    | 33.58  | 37.16 |
| NonAnx., Female, Cong. 1st-Incong. 2nd | 35.41  | 40.33 |
| NonAnx., Female, Incong. 1st-Cong. 2nd | 40.58  | 40.50 |

same for the two sexes. Therefore, the data of the males and females were subjected to separate analyses of variance.

A glance at Tables 8 and 9 indicates that for both sexes the main effect of dogmatism is significant at the .10 level. Since we have already shown the dogmatism variable to be significant in the main analysis of variance, we can see that the reduced sample size inherent in the present analysis resulted in the lowering of the significance level. The data, then, seem to support the over-all prediction of greater accuracy for the open as compared to the closed subjects for both sexes.

For males the interaction of Order by Anxiety with Dogmatism was found to be significant at the .10 level. For the females the main effect of congruence was significant at the .10 level. No other main effect or interaction was significant at beyond the .10 level.

The crucial interaction of Dogmatism by Congruence was not found to be significant for the males, but for the females it is now found to be at the .005 level. Thus we see that the introduction of the belief incongruence variable had a significant effect on the female high dogmatic subjects, resulting in a decrease in their accuracy scores.

Although the high dogmatic males were, in an over-all way less accurate than the low dogmatic males, they were

Table 8. Summary of analysis of variance of accuracy scores for males.

| Source           | Sum of Squares | DF | Mean Squares | F   | P     |
|------------------|----------------|----|--------------|-----|-------|
| Between Subjects |                |    |              |     |       |
| Dogmatism (D)    | 114.8          | 1  | 114.8        | 3.0 | < .10 |
| Anxiety (A)      | 2.3            | 1  | 2.3          |     |       |
| Order (O)        | 33.8           | 1  | 33.8         |     |       |
| DA               | 7.6            | 1  | 7.6          |     |       |
| DO               | 0.9            | 1  | 0.9          |     |       |
| AO               | 25.1           | 1  | 25.1         |     |       |
| DAO              | 110.5          | 1  | 110.5        | 2.9 | < .10 |
| Error (between)  | 1522.7         | 40 | 38.1         |     |       |
| Within Subjects  |                |    |              |     |       |
| Congruence (C)   | 41.3           | 1  | 41.3         |     |       |
| DC               | 2.4            | 1  | 2.4          |     |       |
| AC               | 3.1            | 1  | 3.1          |     |       |
| OC               | 58.6           | 1  | 58.6         |     |       |
| DAC              | 10.0           | 1  | 10.0         |     |       |
| DOC              | 17.5           | 1  | 17.5         |     |       |
| AOC              | 5.4            | 1  | 5.4          |     |       |
| DAOC             | 12.7           | 1  | 12.7         |     |       |
| Error (within)   | 913.5          | 40 | 22.8         |     |       |
| Total            | 2882.2         | 95 |              |     |       |

Table 9. Summary of analysis of variance of accuracy scores for females.

| Source                  | Sum of Squares | DF | Mean Squares | F    | P      |
|-------------------------|----------------|----|--------------|------|--------|
| <b>Between Subjects</b> |                |    |              |      |        |
| Dogmatism (D)           | 145.0          | 1  | 145.0        | 3.93 | < .10  |
| Anxiety (A)             | 104.1          | 1  | 104.1        | 2.82 | < .20  |
| Order (O)               | 9.3            | 1  | 9.3          |      |        |
| DA                      | 0.1            | 1  | 0.1          |      |        |
| DO                      | 20.3           | 1  | 20.3         |      |        |
| AO                      | 100.3          | 1  | 100.3        | 2.71 | < .20  |
| DAO                     | 60.0           | 1  | 60.0         |      |        |
| Error (between)         | 1476.3         | 40 | 36.9         |      |        |
| <b>Within Subjects</b>  |                |    |              |      |        |
| Congruence (C)          | 42.6           | 1  | 42.6         | 3.06 | < .10  |
| DC                      | 126.1          | 1  | 126.1        | 9.07 | < .005 |
| AC                      | 6.1            | 1  | 6.1          |      |        |
| OC                      | 2.1            | 1  | 2.1          |      |        |
| DAC                     | 1.0            | 1  | 1.0          |      |        |
| DOC                     | 20.1           | 1  | 20.1         |      |        |
| AOC                     | 21.9           | 1  | 21.9         |      |        |
| DAOC                    | 6.1            | 1  | 6.1          |      |        |
| Error (within)          | 556.0          | 40 | 13.9         |      |        |
| Total                   | 2697.3         | 95 |              |      |        |

less affected by the introduction of incongruence than were the high dogmatic females. It appears that the predicted effect of incongruence on high dogmatics holds primarily only for women.

#### Like-Dislike Scale

Reference to Table 10 informs us that there is a difference in the amount of acceptance or rejection of the film personalities between the closed and open subjects that approaches significance ( $p < .10$ ). A comparison of the mean scores of the two groups (Table 11) indicates that the closed subjects were more rejecting of the film personalities than were the open subjects.

The congruence condition had a significant ( $p < .01$ ) effect on both groups, resulting in lowered scores for the incongruence condition. The interaction between Dogmatism and Congruence was not found to be significant, and neither the sex nor anxiety variables had any significant effect on this scale (Table 10).

The interaction between Dogmatism and Order was significant at the .05 level. Table 12 shows that the acceptance-rejection scores of the closed subjects was less in the condition where incongruence was presented first and congruence second than when this order was reversed; i.e., they were more

Table 10. Summary of analysis of variance of the like-dislike scale (acceptance-rejection scores).

| Source                  | Sum of Squares | DF  | Mean Squares | F    | P     |
|-------------------------|----------------|-----|--------------|------|-------|
| <b>Between Subjects</b> |                |     |              |      |       |
| Dogmatism (D)           | 50.0           | 1   | 50.0         | 2.95 | < .10 |
| Anxiety (A)             | 0.6            | 1   | 0.6          |      |       |
| Sex (S)                 | 4.1            | 1   | 4.1          |      |       |
| Order (O)               | 0.4            | 1   | 0.4          |      |       |
| DA                      | 6.8            | 1   | 6.8          |      |       |
| DS                      | 22.7           | 1   | 22.7         |      |       |
| DO                      | 72.5           | 1   | 72.5         | 4.27 | < .05 |
| AS                      | 2.5            | 1   | 2.5          |      |       |
| AO                      | 5.9            | 1   | 5.9          |      |       |
| SO                      | 26.9           | 1   | 26.9         |      |       |
| DAS                     | 14.0           | 1   | 14.0         |      |       |
| DAO                     | 21.3           | 1   | 21.3         |      |       |
| DSO                     | 1.8            | 1   | 1.8          |      |       |
| ASO                     | 42.3           | 1   | 42.3         |      |       |
| DASO                    | 70.1           | 1   | 70.1         | 4.13 | < .05 |
| Error (between)         | 1356.8         | 80  | 17.0         |      |       |
| <b>Within Subjects</b>  |                |     |              |      |       |
| Congruence (C)          | 60.8           | 1   | 60.8         | 7.71 | < .01 |
| DC                      | 15.2           | 1   | 15.2         |      |       |
| AC                      | 0.1            | 1   | 0.1          |      |       |
| SC                      | 4.0            | 1   | 4.0          |      |       |
| OC                      | 18.7           | 1   | 18.7         |      |       |
| DAC                     | 3.2            | 1   | 3.2          |      |       |
| DSC                     | 0.2            | 1   | 0.2          |      |       |
| DOC                     | 6.0            | 1   | 6.0          |      |       |
| ASC                     | 0.6            | 1   | 0.6          |      |       |
| AOC                     | 7.6            | 1   | 7.6          |      |       |
| SOC                     | 1.5            | 1   | 1.5          |      |       |
| DASC                    | 27.9           | 1   | 27.9         | 3.54 | < .10 |
| DAOC                    | 0.9            | 1   | 0.9          |      |       |
| ASOC                    | 2.4            | 1   | 2.4          |      |       |
| DSOC                    | 1.5            | 1   | 1.5          |      |       |
| DASOC                   | 0.0            | 1   | 0.0          |      |       |
| Error (within)          | 631.4          | 80  | 7.9          |      |       |
| Total                   | 2480.7         | 191 |              |      |       |

Table 11. Means and standard deviations for main effects of analysis of variance of like-dislike scale.

| Source      | Mean  | Standard Deviation |
|-------------|-------|--------------------|
| Dogmatism   |       |                    |
| High        | 15.07 | 3.52               |
| Low         | 16.09 | 3.63               |
| Congruence  |       |                    |
| Congruent   | 16.15 | 3.38               |
| Incongruent | 15.02 | 3.78               |
| Sex         |       |                    |
| Male        | 15.44 | 3.72               |
| Female      | 15.73 | 4.29               |
| Anxiety     |       |                    |
| Anxious     | 15.53 | 3.67               |
| Non-Anxious | 15.64 | 3.55               |
| Order       |       |                    |
| First Set   | 15.63 | 3.78               |
| Second Set  | 15.54 | 3.44               |

Table 12. Interaction of dogmatism with order (acceptance-rejection scores).

|                                  | High D | Low D |
|----------------------------------|--------|-------|
| Congruence 1st, Incongruence 2nd | 15.49  | 15.58 |
| Incongruence 1st, Congruence 2nd | 14.50  | 16.75 |

rejecting in the former condition. When we look at the scores of the open subjects we see, first, that in both conditions their scores are higher. They were more accepting than the closed subjects. Secondly, we note that the pattern of the open subjects' scores was the reverse of the closed subjects. That is, the scores of the open subjects' increased when the incongruent condition was presented first.

Since the lowest mean score in the table was for the closed subjects in the condition where incongruence was presented first, it would seem that for them, an initial exposure to people of incongruent beliefs had a "carry over" effect to the congruence condition resulting in an over-all lowering of their acceptance scores. This was not true of the open subjects.

The significance of the two fourth order interactions; Dogmatism by Anxiety by Sex by Order (.05) and Dogmatism by Anxiety by Sex by Congruence (.10) are indicative of the lack of clear pattern of the higher order interactions of the accuracy scores. Therefore they will be discussed only briefly.

With regard to the Dogmatism by Anxiety by Sex by Order interaction, reference to Table 13 shows us that on six out of the eight pairs of means, the open subjects were more accepting of the film personalities than were the closed

subjects. On one pair there was no essential difference, and one pair was in the "wrong" direction.

In the Dogmatism by Anxiety by Sex by Congruence interaction (Table 14), again, the open subjects attained higher scores than the closed subjects on six of the eight pairs of means. When congruence is used as the pivot for comparisons we see that the closed subjects have a uniformly lower score than the open subjects in the belief incongruence condition on all four pairs of means where congruence and incongruence are compared.

The open subjects were more variable, with half their scores higher when congruence was present and half when incongruence was present. Thus the presence of incongruence seems to have a more far-reaching effect on the closed subjects with regard to their acceptance or rejection of the film personalities.

#### Summary of Results

Closed subjects were found to be significantly less accurate in their ability to perceive and understand the film personalities than were the open subjects. They were also more rejecting of them than were the open subjects.

The congruence-incongruence variable had a significant effect on both the accuracy and acceptance-rejection measures

Table 13. Dogmatism compared against anxiety, sex, and order  
(means of acceptance-rejection scores).

|                                        | High D | Low D |
|----------------------------------------|--------|-------|
| Anx., Male, Cong. 1st-Incong. 2nd      | 13.66  | 16.41 |
| Anx., Male, Incong. 1st-Cong. 2nd      | 15.00  | 16.00 |
| Anx., Female, Cong. 1st-Incong. 2nd    | 14.58  | 16.91 |
| Anx., Female, Incong. 1st-Cong. 2nd    | 16.75  | 14.08 |
| NonAnx., Male, Cong. 1st-Incong. 2nd   | 14.91  | 18.41 |
| NonAnx., Male, Incong. 1st-Cong. 2nd   | 14.75  | 14.33 |
| NonAnx., Female, Cong. 1st-Incong. 2nd | 14.83  | 15.25 |
| NonAnx., Female, Incong. 1st-Cong. 2nd | 15.25  | 17.33 |

Table 14. Dogmatism compared against anxiety, sex and  
congruence (means of acceptance-rejection scores).

|                          | High D | Low D |
|--------------------------|--------|-------|
| Anx., Male, Cong.        | 15.83  | 16.16 |
| Anx., Male, Incong.      | 12.83  | 16.25 |
| Anx., Female, Cong.      | 16.50  | 15.75 |
| Anx., Female, Incong.    | 15.65  | 15.25 |
| NonAnx., Male, Cong.     | 15.25  | 17.33 |
| NonAnx., Male, Incong.   | 14.41  | 15.41 |
| NonAnx., Female, Cong.   | 16.08  | 16.25 |
| NonAnx., Female, Incong. | 14.00  | 16.33 |

of the closed and open subjects, with decreased accuracy and increased rejection characteristic of both groups in the belief incongruent condition.

Sex differences were found between the open and closed subjects in their accuracy ratings, but none were evidenced on the acceptance-rejection measure. When these sex differences were explored further it was discovered that while the closed male subjects were only slightly more adversely affected by the incongruence condition in their accuracy ratings than were open males, the closed females' accuracy scores were lowered to a significant extent.

Thus while the Dogmatism by Congruence interaction was in the predicted direction, i.e., closed subjects' accuracy scores more adversely affected than open subjects by the belief incongruent condition, the effect was significant only for women. Also, females as a whole were more accurate in their judgments of the film personalities than were the males.

No differences were found with regard to the Dogmatism by Congruence interaction on the acceptance-rejection measures. The Dogmatism by Order interaction was significant at the .05 level.

The anxiety variable had no important effect on the accuracy or acceptance-rejection scores for either the closed or open groups.



## CHAPTER VI

### DISCUSSION OF RESULTS

In previous research relatively closed people have been shown to differ consistently from relatively open people in the way they approach conceptual, perceptual, ideological and esthetic experiences and situations. The results of the analysis of both scales in the present study lend support to a widening of the applicability of the openness-closedness concept to the affective interpersonal area.

The trend of the results point to consistent differences between the two groups, with the closed subjects less accurate in their judgments of others, and on the whole manifesting less acceptance of them, as compared to the open subjects. This finding is in line with the above noted research in that the differences between the open and closed groups in those studies was always in the direction of the closed subjects manifesting a lesser capacity to "entertain" different systems of beliefs, of their approaching new experiences with more rigidly preconceived sets and thus with relatively lesser flexibility.

### Accuracy Judgments Related to the Dogmatism Variable

Let us first look a little more closely at the accuracy judgments. The subjects were required to view a brief filmed bit of behavior of people they had never seen before, and were then asked to "put themselves in the shoes" of these people. The subjects were then required to predict how the film people responded or felt about a wide range of situations not included in the small segment of behavior seen in the film.

This task can be seen as involving the collaboration of at least three processes. First, it is necessary to be able to "take in" or consider all the significant reality aspects of the behavior that actually occurred. The less need there is to narrow the perceptual field, the more information will be available on which to base an accurate judgment. Second, some capacity for putting oneself in the others' place must be present. The more one is able to temporarily adopt the film person's frame of reference and way of believing, the better one should be able to accurately predict how that person will react or feel. Third, the greater the capacity to synthesize the information received and then make inferences based on the seen behavior, but necessarily going beyond it, the more accurate should be the judgments

or predictions.

With reference to the first process, we have seen in the aforementioned Gollin (23) experiment, that certain types of personalities or cognitive structures have a tendency to eliminate from their consideration certain clearly present aspects of the behavior they have seen, whereas other kinds of personalities seem to be able to be more comprehensive in their perceptions. In Else Frenkel-Brunswik's analysis she pointed out the need of high authoritarian people to simplify their milieu because of intolerance of ambiguity. For example, in both the Jones (29) and Scodel and Mussen (48) researches the high authoritarian subjects brought a high degree of pre-conceived notions of the stimulus subjects with them, and projected them into the experimental situation. This hampered their ability to experience the many sidedness of the persons they encountered. One result of this was a lessened accuracy in interpersonal perception for the high as compared to the low authoritarian subjects.

In the theory of the open and closed mind, which is an extension and broadening of the work on the "Authoritarian Personality," similar kinds of narrowing processes for closed as compared to open subjects are presumed to occur.

In Mikol's experiment (35) certain portions of the new (musical) experience were not "seen" or attended to, to a

greater extent for closed as compared to open subjects.

In another study (45) where a hypothetical "Denny Doodlebug" was placed in a world which was governed by rules different from the everyday world, closed subjects had much greater difficulty than open subjects in accepting all the rules by which the "Doodlebug" was governed. They eliminated a part of stimuli, i.e., those rules which they had difficulty in integrating with their own belief system.

The above can thus be used as a framework for explaining the obtained differences in accuracy of interpersonal perception appearing in this research. The structural personality qualities which necessitated greater reliance on a more narrow filtering system resulted in the increased probability of greater perceptual simplification and distortion of the segments of behavior seen in the film, for closed as compared to open subjects.

We now turn to the second process which involves temporarily adopting a different way of thinking so as to "empathize" more effectively with the other person.

In discussing the gamut of experimental problems to which the open and closed subjects were exposed, Rokeach, in partial summary, stated:

. . . All these different tasks are seen to have something structural in common. They all involve a new belief system that is at odds with a previously held

belief system. To deal with such tasks in terms of intrinsic requirements entails a willingness to relinquish old systems, and a capacity to entertain and enjoy new systems. . . . (42, p. 286).

He goes on to say that the nature of open belief systems as compared to closed belief systems, is that open systems seem to be characterized by more willingness to "play along" or entertain new systems of thought or experience to a greater extent than closed systems.

Another factor posited as a hinderance in the capacity to temporarily take another point of view is the amount of predisposition toward isolation within a system. The greater the isolation of beliefs within a system the smaller is the possibility of positive transfer from one system to another. This greater degree of isolation within belief systems has been noted as one of the defining characteristics of closed subjects.

A more speculative point arises. Halpern's study (25) concluded that people with broader psychological experiences and more open personality structures are better able to experience a wider variety of feelings across different types of people. If it follows that closed people have a generally narrower range of potential for experiencing new phenomena, then their capacity to understand and "feel with" a broad range of people should be less than those more open in their personality structure.

Finally we turn to the synthesis and inference process posited as a third factor involved in making accurate interpersonal judgments.

In the aforementioned experiment with the Doodlebug, subjects were presented with a series of hints to help them determine how the bug arrived at a certain location. In order for them to solve the problem it was necessary for them to synthesize each hint so as to form a new but internally consistent belief system. The open and closed groups differed significantly in this ability to integrate or synthesize the hints, with the open subjects more effective than the closed subjects.

In the study by Levy (32) it will be recalled that the subjects had to infer or imagine how the reconstructed design would look before it was reconstructed. With the intelligence factor controlled, significant differences between the groups were found in favor of the open subjects in solving this task. That is, the closed subjects had greater difficulty than the open subjects in going beyond the immediately given, and in making the necessary inferences.

In summary it can be seen that in the light of the present analysis of the posited factors involved in the accuracy judging task, the findings in this research are consistent with the weight of previous experimental evidence

and in general accord with theoretical expectations.

#### Acceptance and Rejection Related to the Dogmatism Variable

On the acceptance-rejection measure the results indicate that the closed subjects have a greater tendency to reject the film personalities than the open subjects.

In one respect this is inconsistent with the theory of belief systems. For the theory states that it is only as the belief system is engaged, i.e., exposed to incongruent beliefs, that the relatively greater stress on protective mechanisms of the closed subjects becomes activated. It is possible that the findings on the acceptance-rejection measure can be accounted for by some unanalyzed difference in questionnaire or test (scale) responding behavior between the open and closed groups.

On the other hand this difference in scale responding behavior must be related to some personality factors. Recall that in the Mikol experiment the open subjects seemed to "enjoy" the new music to a greater extent than the closed subjects. In the Doodlebug problem open subjects seemed to "enjoy" the problem more than closed subjects. The closed subjects spontaneously verbalized more negative remarks about the task. In another study already noted (45) a "generalized misanthropy syndrome" involving a greater

rejection of others was in evidence. These all point to increased rejection by the closed subjects as compared to the open subjects without specifically invoking incongruent beliefs.

It is possible that the unfamiliarity or newness of the stimulus people or tasks, in themselves, resulted in some way, in engaging the dynamics of the closed subjects' belief systems in a negative way to a greater extent than for the open subjects.

Further evidence for this line of reasoning is that in the Mikol experiment the closed subjects responded to the composer in essentially the same negative way as they responded to the composer's music. That is, if the music was new or contemporary, both the music and its composer were reacted to in a rejecting way.

If the closed subjects viewed the composer in a negative manner solely on the basis of his music, this linkage in belief and feeling might manifest itself in other ways. In the present research it is conjectured that the greater rejecting feelings on the part of the closed subjects, as compared to the open subjects toward new others, resulted in the activation of more interfering sets for them. This is a possible added factor in the lessened accuracy in judgment of the closed subjects.

### Relationships of Dogmatism to Congruence and The Confounding Effect of Sex

One of the most crucial variables in terms of bearing out predictions from the theory of belief systems with regard to accuracy of interpersonal perception, is the relationship of dogmatism with congruence. If the theoretical formulations are correct, the differences in accuracy of perception between the open and closed groups should widen when they are exposed to persons known to have beliefs incongruent to their own. The closed subjects should become markedly less accurate while the open subjects should be only minimally adversely affected. This did not occur to any extensive degree. The differences while in the expected direction, were significant at only the .20 level.

In an attempt to understand this a finding emerged that had not heretofore been considered in the theoretical formulations. It was discovered that although the closed subjects' accuracy scores were more adversely affected than the open subjects by the belief incongruent condition, the effect was significant only for women. In a separate analysis of variance for males and females, the dogmatism by congruence interaction was not found to be significant for males, but was highly significant for females (.005).

The setup of the present design precluded a clear

answer to the question as to whether this finding is a result of the dogmatism factor, or more associated with the interpersonal perception variable. More probably it is a combination of both, but the relative contribution of each factor was not determined by this research.

The finding that women are generally more "empathic" than men has appeared in the literature for some time. Jenness (28) reports a significant superiority of females over males in judging emotional expressions using the Rudolph poses. (An atlas containing 680 drawings of faces modified from poses by a German actor.) Other authors (5, 13, 28, 30) also report slight to significant differences in interpersonal accuracy judgments favoring females.

This information of male-female differences points to the wisdom of separating the sexes in any future studies involving the relationship of cognitive style to accuracy of interpersonal perception.

In light of the findings already discussed it is somewhat surprising to discover that the interaction of dogmatism with congruence on the acceptance-rejection measure was not found to be significant. This means that the introduction of the belief incongruent condition did not result in the predicted increase in rejection of the film personalities by the closed as compared to the open subjects.

It is difficult to account for this. One possible

explanation emerges if we look at the level of significance of the congruence-incongruence variable for the Like-Dislike scale. It is significant at the .01 level, indicating that both the open and closed groups tended to rate the interviewee in a less positive or accepting manner when they learned that his (or her) beliefs were incongruent to their own.

In this vein it is important to remember one of the premises of the theory of belief systems that was stated at the outset. It pertains to the non-dichotomous or relative nature of the concept openness-closedness. More specifically, it is related to the fact that all belief systems are organized along the lines of belief congruence regardless of the degree of openness or closedness.

Therefore, with reference to the non-significance of this interaction, it may be that the incongruence instructions were perceived in a more intensely negative way by the open than by the closed subjects. Some slight support of this is seen in the fact that the mean disagreement score (on the issue chosen to arouse incongruence) for the closed subjects was minus 2.68 out of a total of minus three, as compared to the mean disagreement score of minus 2.94 for the open subjects. It is possible that with a numerically larger step scale this difference might have approached significance.

If, in fact, open subjects do have stronger negative feelings on the issue chosen in this research as the incongruence measure, then the relative engagement of the open subject's belief systems would have been proportionately greater. This conceivably could have affected their ratings of the film personalities in such a way as to vitiate the effectiveness of the dogmatism by congruence interaction. Since this points to a lack of clear specificity of the meaning of the incongruence factor for both groups, the above can only be considered speculative. It is another area which is suggestive of further research.

#### The Anxiety Condition

Finally let us look at the anxiety variable. Contrary to prediction it had no important effect on the accuracy or acceptance-rejection scores for either the open or closed group. In the respect that anxiety is presumed to have a disrupting effect on accuracy judgments and to result in a tendency toward increased rejection of others, this finding indicates a lack of corroboration of the research of Kemp and Rokeach (44).

Results similar to the findings of this study with respect to the anxiety variable have been reported by Koons (33). Using the Denny Doodlebug problem, no significant

differences were found between open and closed subjects on the integration of beliefs into a new system in an experimentally induced anxiety situation. It is possible then, that the manifestation of the hypothesized differences in anxiety between the two groups is dependent on the specific processes involved in the experimental problem. That is, the groups may differ in level of anxiety present, and yet performance on a particular cognitive or perceptual task may not be adversely affected by this difference. This is partially borne out by the fact that in the Koons study the closed subjects admitted to significantly more anxiety in the problem-solving situation than did the open subjects, and yet no differences between the groups appeared in the performance of his experimental task, or in the accuracy judgments in the present research.

Two alternative explanations though, are also tenable. First, it may be that the instructions did not, in fact, arouse anxiety. The subjects were invited to record spontaneous comments about any facet of the experiment. There were five comments (three by open, two by closed subjects) which pertained to the subjects' lack of acceptance of the credibility of the anxiety instructions. The references revolved around this theme: "Did you really test high school students last week?" It is possible that other subjects

had similar feelings about this which they did not express.\*

A second alternative revolves around the problem that the intended effect of anxiety may result in an increased involvement to do better, rather than in any disruption of adequacy of performance.

Alper (2) and others state that although the experimenter attempts to orient his subjects toward some particular type of involvement ("ego, task or anxiety"), by the nature of his instructions, he cannot guarantee that the specific type of involvement that was intended will occur.

The fact that the anxiety variable was not adequately controlled then, leaves open too many alternative possibilities for the assertion of any relatively definitive statement with regard to the relationship between the findings of this study and Kemp and Rokeach's work.

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\*These five comments were the only indications that the subjects had any question about the credibility of any of the conditions of the experiment.

## CHAPTER VII

### SUMMARY AND CONCLUSIONS

The purpose of this study was to examine and test some of the implications of the theory of open and closed belief systems in the affective interpersonal areas. A fundamental assumption of this theory is that knowledge of the structure of people's belief systems will lead to an understanding of how many varied types of problems and experiences are approached and dealt with. The majority of the research under this framework has been concerned with differences between open and closed belief systems in conceptual, perceptual, ideological and esthetic spheres of activity.

The present study is an attempt to widen the applicability of the theory to the area of interpersonal perception. In this vein three general hypotheses were formulated.

(1) People with relatively closed belief systems will be less accurate in understanding the feelings of others than people with relatively open belief systems. They will also be less accepting of them. (2) The differences found in hypothesis one will be markedly accentuated when information is presented



about the others which pictures them as having a different and alien (incongruent) belief system from that of the subjects. (3) Under a condition of anxiety the accuracy and acceptance sources of the groups will again be differentially affected, with the relatively closed people becoming less accurate and less accepting of the others than the relatively open people.

Ninety-six subjects who had scored at the extreme ends of the dogmatism scale, the measure of open and closed belief systems, were exposed to six brief filmed interviews of people they had never seen before. The films were presented on eight separate nights. After the film viewing the subjects were asked to predict (or more accurately postdict) how the interviewees had responded to personality questionnaires, and were also asked to rate the interviewees on a like-dislike dimension.

The congruence-incongruence situations were set up by first determining the subjects' beliefs on a series of issues. These issues were tapped by means of filler questions inserted in a random fashion within the dogmatism scale. Then, prior to each film presentation the subjects were told that certain of the interviewees professed strong beliefs which were known to be either extremely incongruent or congruent to those of the subjects. This was determined

on the basis of the subjects' responses to the filler questions.

The anxiety condition was evoked by instructions to the subjects to the effect that accuracy in judging others was related to intelligence. As a further measure the subjects were also told during the course of their judging that their rating scores were quite poor and inaccurate.

The presentation of conditions (congruence-incongruence and anxiety-non anxiety) occurred in counterbalanced order. Thus both the closed and open groups were equally exposed to all the experimental conditions, with the order of presentation of each variable controlled.

No significant differences were found between the groups in age, intelligence as measured by the CQT, and in similarity to the interviewees.

The results of the experiment were analyzed by the analysis of variance technique and by t-tests. It was found that relatively closed subjects were significantly less accurate in their ability to perceive and understand the film personalities than were relatively open subjects. The closed subjects were also more rejecting of the film persons than were the open subjects.

The introduction of the belief incongruence condition resulted in the predicted differential decrease in accuracy judgment scores of the closed as compared to the open



subjects, but not to a significant extent. When the reason for this lack of predicted significance was explored further it was discovered that the incongruence variable was significant only for females. This sex difference was posited as the probable reason for the lack of significance of this interaction. It was also found that females were generally more accurate in their interpersonal judgments than males.

The anxiety variable had no important effect on any of the conditions in this experiment. This was explained primarily as due to lack of adequate control over the intended effect of the anxiety instructions on the subjects. More specifically, it was suggested that certain of the subjects possibly became more motivated, rather than more disrupted in their performance. The fact that this may have affected the closed and open groups in an uncontrolled way made it difficult to relate the findings of this research to other studies bearing on this question.

In conclusion, Rokeach has stated that he believes the dogmatism scale to be a measure of the extent to which the total mind is an open or closed one. This study generally lends support to the extension of the concept of openness-closedness to the area of interpersonal perception.

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## APPENDICES

## APPENDIX A

DOGMATISM SCALE WITH FILLER ITEMS\* (STARRED)

LAST NAME \_\_\_\_\_ FIRST NAME \_\_\_\_\_ AGE \_\_\_\_\_

The following is a study of what the general public thinks and feels about a number of important social and personal questions. The best answer to each statement below is your personal opinion. We have tried to cover many different and opposing points of view; you may find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others, and perhaps uncertain about others; whether you agree or disagree with any statement you can be sure that many people feel the same as you do.

Mark each statement in the left margin according to how much you agree or disagree with it. Please mark every one. Write +1+2+3 or -1 -2 -3 depending on how you feel in each case.

+1: I AGREE A LITTLE

-1: I DISAGREE A LITTLE

+2: I AGREE ON THE WHOLE

-2: I DISAGREE ON THE WHOLE

+3: I AGREE VERY MUCH

-3: I DISAGREE VERY MUCH

- \_\_\_\_\_ 1. A person who thinks primarily on his own happiness is beneath contempt.
- \_\_\_\_\_ 2. The main thing in life is for a person to want to do something important.
- \_\_\_\_\_ 3.\* The best way to raise children is with the least amount of parental interference.
- \_\_\_\_\_ 4. In a discussion I often find it necessary to repeat myself several times to make sure I am being understood.
- \_\_\_\_\_ 5. Most people just don't know what's good for them.
- \_\_\_\_\_ 6.\* I feel strongly for admitting Red China into the United Nations.
- \_\_\_\_\_ 7.\* Things would be much easier for us all if our government would make all those decisions that we have to make for ourselves.
- \_\_\_\_\_ 8. In times like these, a person must be pretty selfish if he considers his own happiness primarily.

- \_\_\_ 9.\* The only way to make sure that certain crimes are not committed again and again is to punish the offender with the death penalty.
- \_\_\_ 10.\* Modern abstract painting is a different form of expression than the styles of the old masters, but is as truthful and as meaningful as they were.
- \_\_\_ 11. A man who does not believe in some great cause has not really lived.
- \_\_\_ 12. Those freedom riders deserve to be thrown in jail.
- \_\_\_ 13. I'd like it if I should find someone who would tell me how to solve my personal problems.
- \_\_\_ 14.\* Europeans criticize the U.S. and its materialism, but such criticism is only to cover up their realization that American culture is far superior to their own.
- \_\_\_ 15. Of all the different philosophies which have existed in this world there is probably only one which is correct.
- \_\_\_ 16.\* The John Birch society is as wrong as McCarthy was.
- \_\_\_ 17. It is when a person devotes himself to an ideal or a cause that his life becomes meaningful.
- \_\_\_ 18.\* A man's moral decisions should be based on what he feels is right, and not on any outside authority such as the church.
- \_\_\_ 19. There are a number of persons I have come to hate because of the things they stand for.
- \_\_\_ 20.\* I believe that socialists are at the very least, misguided, and are probably close to being fanatic.
- \_\_\_ 21. In this complicated world of ours the only way we can know what is going on is to rely on leaders or experts who can be trusted.
- \_\_\_ 22.\* The U.S. must bow to the rulings of the United Nations even if it means changing our way of looking at things.

- \_\_\_23. There is so much to be done and so little time to do it in.
- \_\_\_24. It is better to be a dead hero than a live coward.
- \_\_\_25.\* There is something very wrong about a white person who marries a negro.
- \_\_\_26. A group which tolerates too much difference of opinion among its members cannot exist for long.
- \_\_\_27.\* A communist victory would not be so great a disaster as the extermination of human life from the H bomb.
- \_\_\_28. It is only natural that a person should have a much better acquaintance with ideas he believes in than with ideas he opposes.
- \_\_\_29.\* Homosexuals should have the severest kind of punishment.
- \_\_\_30. While I don't like to admit this even to myself I sometimes have ambition to become a great person, like Einstein, or Beethoven, or Shakespeare.
- \_\_\_31.\* Students in American schools are too pampered and are never made to work hard.
- \_\_\_32. Though freedom of speech for all groups is a worthwhile goal it is unfortunately necessary at times to restrict the freedom of certain political groups.
- \_\_\_33. If a man is to accomplish his mission in life it is sometimes necessary to gamble "all or nothing at all."
- \_\_\_34.\* Teen-agers should earn all or almost all of their college expenses.
- \_\_\_35. Most people just don't give a "damn" about others.
- \_\_\_36.\* They should make laws restricting labor unions much stricter.
- \_\_\_37. A person who gets enthusiastic about a number of causes is likely to be a "wishy-washy" sort of person.

- \_\_\_38.\* Children should be taught unquestioning obedience to their parents.
- \_\_\_39. To compromise our political opponents is dangerous because it usually leads to a betrayal of our own side.
- \_\_\_40. If given the chance I would do something of great benefit to the world.
- \_\_\_41.\* Cradle to the grave security provided by the government is wrong because it results in loss of desire to do things for yourself.
- \_\_\_42. In times like these it is necessary to be more on guard against ideas put out by certain people or groups in ones' own camp than by those in the opposing camp.
- \_\_\_43.\* I feel strongly against admitting Red China into the United Nations.
- \_\_\_44. In a heated discussion I generally become so absorbed in what I am going to say that I forget to listen to what the others are saying.
- \_\_\_45.\* There is no crime that deserves the death penalty.
- \_\_\_46.\* Modern abstract painting is just a big meaningless splotch of colors.
- \_\_\_47. Once I got wound up in a heated discussion I just can't stop.
- \_\_\_48.\* The freedom riders are doing an important and useful work.
- \_\_\_49. There are two kinds of people in this world; those who are on the side of truth and those who are against it.
- \_\_\_50. Man on his own is a hopeless and miserable creature.
- \_\_\_51.\* The John Birch society is a truly patriotic organization.
- \_\_\_52.\* A man's moral decision can only be based on what his church tells him to believe.

- \_\_\_53. The U.S. and Russia have just about nothing in common.
- \_\_\_54. In the history of mankind there have probably been just a handful of really great thinkers.
- \_\_\_55.\* Socialism is becoming more and more evident in this country, and I believe that this is a sign of real progress.
- \_\_\_56.\* No world organization like the United Nations should have the right to tell Americans what they can or cannot do.
- \_\_\_57. The highest form of government is a democracy and the highest form of a democracy is a government run by those who are most intelligent.
- \_\_\_58. The present is all too often full of unhappiness. It is the future that counts.
- \_\_\_59.\* If a white person loves and then marries a negro, that person has earned my respect and admiration.
- \_\_\_60.\* It would be preferable to die in an H bomb attack than to live under communism.
- \_\_\_61. Unfortunately, a good many people with whom I have discussed important social and moral problems don't really understand what is going on.
- \_\_\_62.\* Homosexuals need understanding of their problem more than anything else.
- \_\_\_63. Fundamentally the world we live in is a pretty lonely place.
- \_\_\_64.\* It is not necessary to give students as much home-work as they do.
- \_\_\_65. It is often desirable to reserve judgment about what's going on until one has had a chance to hear the opinions of those one respects.
- \_\_\_66.\* Teen-agers have too many other interests to worry about earning money for their college education; that's the parents responsibility.

- \_\_\_67. The worst crime a person can commit is to attack publicly the people who believe in the same thing he does.
- \_\_\_68.\* They should make laws restricting business corporations much stricter.
- \_\_\_69.\* Although the U.S. has more material things, the Europeans really have the more mature and advanced culture.
- \_\_\_70. In the long run the best way to live is to pick friends and associates whose tastes and beliefs are the same as ones' own.
- \_\_\_71. Most of the ideas which get published nowadays aren't worth the paper they are printed on.
- \_\_\_72. It is only natural for a person to be rather fearful of the future.
- \_\_\_73. My blood boils whenever a person stubbornly refuses to admit he's wrong.
- \_\_\_74. When it comes to differences of opinion in religion we must be careful not to compromise with those who believe differently from the way we do.

**APPENDIX B**

**ORIGINAL CLINE SCALES**

REV. POSTDICTION No. 5: Mr. G. Guess which way Mr. G.  
behaves in real life.  
Check the one right answer  
for each item.

1. In his social life he:  
☐ (a) enjoys "dress-up" parties.  
☐ (b) entertains informally frequently at home.  
☐ (c) is rather inactive and only rarely goes to social activities.
2. People who know him describe him as being:  
☐ (a) easy to get along with.  
☐ (b) somewhat irresponsible.  
☐ (c) somewhat dominating.
3. He tends to be:  
☐ (a) quite ambitious.  
☐ (b) above average in this regard.  
☐ (c) somewhat indifferent and lazy.
4. When he gets in an argument with his wife he:  
☐ (a) shouts loudly and obscenely at her.  
☐ (b) may occasionally strike her.  
☐ (c) raises his voice a little but maintains good control.
5. In handling his 12-year-old son he is:  
☐ (a) rather strict.  
☐ (b) fairly easy going.  
☐ (c) not too interested.
6. When he goes to a party he:  
☐ (a) tends to flirt with women other than his wife.  
☐ (b) enjoys himself but is not much noticed.  
☐ (c) sometimes gets drunk and then becomes the life of the party.
7. When it comes to money:  
☐ (a) he buys mainly with cash.  
☐ (b) he buys a great deal on credit, but keeps his payments up.  
☐ (c) he buys a great deal on credit and is often late with his payments.

Judge Name or No. \_\_\_\_\_ Person Rated \_\_\_\_\_

THE PERSONALITY TRAIT SCALE

**Instructions:** Below are listed 25 personality traits which can be used to describe people. Read each trait below and then check (✓) the appropriate response as it applies to the person you are rating.

For example: Let's start with the first trait below: COOPERATIVE. If the person you are rating is very cooperative and this is very like him then check under the very like column, No. 1. If he is actually just the opposite or very UNcooperative, then check under the very UNlike column, No. 6. If he is somewhere in-between (as most people are) then check one of the in-between or middle columns.

|                 | 1            | 2              | 3                | 4                  | 5                | 6              |
|-----------------|--------------|----------------|------------------|--------------------|------------------|----------------|
|                 | Very<br>Like | Rather<br>Like | A Little<br>Like | A Little<br>UNlike | Rather<br>UNlike | Very<br>UNlike |
| 1. COOPERATIVE  |              |                |                  |                    |                  |                |
| 2. CONFIDENT    |              |                |                  |                    |                  |                |
| 3. NERVOUS      |              |                |                  |                    |                  |                |
| 4. UNGRATEFUL   |              |                |                  |                    |                  |                |
| 5. ENERGETIC    |              |                |                  |                    |                  |                |
| 6. IMPATIENT    |              |                |                  |                    |                  |                |
| 7. A LEADER     |              |                |                  |                    |                  |                |
| 8. METHODOICAL  |              |                |                  |                    |                  |                |
| 9. MEEK         |              |                |                  |                    |                  |                |
| 10. EGOTISTICAL |              |                |                  |                    |                  |                |
| 11. PERSISTENT  |              |                |                  |                    |                  |                |
| 12. FRIENDLY    |              |                |                  |                    |                  |                |
| 13. AGGRESSIVE  |              |                |                  |                    |                  |                |
| 14. DULL        |              |                |                  |                    |                  |                |
| 15. HAPPY       |              |                |                  |                    |                  |                |
| 16. AMBITIOUS   |              |                |                  |                    |                  |                |

|                  | 1            | 2              | 3                | 4                  | 5                | 6              |
|------------------|--------------|----------------|------------------|--------------------|------------------|----------------|
|                  | Very<br>Like | Rather<br>Like | A Little<br>Like | A Little<br>UNlike | Rather<br>UNlike | Very<br>UNlike |
| 17. EFFICIENT    |              |                |                  |                    |                  |                |
| 18. ORIGINAL     |              |                |                  |                    |                  |                |
| 19. FAIRMINDED   |              |                |                  |                    |                  |                |
| 20. INHIBITED    |              |                |                  |                    |                  |                |
| 21. ANXIOUS      |              |                |                  |                    |                  |                |
| 22. FRANK        |              |                |                  |                    |                  |                |
| 23. LAZY         |              |                |                  |                    |                  |                |
| 24. IMPULSIVE    |              |                |                  |                    |                  |                |
| 25. AFFECTIONATE |              |                |                  |                    |                  |                |

ACL FILM No. 5: Mr. G

Mr. G. has checked one adjective from each pair of adjectives below as being descriptive of himself. You are to check the one (in each pair) you think he checked.

- |                                                                  |                                                                   |
|------------------------------------------------------------------|-------------------------------------------------------------------|
| 1. <u>     </u> (a) tense<br><u>     </u> (b) changeable         | 11. <u>     </u> (a) ingenious<br><u>     </u> (b) tolerant       |
| 2. <u>     </u> (a) contented<br><u>     </u> (b) forceful       | 12. <u>     </u> (a) foolish<br><u>     </u> (b) cynical          |
| 3. <u>     </u> (a) easy-going<br><u>     </u> (b) handsome      | 13. <u>     </u> (a) capable<br><u>     </u> (b) polished         |
| 4. <u>     </u> (a) mannerly<br><u>     </u> (b) friendly        | 14. <u>     </u> (a) affectionate<br><u>     </u> (b) quick       |
| 5. <u>     </u> (a) painstaking<br><u>     </u> (b) good natured | 15. <u>     </u> (a) impatient<br><u>     </u> (b) emotional      |
| 6. <u>     </u> (a) superstitious<br><u>     </u> (b) dependent  | 16. <u>     </u> (a) forceful<br><u>     </u> (b) warm            |
| 7. <u>     </u> (a) moderate<br><u>     </u> (b) artistic        | 17. <u>     </u> (a) clever<br><u>     </u> (b) reasonable        |
| 8. <u>     </u> (a) charming<br><u>     </u> (b) practical       | 18. <u>     </u> (a) suggestible<br><u>     </u> (b) fussy        |
| 9. <u>     </u> (a) witty<br><u>     </u> (b) relaxed            | 19. <u>     </u> (a) robust<br><u>     </u> (b) stable            |
| 10. <u>     </u> (a) steady<br><u>     </u> (b) spunky           | 20. <u>     </u> (a) soft-hearted<br><u>     </u> (b) high-strung |

OPS Film No. 5

Mr. G. answered true or false to each of the questions below. YOU are to guess how he answered each question about himself. Circle T (for true) or F (for false).

- T F 1. I do not always tell the truth.
- T F 2. It takes a lot of argument to convince most people of the truth.
- T F 3. I worry over money and business.
- T F 4. Even when I am with people I feel lonely much of the time
- T F 5. I have had periods in which I lost sleep over worry.
- T F 6. I find it hard to set aside a task that I have undertaken, even for a short time.
- T F 7. I enjoy children.
- T F 8. Sexual things disgust me.
- T F 9. My parents were too strict with me when I was a child.
- T F 10. I seldom have quarrels with the members of my family.
- T F 11. I hate to have to rush when working.
- T F 12. When someone annoys me I don't mind telling him what I think of him.
- T F 13. I have had more unusual experiences than most people.
- T F 14. I take a pretty easygoing and light-hearted attitude toward life.
- T F 15. I would not be afraid to talk back to my boss if I thought he was criticizing me unfairly.
- T F 16. My hardest battles are with myself.
- T F 17. I like to read adventure stories.
- T F 18. I enjoy bull sessions where everyone talks about sex.

- T F 19. I have sometimes refused to do something for someone, not because it amounted to much, but because of the principle of the thing.
- T F 20. I am often the center of attention at a party.

## APPENDIX C

REVISED ACCURACY SCALE  
USED IN THIS RESEARCH

You are going to see five minute film interviews with Mrs. P., Mr. W., and Mrs. N. When the film is over you will be asked questions about their behavior and attitudes. When you answer the questions on the IBM sheets use only spaces 1, 2, and 3. The numbers correspond to the order in which the interviews appeared. That is Mrs. P. (1), Mr. W. (2), and Mrs. N. (3). In other words if the answer to a particular statement is Mr. W. or the person in the second interview, mark the space 2 on the answer sheet. Do all the items and try not to leave any blank.

---

(1) Mrs. P., (2) Mr. W., (3) Mrs. N., filled out a rating scale showing their agreement or disagreement with a series of statements about religious questions. Which person fits the following statement?

1. Most strongly agreed that "God will punish those who disobey his commandments and reward those who obey Him (either in this life or in a future life)."
2. Most strongly agreed with the statement "no one who has experienced God like I have could doubt his existence."
3. Believed that "after death we will ultimately regain our bodies and in a real sense be resurrected."
4. Strongly agreed that "When in doubt, I have usually found it best to stop and ask God for guidance."
5. Most strongly disagreed that "I'm unable to accept the idea of 'life after death' at least not until we have definite evidence there is such a thing."
6. Would also disagree with the above statement.
7. Strongly agreed that "I have sometimes been very conscious of the presence of God."
8. Would also agree with the above statement.
9. Agree that "While I am responsible for my own actions, I feel that God has some definite purpose or role for me to fulfill in life."

(1) Mrs. P., (2) Mr. W., (3) Mrs. N. were each given pairs of words and asked to select the one which they thought was a better description of themselves. Who made the following choices?

10. Efficient, in the pair efficient - precise.
11. Loyal, in the pair loyal - sophisticated.
12. Arrogant, in the pair arrogant - apathetic.
13. Practical, in the pair practical - wholesome.
14. Reliable, in the pair reliable - feminine.
15. Determined, in the pair determined - relaxed.
16. Egotistical, in the pair egotistical - stingy.
17. Nervous, in the pair nervous - selfish.
18. Rational, in the pair rational - painstaking.
19. Courageous, in the pair courageous - rational
20. Assertive, in the pair assertive - reckless.
21. Tactful, in the pair tactful - enthusiastic.
22. Conservative, in the pair conservative - excitable.
23. Conscientious, in the pair conscientious - excitable.
24. Dependable, in the pair dependable - excitable.
25. Unselfish, in the pair unselfish - cool.
26. Mannerly, in the pair mannerly - humorous.
27. Complicated, in the pair complicated - hasty.
28. Moody, in the pair moody - complaining.
29. Warm, in the pair warm - reflective.
30. Contented, in the pair contented - progressive

- 31. Understanding, in the pair understanding - timid.
- 32. Restless, in the pair restless - unemotional.
- 33. Snobbish, in the pair snobbish - hostile.
- 34. Appreciative, in the pair appreciative - sharp witted.
- 35. Severe, in the pair severe - hard headed.
- 36. Cool, in the pair cool - timid.
- 37. Capable, in the pair capable - obliging.
- 38. Poised, in the pair poised - moderate.
- 39. Active, in the pair active - artistic.

(1) Mrs. P., (2) Mr. W., (3) Mrs. N. were given a series of incomplete sentences. Which of the three completed each of the following sentences in the way underlined?

- 40. Sex is too often considered filthy.
- 41. When I'm criticized I appreciate it.
- 42. I felt most dissatisfied when I didn't do the right thing.

(1) Mrs. P., (2) Mr. W., (3) Mrs. N. were given a series of true-false items. Who answered true to these items?

- 43. My daily life is full of things that keep me interested.
- 44. At parties I am more likely to sit by myself or with just one other person than to join in with the crowd.
- 45. I believe a person should never take an alcoholic drink.
- 46. I am happy most of the time.
- 47. I seem to be about as capable and smart as most others around.
- 48. Policemen are usually honest.
- 49. Sometimes I enjoy hurting people I love.

- 50. I like to visit places where I have never been before.
- 51. I find it hard to set aside a task that I have undertaken, even for a short time.
- 52. I like to read adventure stories.
- 53. I am nearly always on time for appointments.
- 54. I enjoy bull sessions where everyone talks about sex.
- 55. I fall in love rather easily.

(1) Mrs. P., (2) Mr. W., and (3) Mrs. N. were rated by their friends on a series of personality traits. Which was rated as follows?

- 56. least cooperative
- 57. most unfriendly
- 58. least affectionate
- 59. least rebellious
- 60. most practical
- 61. least ambitious
- 62. least careful

Friends of (1) Mrs. P., Mr. W., and (3) Mrs. N. also gave thumbnail sketches of them. Who was described by friends as follows?

- 63. "Somewhat insecure and highstrung"
- 64. "Exceptionally hard working and energetic"
- 65. "In a state of rebellion against all religions"
- 66. "Very conscientious and responsible"
- 67. "Handles money and budgets it extremely well"
- 68. "Maintains quite firm and strict discipline with children"

- 69. "Rather fussy about what he (or she) eats and how it is prepared"
- 70. "Avoids emotional scenes because they make this person feel most uncomfortable"
- 71. "Always on time"
- 72. "Unselfish and interested in pleasing others"
- 73. "Most enjoys creating floral displays and artistic work"
- 74. "Generous and warm hearted"

You are now going to see three more interviews - with Mr. Z. (1), Mr. G. (2), and Mrs. D. (3). You will then be asked questions similar to those in the first part.

---

(1) Mr. Z., (2) Mr. G., (3) Mrs. D. filled out a rating scale showing their agreement or disagreement with a series of statements about religious questions. Which person fit the following statement?

- 75. Least agreed that "God will punish those who disobey his commandments and reward those who obey him (either in this life or in a future life)."
- 76. Most strongly disagreed that "If there is a 'God' it is only an impersonal creative force in the universe."
- 77. Most strongly disagreed that "People don't necessarily need to believe in God in order to live good lives and have a high system of ethics and morals."
- 78. Most strongly agreed that "While God may exist it is quite difficult for me to accept such a fact without some definite proof."
- 79. Least disagreed that "I am unable to accept the idea of 'life after death' at least not until we have definite evidence there is such a thing."
- 80. Most strongly agreed that "God does marvelous things which are called miracles by some."

81. Least agreed that "God does marvelous things which are called miracles by some."
82. Most strongly disagreed that "I have sometimes been very conscious of the presence of God."
83. Most strongly agreed that "I have sometimes been very conscious of the presence of God."
84. Most strongly disagreed that "While I am responsible for my own actions, I feel that God has some definite purpose or role for me to fulfill in life."

(1) Mr. Z., (2) Mr. G., (3) Mrs. D. were each given pairs of words and asked to select the one which they thought was a better description of themselves. Who made the following choices?

85. Versatile, in the pair versatile - witty.
86. Ambitious, in the pair ambitious - charming.
87. Easy going, in the pair easy going - handsome.
88. Honest, in the pair handsome - honest.
89. Peaceable, in the pair enterprising - peaceable.
90. Kind, in the pair insightful - kind.
91. Modest, in the pair modest - resourceful.
92. Practical, in the pair charming - practical.
93. Relaxed, in the pair witty - relaxed.
94. Steady, in the pair steady - spunky.
95. Interests wide, in the pair efficient - interests wide.
96. Original, in the pair quiet - original.
97. Talkative, in the pair boastful - talkative.
98. Foolish, in the pair foolish - cynical.
99. Capable, in the pair capable - polished.

- 100. Forgiving, in the pair forgiving - witty.
- 101. Serious, in the pair flirtatious - serious.
- 102. Forgetful, in the pair forgetful - initiative.
- 103. Shy, in the pair shy - assertive.
- 104. Individualistic, in the pair conservative - individualistic.
- 105. Spontaneous, in the pair spontaneous - attractive.
- 106. Adventurous, in the pair adventurous - bossy.
- 107. Sincere, in the pair sincere - original.
- 108. Cooperative, in the pair cooperative - charming.
- 109. Strong, in the pair wise - strong.
- 110. Impulsive, in the pair forgetful - impulsive.
- 111. Stable, in the pair robust - stable.
- 112. Mannerly, in the pair mannerly - versatile.
- 113. Helpful, in the pair helpful - painstaking.
- 114. Considerate, in the pair considerate - sharp witted.

(1) Mr. Z., (2) Mr. G., (3) Mrs. D. were given a series of incomplete sentences to complete. Which of the three completed each of the sentences in the way underlined?

- 115. When it comes to jokes I can't remember them.
- 116. If I can't get what I want I wait.
- 117. When they offered me help I accepted.
- 118. I felt my lack of success was due to not getting along well with people.
- 119. I enjoy sports.
- 120. I enjoy being with people.

- 121. When they didn't invite me I knew they had a reason.
- 122. I am most anxious about world peace.
- 123. I am most anxious about my personality.
- 124. Religion seems to me necessary and important.

(1) Mr. Z., (2) Mr. G., (3) Mrs. D. were given a series of true-false items. Who answered true to these items?

- 125. I have often had to take orders from someone who did not know as much as I did.
- 126. My mother or father often made me obey even when I thought that it was unreasonable.
- 127. I have had periods in which I lost sleep over worry.
- 128. A large number of people are guilty of bad sexual conduct.
- 129. It makes me uncomfortable to have a lot of people around me.
- 130. I am happy most of the time.
- 131. I like to visit places I have never been before.
- 132. My hardest battles are with myself.
- 133. Policemen are usually honest.

Who answered false to the following items?

- 134. At times I have a strong urge to do something harmful or shocking.
- 135. I hate to have to rush when working.
- 136. Sometimes I enjoy hurting people I love.
- 137. I would not be afraid to talk back to my boss if I thought he was criticizing me unfairly.
- 138. It is easy for me to talk to strangers.

(1) Mr. Z., (2) Mr. G., (3) Mrs. D. were described by their friends. Who was described as follows?

- 139. "Emotionally possessed of considerable mood swings (happy or unhappy)."
- 140. "Loyal, honest, and kind."
- 141. "Raises voice a little but maintains control in family arguments."
- 142. "Is shy and reserved at parties."
- 143. "Does quite poorly in speaking to groups."
- 144. "Is a rather quiet and humble person."
- 145. "Helps people with their problems quite often."
- 146. "Resents family criticism and gets upset."
- 147. "At parties has a good time but is not much noticed."
- 148. "Doesn't want to be just ordinary, so 'writes'."
- 149. "Prefers going steady with one person."

## APPENDIX D

### LIKE-DISLIKE SCALE

In addition to figuring out what kind of person the film interviewee is, we would also like you to express your own feelings with regard to how he impresses you personally. That is, to what degree you can see yourself as being friends or not being friends with that particular person. . . . Below is a scale numbered from 1 - 9 which you are to use as a guide. Circle the number which best expresses your preference for each of the six film interviewees.

I can't see  
myself being friends  
with such a person.

I can very easily  
see myself being friends  
with such a person.

|         |   |   |   |   |   |   |   |   |   |
|---------|---|---|---|---|---|---|---|---|---|
| Mrs. P. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Mr. W.  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Mrs. N. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Mr. Z.  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Mr. G.  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Mrs. D. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

APPENDIX E

SIMILARITY SCALE

LAST NAME \_\_\_\_\_ FIRST NAME \_\_\_\_\_ AGE \_\_\_\_\_

This questionnaire has to do with your feelings about yourself and your behavior. Circle T (for True) or F (for False), depending on whether you feel the statement is mostly true or mostly false for you. Please answer each one even if it is difficult to make a choice on some of the questions.

- T F 1. My daily life is full of things that keep me interested.
- T F 2. I worry over money and business.
- T F 3. I am happy most of the time.
- T F 4. I easily become impatient with people.
- T F 5. I seem to be as capable and smart as most others around.
- T F 6. When I am feeling very happy and active, someone who is blue or low will spoil it all.
- T F 7. I have had periods in which I lost sleep over worry.
- T F 8. I like to visit places where I have never been before.
- T F 9. I find it hard to set aside a task that I have undertaken even for a short time.
- T F 10. A large number of people are guilty of bad sexual conduct.
- T F 11. I sometimes keep on at a thing until others lose patience with me.
- T F 12. I frequently ask people for advice.
- T F 13. I have never been in love with anyone.
- T F 14. Sometimes I enjoy hurting people I love.
- T F 15. At times I think I am no good at all.
- T F 16. My relatives often take my side in arguments.

- T F 17. I have had more unusual experiences than most people.
- T F 18. I like to read adventure stories.
- T F 19. I enjoy reading about history.
- T F 20. If a friend asked me for something I didn't have, I would just tell him I didn't have it.
- T F 21. I have nightmares every few nights.
- T F 22. I have often had to take orders from someone who did not know as much as I did.
- T F 23. It takes a lot of argument to convince most people of the truth.
- T F 24. No one cares much what happens to you.
- T F 25. At times I have a strong urge to do something harmful or shocking.
- T F 26. My mother or father often made me obey even when I thought it was unreasonable.
- T F 27. I believe that a person should never take an alcoholic drink.
- T F 28. I practically never blush.
- T F 29. When someone annoys me I don't mind telling him what I think of him.
- T F 30. I hardly ever get excited.
- T F 31. I do not always tell the truth.
- T F 32. I find it hard to set aside a task I have undertaken even for a short time.
- T F 33. Sexual things disgust me.
- T F 34. I hate to have to rush when working.

- T F 35. I take a pretty easy-going, light-hearted attitude toward life.
- T F 36. I have had more unusual experiences than most people.
- T F 37. Even when I am with people I am lonely much of the time.
- T F 38. I enjoy bull sessions where everyone talks about sex.
- T F 39. I seldom have quarrels with members of my family.
- T F 40. My hardest battles are with myself.
- T F 41. I have a good appetite.
- T F 42. I refuse to play some games because I am not good at them.
- T F 43. I enjoy children.
- T F 44. It makes me uncomfortable to have a lot of people around me.
- T F 45. It is easy for me to talk to strangers.
- T F 46. I don't like it when people don't notice me.
- T F 47. If a person has enough money he can fix anything with the law courts.
- T F 48. I like to be the center of attention.
- T F 49. Policemen are usually honest.
- T F 50. My parents were too strict with me as a child.

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