GROUP AND INDIVIDUAL SANCTIONING BEHAVIOR AS A FUNCTION OF ATTITUDE SIMILARITY-DISSIMILARITY WITH THE RECIPIENT OF THE PUNISHMENT

By

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Abstract of Dissertation Presented to the Graduate Council of the University of Florida in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

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By

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The purpose of the present investigation was to assess the effects of attitude similarity-dissimilarity between a bogus defendant and subjects acting as judges or jurors on the administration of sanctions in both individual and group decision making situations. It was hypothesized that when the subjects and a defendant accused of a crime were similar in attitudes, lighter negative sanctions would be recommended and less certainty of the defendant's guilt would be exhibited than when they were dissimilar in attitude. Furthermore, it was hypothesized that when groups reached a consensus on their sanctioning decisions an extremity shift in sanctions would occur. Specifically, groups holding similar
opinions to those of the defendant were predicted to recommend lighter negative sanctions and show less certainty concerning the defendant's guilt than the average of the group members' prediscussion positions, and groups which held dissimilar opinions to those of the defendant were predicted to recommend heavier negative sanctions and to display more certainty of the defendant's guilt than the average of the group members' prediscussion positions.

The subjects were presented a tape recorded interview with an individual accused of a crime. The content of the interview was designed to reflect attitudes held by the interviewee which previous testing revealed were in agreement or disagreement with those of the members of the population from which the subject sample was drawn. After the subjects listened to the tape recording they were asked to recommend the sanctions which should be applied to the defendant and to state their certainty of the defendant's guilt. The subjects in a given experimental session were divided into an experimental group which was asked to come to a consensus about its recommendation of sanctions and certainty of guilt and a control (statisticized) "group" in which each subject individually performed an irrelevant task and then answered the certainty and sanctioning questions for a second time.

The results confirmed the similarity-sanctioning hypothesis. Lighter sanctions were given to the similar
than to the dissimilar defendants. However, no differences between the similar and dissimilar defendant conditions were found on the certainty of guilt measure.

In the two-group decision making conditions (i.e., groups judging a similar and judging a dissimilar defendant) the group sanctions were significantly lower than the sanctions given by the group members before group discussion. Certainty of guilt, on the other hand, was greater for the group consensus than for the initial decision of the group members for both the similar and dissimilar defendant conditions. However, contrary to the group polarization predictions, there were no interactions observed between defendant similarity-dissimilarity and group versus individual decisions on sanctions or certainty of guilt.
I. INTRODUCTION

One of the factors necessary to the functioning of an organization is the adherence of its members to a certain minimal set of norms. In order to maintain this necessary level of conformity among their constituents, various societies have developed a complex system whereby certain individuals and groups are authorized to administer sanctions to those persons who violate given rules. A recurrent question in assessing such sanctioning systems is whether or not they are "fair," i.e., whether the punishments which are meted out are based on the occurrence of proscribed behavior or are the result of factors extraneous to the cases at hand.

Two problems may arise in the examination of bias in such sanctioning apparatus. Firstly, there may be some disagreement as to which variables are germane to the consideration of appropriate punishment. Secondly, questions may be raised as to whether factors which are generally considered to bring about unfairness in administering punishment exist within a given sanctioning system. The concern of the present study is with two problems of the second type.

In democratic organizations it has traditionally been
considered inappropriate for the political attitudes of an accused to be taken into account in assigning sanctions. In the case where a group renders decisions, if the biases of group members were accentuated in the process of reaching consensus, this would be another factor introducing "unfairness" into the system. For the present investigation, the effect on sanctioning behavior of attitude similarity-dissimilarity between a defendant and simulated jurors and the operation of any shifts in group as compared to individual sanctioning will be of interest.

There is a good deal of research evidence demonstrating that when a stranger exhibits similar attitudes to a subject, he is positively evaluated by the subject and when dissimilar attitudes are shown by the stranger, the subject provides a negative evaluation (Byrne, 1971). If one assumes that there is an evaluative element in sanctioning behavior, it could be hypothesized that the presentation by a defendant of attitudes which are similar to those of the judge or jury will result in lighter punishment than would be the case if dissimilar attitudes were expressed.

Furthermore, the results of recent experiments have suggested that when groups are asked to reach a consensus concerning a question on which there is a dominant attitude, the consensus represents a more extreme position than that taken by the individual members (e.g., Moscovici and Zavalloni, 1969; Myers and Bishop, 1971). It might be hypothesized that where groups hold homogeneous negative
or positive attitudes concerning an individual defendant, their sanctioning tendencies towards the defendant would be accentuated when a group consensus is employed as a means of determining punishment.

Research evidence concerning factors affecting sanctioning behavior should provide interesting implications for the assessment of the present judicial system in the United States. Arguments could be advanced that defendants who held political beliefs which are at odds with the judge or jury could not receive a fair trial. Although the present study is directed to general psychological questions about sanctioning behavior, the results obtained will present data particularly relevant to the operation of judicial decision making systems. Thus, the research approach used in this study is aimed at expanding our knowledge about a psychological phenomenon in a situational context that is relevant to current social issues.

Meehl (1971) notes that judges and legislators have relied on "fireside inductions" or common sense logic about human behavior in making determinations about the proper structure of the legal system. When the behavioral sciences conflict with or provide no information concerning "fireside inductions," there is a need for systematic scientific examination of the law. Meehl (1971) points out, however, that psychology as well as common observations can be in error. He particularly stresses a tendency for social scientists to overgeneralize results from
investigations which are not valid analogues of the legal setting. The Meehl (1971) article was not a condemnation of laboratory studies, but an attempt to provide a caveat in the use of results, especially those generated by studies employing infrahuman subjects. The present study of sanctioning behavior, while directed to general theoretical questions, should provide a partial answer to Meehl's (1971) call for empirical investigation of the juridical decision making process.

In the following pages, the bases for the hypotheses of the present study concerning attitude similarity and sanctioning behavior of individuals and groups will be discussed, the experimental method will be described, the results of the study will be presented, and conclusions about their meaning will be drawn.
II. SIMILARITY AND SANCTIONING

Attitude Similarity and Attraction

Although similarity-dissimilarity between individuals along a number of dimensions (e.g., race, personality) has been shown to influence not only interpersonal attraction but other evaluative responses (cf., Byrne, 1971), the present study will be concerned with the effects of attitude similarity on the evaluative response of sanctioning behavior. The basis for hypotheses about attitude similarity and sanctioning behavior can be derived from the evidence contained in the extensive literature on attitude similarity and interpersonal attraction. The proposition that the greater the similarity of attitudes expressed by a stranger, the greater will be the level of attraction toward the stranger has been demonstrated in both field studies (Newcomb, 1961; Curry and Emerson, 1970) and laboratory investigations (cf., Byrne, 1971).

Early Studies on Similarity-Attraction

Early work aimed at the question of whether similarity of attitudes leads to liking tended to be represented by studies which examined already existing friendship dyads or marriage pairs and correlated the opinions of the dyad
or pair members to determine if they were similar. For example, Winslow (1937) correlated attitudes of friends on a number of topics, such as religion and politics, and concluded that friendship is related to attitude similarity especially for long-standing (six to twenty years) interactions. The obvious difficulty with this type of investigation is that since the measures of attitude similarity and friendship were taken after acquaintance, it is difficult to draw causal inferences from the results. Recent experimental investigations have controlled more precisely the variables involved in the similarity-attraction (S-A) relationship, and have provided better evidence as to the direction of causality.

Field Studies

The major field study on the attitude similarity-attraction relationship was conducted by Newcomb and reported in a series of articles and books (Newcomb, 1956, 1961, 1963). Newcomb (1961) investigated attraction patterns of students whose attitudinal positions on a variety of topics had been assessed prior to their being brought together to live in a specially set aside dormitory. The results showed that at first there was not a strong relationship between friendship choices and attitude similarity but the similarity-attraction relationship strengthened as time passed. The data indicated that the friendship choices as measured at the conclusion of the study bore a striking similarity to those which would be predicted
from a knowledge of the attitudes held by the subjects before their participation in the experiment. Newcomb (1961) concluded that a certain amount of time was needed for the subjects to obtain enough information to accurately assess the others' attitudes. As time passes, the likelihood of any significant new information concerning the attitudes of the other subjects decreases and friendship choices between those of similar attitudes tend to become stabilized.

Unlike the earlier correlational studies, Newcomb's (1961) field experiment allows for the experimental control of the effects of prior acquaintance among subjects and also selection factors which alter the probability of the interaction of given individuals. The fact that the similarity attraction relationship was demonstrated with subjects who were brought together by chance, tended to strengthen the notion that it was attitude similarity between friends, and not selection factors, which was responsible for the attraction patterns observed. Information could also be obtained on the effects of ecological variables (i.e., propinquity) on attraction. Furthermore, the fact that attitudes were measured before the subjects interacted, allowed for the examination of question of whether attitude similarity among friends was the result of congruence among their initial opinions or was brought about by attitude change during the course of their acquaintance. As subject attitudes were stable during
the period of the experiment, an explanation of the results based on any attitude change among friends could be eliminated.

Recently, Curry and Emerson (1970) essentially replicated Newcomb's (1961) study and obtained similar results. However, the use of nine groups in the Curry and Emerson (1970) field experiment permitted the investigation of a variety of parameters (e.g., sex differences) affecting the experimental situation. Specifically, the frequency of testing was not found to affect the S-A relationship. There was an exception to Newcomb's (1961) results for female subjects who displayed such a high level of agreement on the attitude measures employed that there was not enough variation in their attitudes for these differences to produce any differential attraction.

Laboratory Experiments

One of the first laboratory experiments examining the effects of attitude similarity on attraction was conducted by Byrne (1961). In the "Byrne Paradigm" subjects were asked to complete a questionnaire and then presented with a copy of the same questionnaire which was supposedly filled out by another subject. In actuality, the questionnaires were completed by an experimenter in such a way as to reflect a predetermined level of agreement with the opinions of the subject. The subjects were then told that they were participating in a study of "interpersonal prediction" and were then asked to rate the stranger on
an Interpersonal Judgment Scale. Byrne's (1961) Interpersonal Judgment Scale (IJS) included a measure of interpersonal attraction as well as evaluative measures of the stranger's morality, personal adjustment, intelligence and knowledge of current events. The results of this study clearly confirmed the hypothesized relationship between attitude similarity and attraction. The stranger who agreed with 100 per cent of the items was liked better than the stranger who disagreed on 100 per cent of the items.

In a subsequent experiment, Byrne and Nelson (1965) separated the effects of number and proportion of similar attitudes on attraction. The results showed a significant linear relationship between the proportion of similar attitudes and attraction and showed no significant relationship between the absolute number of similar attitudes and attraction. Thus, the crucial variable of the similarity-attraction relationship is not the absolute number of attitude objects on which the stranger expresses agreement, but, rather, it is the ratio of these agreeing attitudes (or attitude items) to those attitudes (or attitude items) on which disagreement is expressed.

Generalizability of Laboratory Results

Different subject samples. -- The ubiquity of similarity-attraction relationship has been demonstrated by the use of the Byrne Paradigm with subject samples drawn
from a wide variety of populations including members of
the Job Corps and hospitalized mental patients (Byrne,
Bond and Diamond, 1969). Byrne and Griffitt (1966) and
Gaynor, Lamberth and McCullers (1972) found that the
similarity-attraction relationship can be obtained with
children as young as five years old, although the typical
linear function was not present with the younger children
who could only distinguish between general agreement or
disagreement. The S-A relationship has also been shown
cross culturally with subjects from Hawaii, India, Japan,
Mexico, and Texas (Byrne, Gouaux, Griffitt, Lamberth,
data obtained by G.F. Mascaro, Ofelia Puig, and the present
author indicated that the S-A relationship also holds for
Cuban-born subjects attending a Florida university.

Measures of attitudes employed. -- Although the survey
of attitudes developed by Byrne (1961) is the instrument
most commonly employed as a means of manipulating stranger
agreement, many other types of attitude measures have been
used for this purpose including a Hammond "error choice"
measure (Mascaro, 1971), a semantic differential question-
naire (Mascaro and Lopez, 1970), and a liberalism conserva-
tivism scale (Jackson and Mascaro, 1971a,b; Mascaro and
Graves, in press). In all of these studies the predicted
S-A relationship was obtained.

Methods of presentation of the strangers' atti-
tudes. -- Methods of presentation of the stranger other than
manipulated questionnaires have recently come into use. These include confederates who pose as other subjects (Brewer and Brewer, 1968) and videotaped presentations of conversations wherein the views of the stranger who is to be rated are expressed (Hendrick, Bixenstein and Hawkins, 1971). Again investigations using these methods produced results confirming the hypothesized S-A relationship. Byrne and Clore (1966) found no significant effect on attraction scores as a result of the use of different modes of stimulus presentation (i.e., mimeographed questionnaires, sound films, and tape recordings).

The manipulation of the presentation of the strangers' attitudes may be directed towards the expression of a specific level of agreement for each subject or it may be centered on presenting strangers who represent "pro" or "con" positions to groups of subjects who hold favorable or unfavorable attitudes on the topic in question. The "standard stranger design" (Griffitt and Byrne, 1970) where general agreement or disagreement with the subject is emphasized has a distinct practical advantage when the stranger's position is presented in modes other than the manipulated questionnaire. For example, it is difficult to make up a videotape for each subject so that the stranger can express attitudes which agree or disagree with the specific positions of that subject. The results of studies using this method (e.g., Byrne, Baskett and Hodges, 1971) parallel those reported in other laboratory
studies confirming the S-A relationship.

**Measures of attraction.** -- Interpersonal attraction has been measured in a number of ways in laboratory experiments dealing with attitude similarity and attraction. The Byrne (1961) Interpersonal Judgment Scale which represents the most commonly employed scales of liking, correlates well with other paper and pencil measures of attraction (Gormly, Gormly and Johnson, 1971). The fact that similar results tend to be obtained with these measures provides a type of "quasi convergent" validity for them.

Behavioral measures of attraction have recently come into use in studies concerned with the S-A relationship. Byrne, Ervin and Lamberth (1970) found that persons matched in a "computer dating" experiment who believed that they were similar in attitudes to their dates rated their dates more positively and stood closer to them while talking to the experimenter than did those subjects who believed that they were dissimilar in attitudes to their dates. A follow up indicated that the subjects who thought themselves to be more similar remembered their partner's names better, talked more with their dates during the interim since the experiment, and had a greater desire to date their partners. Differences in the actual frequency of dating did not reach significance, but the only dates reported were among subjects in the high similarity condition. The incidence of actual dating behavior may be the result of
the conditions under which the subjects met.

Another measure of the level of friendship has been the seating patterns of subjects exposed to strangers expressing similar or dissimilar attitudes. Although Clore (1969) found no significant relationship between stranger agreement and distance in seating, he attributed his results to the fact that the subject seated himself while the stranger (confederate) sat at the same spot and in setting the distance the subject may have become hyperaware of his distance from the confederate. Byrne, Baskett and Hodges (1971) obtained data which indicated that attitude similarity affected seating behavior; although the exact nature of the relationship remains unclear.

Generally, the above findings point to the ubiquity and reliability of the similarity-attraction relationship as examined by laboratory and field studies. Since attraction towards an individual can be thought of as a general positive orientation towards that person, the greater attraction generated by the presentation of similar attitudes may result in greater positive behavior towards the person expressing similar attitudes. Theoretical considerations and empirical evidence, which will be presented subsequently, suggest that such a relationship between attitude similarity and evaluative responses exists.
Attitude Similarity and Evaluative Responses

In their attempts to explain the similarity attraction relationship, some investigators have conceptualized interpersonal attraction as one of a more general class of responses which are elicited upon the presentation by a stranger of similar or dissimilar attitudes to those of the evaluator. Research evidence addressed to the question of an attitude similarity-evaluative response relationship bears on the possible effects of attitude similarity-dissimilarity on the assignment of sanctions.

Theoretical Models of Attitude Similarity and Evaluative Responses

Byrne and Clore (1970) have presented a model in which evaluative responses are a function of the amount of positive or negative affect which is generated in a given situation. The expression of similar or dissimilar attitudes elicits such affect.

Growing out of conditioning models of attitude formation (e.g., those of Lott and Lott, 1969 and Staats and Staats, 1969), the Byrne-Clore model postulated that attraction was generated by Pavlovian conditioning where the UCS is the reinforcing stimuli of attitude statements, the CS is the stranger, and the UCR is an "implicit affective response" which is translated into the response of attraction. It should be noted that because of the past experience of human subjects the UCS which is examined in the experiments is often a CS, the response to which is learned
prior to visiting the psychological laboratory. Thus, higher order conditioning is presumably represented in most attraction situations (Byrne, 1971).

In his discussion of the Byrne-Clore model, Murstein (1971) pointed out that the references to a classical conditioning model by Byrne and Clore (1970) may be inexact in that the UCR should follow rapidly and inevitably as a result of the onset of the UCS (i.e., similar or dissimilar attitudes). This temporal relationship is not commonly observed with the attraction situation; however, empirical evidence to be presented later points out the usefulness of the classical-conditioning notions as a framework for conceptualizing the operation of the S-A relationship.

Byrne and Clore (1970) tested the existence of the conditioned affective response of attraction by simply asking subjects who had listened to tapes of agreeing or disagreeing statements to indicate their general feelings at the time on six evaluative scales of the semantic differential. Agreement engendered higher evaluative scores (i.e., a more positive affect) than did disagreement. In a second experiment, Byrne and Clore (1970) obtained similar results when the subjects provided semantic differential ratings of pictures of same sex individuals who had been paired with a series of tape recorded agreeing or disagreeing statements. Thus, positive affect was elicited towards an object which was paired with the expression of
agreement. A question might be raised as to whether the results of the Byrne and Clore (1970) study could be explained by the fact that the subjects attributed the given attitudes to the stranger and not by the temporal contiguity of picture and statement as postulated by the simple Byrne-Clore model. To deal with this problem Sachs and Byrne (1970) paired a nonhuman or an opposite-sex human picture with a recorded voice expressing varying levels of agreement. Semantic differential ratings of both types of pictures paralleled those in the Byrne and Clore (1970) experiment. A specially designed picture-judgment scale patterned after the Interpersonal Judgment Scale showed a more positive attraction to pictures paired with agreeing statements than to those paired with disagreeing opinions. Such evidence seems to support the validity of Byrne and Clore's (1970) Pavlovian model of the S-A relationship. However, necessary aspects of classical conditioning other than stimulus response contiguity (e.g., extinction) have not been experimentally demonstrated.

The postulate of the Byrne-Clore model that there is a general affect aroused in an individual upon the presentation of agreeing or disagreeing statements has been examined in several studies. Gouaux (1971) demonstrated that the general affective state (i.e., depressed or elated) of the subject had an effect on the S-A relationship. Films designed to either depress or elate the
subject were shown in conjunction with the typical Byrne Paradigm. The data revealed two parallel linear functions for similarity-attraction with the elated subjects showing more positive attraction.

Although not designed to test the same question, studies by Griffitt (1970) and Griffitt and Veitch (1971) provide support for the findings of Gouaux (1971). Griffitt (1970) employed two conditions of room temperature (i.e., normal and hot) and Griffitt and Veitch (1971) used two conditions of population density (i.e., normal and crowded) in their studies of attitude similarity and attraction. The results of these two investigations revealed that the more positive environmental conditions produced more attraction. These findings can be taken to indicate that the affective state of the subject alters his conditionability in an analogous manner to the way that varying amounts of food deprivation affects conditioning experiments using the salivary responses.

In a series of experiments, Lamberth, Gouaux and Padd (1971) investigated further the affect eliciting and reducing properties of agreement-disagreement. Basically it was found that dissimilar attitudes elicited negative affect while similar attitudes did not elicit positive affect as measured by evaluative scales on the semantic differential. In a second experiment using a stimulus of a positive or negative evaluation of the subject by the stranger, positive affect was elicited for positive evaluation and
negative affect appeared with a negative evaluation. Lamberth et al. also employed a control group of subjects who did not evaluate the stranger on the Interpersonal Judgment Scale while the experimental group completed the IJS. The results revealed that the act of filling out IJS tended to reduce affect (i.e., pretest and posttest measures of affect were not significantly different). This finding illustrates the effectiveness of the evaluations of the IJS as a CR. Of course, the fact that the UCS was the personal evaluation of the subject by the stranger instead of the presentation of attitude similarity-dissimilarity limits the strength of the evidence in dealing with the S-A relationship, but the results provide powerful suggestions as to the validity of the Byrne-Clore model. Thus, there is some empirical support for a concept of a general evaluative response which occurs with the presentation of similar-dissimilar attitudes.

Behavioral Tendencies and Attitude Similarity

The early interest of investigators in the relationship between attitude similarity and interpersonal attraction has broadened to include a concern about the general evaluative tendencies towards an individual elicited by the presentation of attitude similarity-dissimilarity. Items on Byrne's (1961) Interpersonal Judgment Scale provide some information on these evaluative tendencies. In Byrne's (1961) earliest study, it was found that the presentation of agreeing attitudes by a stranger resulted in a more positive
rating of the stranger's intelligence, knowledge of current events, morality, and adjustment than when disagreement was shown. Further, in other studies ratings of a stranger's desirability as a date (Byrne, Ervin and Lamberth, 1970) and his desirability as a political candidate (Byrne, Bond and Diamond, 1969) were found to be higher when he expressed similar attitudes.

Recent studies also indicate that more positive behavior is exhibited to a stranger who expresses similar attitudes than to one who presents dissimilar opinions. Baron (1971) manipulated attraction to a confederate by varying attitude similarity and personal evaluation. The confederate then asked subjects to comply with either a small, moderate, or large request. There was more compliance when attraction was high (i.e., when similar attitudes and a positive evaluation were expressed), than when it was low, in the moderate and large requests conditions; but the relationship failed to appear when trivial favors were requested. Apparently the situational constraints in the experiment made people feel compelled to grant a small request no matter what the level of attraction that they held for the requestor, but the evidence from the study still seems to suggest that similarity affects the behavior of granting requests.

Griffitt and Jackson (1970) presented data which indicated that similarity-dissimilarity affected hiring recommendations in a simulated personnel selection procedure.
However, it was also found that the recommended salary bore no relationship to attitude similarity; although the applicant's ability affected the level of suggested compensation. After initial selection took place, the norm of distributive justice (Homans, 1961) seemed to take over. Since it is unlikely that attitude similarity is a valid or generally accepted predictor of job success, the Griffitt and Jackson (1971) study indicates that there is an affective "bias" influencing the personnel selection process.

Golightly, Huffman and Byrne (in press) examined the relationship between attitude similarity and the granting of loan applications in a simulated banking situation employing graduate students in finance as subjects. Golightly et al. (in press) found that the magnitude of loans approved was related to the level of attitude similarity of the subject and "loan applicant." Again it might be noted that attitude similarity between customer and loan officer would not be considered a relevant factor in determining the credit risk involved in the loan application. In fact "bias" in this area might cause the bank to lose a valuable loan client. The type of "bias" indicated in this study might be considered likely to appear in the sanctioning situation.

A series of field experiments has been conducted in which reactions of individuals to persons dressed in a "hippie" or "straight" manner were examined. Although
these studies did not deal with the question of attitude similarity *per se*, they did provide suggestive evidence on the topic because many subjects presumably assumed that being dressed as a "hippie" or "straight" implies that an individual holds certain attitudes. Emswiller, Deaux and Willits (1971) found that individuals acquiesced to requests for a dime to make an important phone call more often when the person requesting the coin was dressed similarly.

In a similar study of the effects of similarity on the behavior of others Suedfeld, Bochner and Wnek (1972) studied the willingness of participants in a peace demonstration to cooperate on a series of requests from a person in "straight" or "hip" clothing who carried either a "Dump Nixon" or "Support Nixon" placard. After the demonstration had become intense, there was more help for individuals displaying the "Dump Nixon" sign. There was no effect for different styles of dress representing "implicit attitudinal similarity or dissimilarity." Perhaps, the fact that a "hippie" was carrying a "Support Nixon" sign caused anti-war demonstrators to conclude the "hippie" dress was not representative of the wearer's attitudes, thus making the dress manipulation meaningless. The notion that assumed similarity of attitudes, and not the dress of the individual requesting a favor, determined the behavior of others towards the requestor finds support in a study by Samuel
He found that "hippie" or "straight" dress made no difference in willingness to approve a copy of the bill of rights, indicating that statements of actual belief tend to outweigh dress factors. These findings have been confirmed in field investigations of voter behavior. Darley and Cooper (1972) studied the "clean for Gene" phenomenon where supporters of Sen. McCarthy who were campaigning tried to appear similar to the voting public to gain their approval. Voters tended to ascribe more radical stances to candidates represented by deviantly dressed individuals. Thus, voters might tend to be "turned off" to these candidates. It was also found that shoppers in a suburban mall were less likely to take a leaflet from a "hippie" and, even if they took it, they were more likely to throw it away without looking at it. Thus, evidence from these studies is congruent with that from other investigations in pointing towards a generalized evaluative response directed to an individual who presents either similar or dissimilar attitudes.

As the results cited above suggest, there are a whole series of behaviors which occur in response to attitude similarity-dissimilarity. As the level of sanctioning can be considered to be a type of evaluative response, it seems reasonable to hypothesize that the presentation of similar attitudes by the person being considered for punishment will result in lower negative sanctions than the presentation of dissimilar opinions. In the next section the evidence which speaks directly to this question will be examined.
Attitude Similarity and Sanctioning

Although the nature of punishment has been extensively examined by psychologists, comparatively little work has dealt with the effect of attitude similarity-dissimilarity on the assignment of sanctions. One line of indirect evidence is contained in two studies where subjects were asked to assume that the person being judged was similar or dissimilar. Lackey (1968) found that the "perceived similar other" was assigned less responsibility for his acts than the "perceived dissimilar other." Shaver (1970) in a simulated jury study asked subjects to assume that they were similar or dissimilar to the defendant and found that assignment of responsibility and perceived negligence were negatively related to similarity. Even though different factors may influence the level of assignment of sanctions (AS) and the attribution of responsibility (AR), Shaw and Reitan (1967) found that AR is the basis for AS. Thus, the evidence from the Lackey (1968) and Shaver (1970) studies provides some indirect support for the notion that similarity affects sanctioning.

Other indirect evidence on the attitude similarity-sanctioning problem can be drawn from studies assessing the role of racial or ethnic similarity between punisher and punished in determining sanctioning behavior. Stokes and Prestholdt (1972) asked white and black college students in the deep South to examine statements about crimes and recommend proper penalties. Both black and white subjects
exhibited significantly more punitiveness to defendants who were not members of their own racial group. In their exhaustive field study of the operation of the American jury, Kalven and Zeisel (1966) found that juries tend to be more lenient than judges except where the defendant was black. When the defendant was black the trend was reversed (i.e., judges were more lenient than jurors). As juries tended to be predominantly made up of whites, this finding indicated that juries tended to behave differently (i.e., were more harsh) towards an individual who was a member of a different racial group. Barreto (1972) compared the sanctioning tendencies of Cuban and "American" high school students in Miami who were presented with simulated depositions describing the facts of a civil litigation where the defendant was either Cuban or American. The results indicated that when the defendant was similar in national origin to the juror he was seen as less negligent and lower damages were assessed against him than when the defendant was dissimilar in nationality. Although important factors of group identification and assumed similarity or dissimilarity along a number of dimensions may have played a part in the results of the investigations cited above, their findings provide some suggestions with regard to sanctioning tendencies in the face of varying levels of attitude similarity. As the work of Rokeach (e.g., Rokeach and Mezei, 1966) has pointed out, assumed dissimilarity of belief exists between a subject and members of other racial
groups and this assumption is an important component of racial prejudice. The assumed dissimilarity of attitude of nonmembers of the subject's racial group may affect his sanctioning tendencies.

In another study where assumed similarity or dissimilarity between juror and defendant may have affected sanctioning tendencies, Landy and Aronson (1969) presented subjects with a description of a simulated case where the defendant was assumed to be "attractive," "unattractive," or "neutral" to the subject. It was found that "attractive" and "neutral" defendants received significantly lighter sentences than did the "unattractive" defendants. However, there was no effect for defendant attractiveness when subjects were asked about certainty of the defendant's guilt. Since the attractiveness of the defendant was defined in terms of the defendant's similarity in values to those represented by persons of middle class socio-economic status in terms of occupational role and moral conduct, there might have been a tendency for the college student subjects to perceive the "unattractive" defendant as being dissimilar to themselves while they might have identified with the attractive defendant.

If one assumes that an individual's occupational group will indicate to others that he holds attitudes characteristic of certain social classes, then occupational group membership might be hypothesized to influence sanctioning. However, Hogarth (1971) in an intensive study of
the sentencing behavior of Canadian judges found that there was no significant relationship between the occupation of the defendant and the penalty which he received. However, the professional role of the judge may cause him to be more aware of factors which might bias his decisions. Thus, the possible biasing effect of using occupation as a determinant of sentence may have been more apparent to judges than the nonprofessionals who make up many groups which administer sanctions.

Mitchell and Byrne (1971) provided a more direct test of the proposition that defendants similar in attitude to judges or jurors will receive lower levels of negative sanctions than defendants who hold dissimilar opinions. Subjects were presented with information concerning a student from another university who had allegedly stolen some examination papers. Included in the packet of data on the student was information on the accused's attitudes (about such topics as drinking, fraternities, etc.) designed to reflect either 0 or 100 per cent agreement with the attitudes of the subject. There was no significant main effect for similarity when the subjects were asked to estimate their certainty of the defendant's guilt. However, there was a significant main effect for similarity on a measure of recommendation of the appropriate severity of punishment. Lighter sanctions were recommended for the hypothetical individual who agreed with the subject than for the person who expressed disagreement. Furthermore, a
comparison of the responses of subjects who held a more common position on the attitude topics used in the experiment with those who held less common beliefs revealed no differences. This result tends to rule out the contention that subjects with whom the defendant disagreed were merely responding to the presentation of viewpoints which deviated from commonly held positions rather than the effects of varying levels of attitude similarity.

Two aspects of the method used in the Mitchell and Byrne (1971) study detract from the generalizability of its results. Firstly, the information concerning the attitudinal position of the accused was presented to the subject as a separate piece of information from the data on the alleged crime, and the attitude topics on which agreement or disagreement was expressed concerned the same issues included in a preexperimental questionnaire which was administered to the subjects. Thus, the attitude manipulation was made salient to the subject and the likelihood of "demand awareness" was probably increased by such procedures. Secondly, in many situations where sanctions are determined (e.g., law courts), information about a defendant's attitudes on topics unrelated to the case would not be brought to the attention of the individuals imposing sanctions. The attitude items in the Mitchell and Byrne (1971) study would probably fall into this category.

The evidence from the literature on attitude similarity and evaluative responses including interpersonal
attraction and sanctioning behavior leads to the hypothesis that persons will recommend heavier sanctions against those who are dissimilar in attitude than for those expressing similar opinions. The present study undertakes to examine the attitude similarity sanctioning relationship in the context of a common sanctioning situation (i.e., the commission of a crime) where the expression of attitudes is incorporated into the presentation of the situation being judged.

Since many groups in our society (e.g., juries and court martial panels) make sanctioning decisions by arriving at a consensus about the appropriate level of punishment to be administered, the possible effects of group decision on sanctioning is particularly relevant to the American system of trials by jury. Although many arguments have been offered in favor of the jury system, no research has been made to demonstrate the "greater impartiality" so commonly attributed to juries. The second part of this study will present a theoretical examination and an empirical test of the sanctioning behavior of groups.
III. GROUP POLARIZATION EFFECTS

Extremity Shifts

The sanctions imposed by groups can be thought of as the result of the effect of group discussion on the attitudes of the group members towards the appropriate penalty to be administered in the given situation. The result of the discussion could be a group opinion which is more neutral, more extreme, or the same as the average of the opinions which were held by the members prior to their interaction. Evidence has recently come to light that when groups reach a consensus on a topic on which there is a dominant attitude held by the members, that consensus is more extreme than the average of the individual opinions of the members before the discussion. Thus, perhaps any "bias" among group members before sanctions are determined should be reflected in an extremity shift in the group's assignment of punishments.

The reports of group polarization of attitudes originated with studies of the effect of group discussion on attitudes involving risk taking behavior. Wallach, Kogan and Bem (1962) obtained results which indicated that when groups discussed problems involving risk, they reached a consensus which recommended greater risk than was
represented by the individual positions of the members. The general publication of the findings on the "risky shift" by Wallach et al. (1962) caused a great deal of interest because the results ran counter to previously held concepts which emphasized an "averaging" effect of group discussion (e.g., Schachter, 1951).

As Pruitt's comprehensive review of the literature on the risky shift pointed out, the concept of the risky shift is too narrow to define the phenomenon involved. A number of workers (e.g., Rabow, Fowler, Bradford, Hofeller and Shibuya, 1966; Stoner, 1963) have observed a conservative shift (i.e., the group's consensus was less risky than the individual decisions) for some problems. As Cartwright (1971) noted, even two of the items on the Choice Dilemmas Questionnaire, which has been used to demonstrate the risky shift, have repeatedly produced cautious shifts. Thus, the topic involved in group discussion seems to determine the nature of attitude shifts.

The work of Moscovici and Zavalloni (1969), Doise (1969) and others has shown that extremity shifts occur with attitude choices which are in areas other than questions involving risk. Thus, Pruitt (1971) recommended the term "choice shifts" to describe the extremity shifts (group polarization effects) which result from group consensus concerning topics where a dominant attitude is held by members of the group. The results of experiments which have extended the concept of choice shifts to attitude
domains other than risk taking behavior form the basis for the hypotheses in the present experiment which concern the effect of group decisions on the sanctions imposed in a group setting.

In order to demonstrate the existence of an extremity shift on nonrisk attitude items, Moscovici and Zavalloni (1969) asked groups of French high school students to come to a group consensus about their attitudes towards deGaulle and towards Americans. These were issues of high involvement for the subjects. It was found that when the mean initial individual decisions of a nominal group were compared with the consensus of the group on the same questions, there was a shift to the extreme in the same direction of favorability or unfavorability as the initial response. Doise (1969) confirmed Moscovici and Zavalloni (1969) results when he asked art school students' opinions about the art schools in Paris. Although he found a significant extremity shift in all conditions, there was a greater shift when the subjects were confronted with presumed opinions of a rival group. Thus, the fact that the increased cohesiveness of the group, in the face of the threat increased the extremity, emphasizes the importance of the group influence.

The lack of a control group in the Moscovici and Zavalloni (1969) and Doise (1969) studies left undetermined the possible effect of the initial administration of the attitude questionnaire on the subsequent responses of the
subjects. However, Myers and Bishop (1970) obtained a polarization effect with an experimental group and no effect with a control group. Johnson (1972) found that there was no difference in ratings when individual decisions were made before or after group discussions which produced extremity shifts. Finally, a study of the effect of the pretest in the risky shift by McCauley, Kogan and Teger (1971) showed that there is a minimal influence of the pretest. These results tend to reduce the probability that the results of the studies can be attributed to instrument effects.

Although a number of theoretical themes have been advanced to explain the polarization effects, they seem to revolve around what Pruitt (1971) terms "value theory" explanations of choice shifts. Developed by Brown (1965) to explicate the risky shift, these theoretical positions are based on the notion that the members of the group are predisposed to hold favorable or unfavorable attitudes to the topic discussed and the group interaction in one way or another brings out these values.

Support for the risk as value hypothesis has been obtained from studies which have demonstrated that greater choice shifts occurred when the subjects originally held more extreme positions (i.e., subjects possessed more strongly held values) on a given topic. A positive relationship has been noted between the initial level of risk and the extent of the risky shift (Teger and Pruitt, 1967). Further, it was found that a risky shift occurred when only
information about the subject's earlier position (and hence the values which he held) was revealed. Thus, the group-held values of risk seemed to be important factors in determining risky shifts.

One explanation of the value hypothesis has been based on an information exchange notion which postulates that the group discussion allows for the exchange of data among the subjects about the true nature of the values which they hold. Levinger and Schneider (1969) asked subjects to state what position on the Choice Dilemmas Questionnaire they felt their fellow students would take and what choices they most admired. For the items where risky shifts have traditionally been found, subjects estimated that their fellow students' choices would be more conservative than their own but placed their most admired choice in a more risky category. These data might be taken as support for a notion that subjects value risk but feel constrained in expressing such sentiments because of a pluralistic ignorance of others' values. The group discussion results in a risky shift because it provides the subject with information about the norms held by the other members. Such notions have been generalized to cover choice shifts on nonrisk attitude questions on which dominant attitudes are held by the group members.

Myers and Bishop (1970) examined an information exchange approach to the explanation of extremity shifts on "risk neutral" items. As in the Levinger and Schneider
(1969) study, the subjects in the Myers and Bishop (1970) study tended to see the other subjects as holding a more neutral position than their own. However, when subjects did not participate in group discussion but only provided information about their initial positions to the other participants, no extremity shift occurred. Extremity shifts were obtained in the typical group discussion condition. A content analysis of the tape recordings of the group discussions did reveal that the extent to which the arguments presented by the participants favored the dominant alternative significantly predicted the group shift scores. Thus, there is support for a dominant value hypothesis to explain extremity shifts, but the validity of the hypothesized mechanism of reduction of pluralistic ignorance remains questionable.

If the values of the group operate on the individual to cause a group choice shift after discussion, then it might be hypothesized that the individual's attitudes would be more extreme after he had engaged in the group discussion.

When McCauley (1972) employed a topic on which there was wide disagreement among group members, the predicted extremity shift was not found in individual decisions made after group discussion, when individual extremity scores were compared, even though the average of ("statisticized group") decisions after group discussion was more extreme than the average of the initial decision of the members.
This result occurred because of shifts towards neutrality by persons holding opinions in the opposite direction from the dominant position. This finding suggests that "extremity shifts" should not be attributed to a shift in attitude on the part of individual group members resulting solely from group discussion. However, there are several factors which limit the interpretability of these results. Firstly, McCauley (1972) stated that he purposely selected items for discussion where there would be disagreement among the subjects. The lack of a discussion of a topic about which there is a dominant attitude reduces the probability of a group value being present, as is the case with most extremity shift situations. The group was also not asked to reach consensus on their position in the McCauley (1972) study. Although risky shifts have been noted in average group decisions without consensus being reached (Wallach and Kogan, 1965), the effect of failure to reach consensus on nonrisk choice shifts is uncertain. In terms of the interest of the present study, the average individual opinion is not the crucial factor because many types of sanctioning groups require consensus rather than averaging of individual opinions in making decisions. It is not the individual positions after group discussion but the group decisions which determine the level of punishment administered in group sanctioning situations.

In summary, although there is still some uncertainty as to the mechanism involved, there is some recent evidence
supporting the notion that group discussion to consensus concerning topics where a dominant position is held by group members will lead to polarization of the group attitude. The question remains as to whether extremity shifts occur for interpersonal evaluations. Research evidence directed to this point will be examined in the next section.

**Polarization and Interpersonal Evaluative Response**

Recent studies have indicated that there are extremity shifts for evaluative responses towards other persons. Myers and Bishop (1970) divided high school students into groups which were high or low in racial prejudice. Although the absolute magnitude of the shift was not great, group discussion caused the gap between the high and low prejudiced group to increase (i.e., a statistically significant extremity shift occurred).

Andrews and Johnson (1971) provided students with favorable or unfavorable information about a hypothetical professor and then asked the subjects to rate the teacher. The judgments of the groups were more extreme than the individual in the predicted direction (i.e., favorable groups were more favorable while unfavorable groups were more unfavorable). It might be noted, however, that there were greater numbers of cues (i.e., favorable or unfavorable statements) required for a shift in the favorable direction to occur at a statistically significant level.
Johnson (1972) had students rate a real professor under whom they were studying. He found that group discussion led to lower ratings of the professor in the group consensus. The subjects only rated one professor and the fact that most items produced a negative shift may be the result of a dominant negative attitude towards the individual being rated.

In sum, the evidence points towards extremity shifts in interpersonal evaluations. Since sanctioning might be affected by such evaluation, an extremity shift for groups making sanctioning decisions might be hypothesized where there is a dominant sanctioning tendency. Thus, the groups whose members tend to be lenient might impose lighter sanctions than would be given in individual decisions, and the groups whose members tend to be harsh would impose heavier sanctions. The biasing tendencies of attitude similarity-dissimilarity might result in such choice shifts when group members were similar or dissimilar to the person being sanctioned. When the person being punished was similar to the group members, it would prescribe lighter sanctions than would be recommended by its individual members, and, when the group members were dissimilar in attitude to the accused, heavier sanctions would be imposed by the group consensus.
IV. HYPOTHESES

1. When subjects are asked to judge an accused who holds deviant attitudes, the negative sanctions imposed will be greater than when they judge an accused holding similar attitudes.

2. When subjects are asked to judge an accused who holds deviant attitudes, the certainty of the defendant's guilt will be greater than when they judge an accused holding similar attitudes.

3. When groups are asked to reach consensus on negative sanctions, these negative sanctions will be greater for an accused who holds dissimilar attitudes, and less for an accused who holdssimilar positions, than the mean of the individual negative sanctions of the group members.

4. When groups are asked to reach consensus on certainty of a defendant's guilt, the certainty will be greater for an accused who holds dissimilar attitudes, and less for an accused who holdssimilar positions, than the mean of the individual certainty of guilt of the individual members.
V. METHOD

Subjects

Subjects were 160 male and female students from introductory psychology courses at the University of Florida. Participation in the experiment allowed the subjects to fulfill course requirements. In addition, groups of 42 and 49 male and female undergraduate psychology students participated in pilot studies involved in the investigation.

Procedure

The subjects were told that they were participating in a study of decision making processes and the law and then presented with a tape recorded interview on which the interviewee stated viewpoints which a pilot study demonstrated to be generally similar or dissimilar to those held by persons in the population from which the subject sample was drawn. The presentation of these attitudes was in the context of a discussion of an alleged crime of aggravated assault with which the interviewee had been charged. The content of the interview script (see Appendix C) was designed to be equivalent except for
the expression of the attitudes for which the similarity-dissimilarity manipulation was to be directed. For these statements opposite viewpoints were presented in the similar and dissimilar conditions.

Although the use of the "standard stranger design" in the present study manipulated agreement or disagreement along attitude dimensions which are more normative in character than those employed in many studies on the effects of attitude similarity, experiments by Byrne (1962) and Mitchell and Byrne (1971) indicate that the same processes are in operation in situations both where attitudes are held in common by most of the people in a given population and where these attitudes are idiosyncratic to a few individuals. The design of the present study eliminated the necessity for a pretesting of the subjects and should consequently lower the probability of subjects perceiving the experiment as an examination of their attitude similarity-dissimilarity with the person judged.

After the subjects concluded listening to the tape recording they were asked to state an opinion on the proper sanctions which should be imposed on the interviewee under the assumption that the accused was guilty. The item on which the subject rated the sanctions represented a ten-point scale (see Appendix D) of possible punishments from 0 to 36 months in prison. These values reflect possible sentences normally given for aggravated assault. Next the subject was asked to rate on a seven-point scale (see
Appendix D) his certainty of the defendant's guilt in terms of the definition of the crime provided in the law. The order of the presentation of the questions on sanctioning and certainty was counterbalanced.

Upon completion of their individual ratings, the subjects in a given session were randomly divided into two groups. The four subjects in the experimental group were asked to come to a consensus as to the group's opinions concerning the questions outlined above (see Appendix E). The groups were asked to render their decision on the first time within a time limit of ten minutes and then to provide a consensus on the second question before another time limit of ten minutes had elapsed. A clock was provided for the group's guidance. Following the procedure of past studies on group polarization effects, no instructions were provided as to the methods the groups were to use in reaching their positions (see Appendix E). The experimental session was completed after the groups reached their decisions.

During the time that the experimental group was engaged in discussion, a control "group" of subjects was asked to work as individuals on an irrelevant task (i.e., adding up a series of numbers). At the end of a period of time equivalent to that expended by the experimental group in the session, the individual subjects were asked to answer the questionnaire on sanctioning and certainty for a second time. The instructions preceding the second
administration of the questionnaire emphasized that people often change their mind when they reconsider a decision and that no test of memory was intended in the experiment. The task was presented as one of reconsidering the earlier decisions of the subject (see Appendix F). As in the procedure of Wallach, Kogan and Bem (1962), these instructions were designed to dissuade the subject from assuming that the experimenters were looking for the same decision on the second questionnaire. Thus, a response opposite to that hypothesized was, if anything, encouraged rather than discouraged. After the second decision was rendered, the experiment was concluded.

**Materials**

**Stimulus tape recordings.** — The interview script was designed to provide content on which virtually all subjects from the college student population sampled in the experiment would agree or disagree with the attitudes expressed by the interviewee. Further, a crime was picked which would be severe enough to allow for variation in the sanctions recommended (see Appendix C). Statements which carried the extreme racist sentiments of certain far right wing organizations were used for this purpose. These statements were based on quotations from a book of the writings of former American Nazi Party commander George Lincoln Rockwell (1963). In order to compile the scripts for the two conditions (similar and dissimilar), each
statement was paired with one expressing the opposite position.

A questionnaire was made up to include the topics which were covered in the two scripts (see Appendix A). As it can be noted in the table in Appendix B, a pilot study with 42 psychology students as subjects indicated a good general degree of agreement among these subjects as to their positions on these topics. Except for two items, agreement of subjects in terms of the direction of their responses ranged from 91 to 100 per cent. It will also be noted that on eight of the ten questions the majority of the responses were in the most extreme position, indicating a strong feeling (i.e., high involvement) on the part of a large number of subjects. Further, an examination of the response patterns of the individual subjects shows that those who disagree with the group on a small number of given items generally agree on most other questions. All in all, the pilot data indicated that the script met the condition of providing statements which would be perceived by the subjects as agreeing or disagreeing with their own position.

The tape recording was made to appear genuine by using as interviewer and interviewee graduate students who were experienced in interviewing prison inmates and clinical patients. In addition, in order to assess the possible effect of differential levels of suspiciousness concerning the two different scripts presented in the tape recordings,
49 students recruited from the experimental subject pool were presented with the tape recordings (23 in the similar and 26 in the dissimilar condition) and asked in an open-ended questionnaire to comment on their feelings about them. These responses were collected after the subjects in the pilot heard the tape and received the same introduction as did the persons who participated in the actual experiment.

The questionnaires were given to two independent judges who were asked to determine which responses indicated that the subjects expressed suspicion as to the validity of the tape recording or its content. The judges were "blind" as to which of the two tapes were listened to by a given subject. The judges attained 94 per cent agreement as to whether the questionnaires indicated suspiciousness on the part of the subject. The reliability of the judgments falls well within the acceptable range. The second judge agreed with the first judge on all of the responses which judge number one felt showed suspiciousness and added three responses to the suspicious group. The judgments indicated that there was no significant difference in the level of suspiciousness for the similar or dissimilar conditions. The two judges agreed on responses which indicated 15 per cent suspiciousness for the dissimilar group and 22 per cent for the similar group. A chi square revealed no significant differences between the groups ($X^2=0.23; \text{d.f.}=1; p > .50$) in terms of
suspiciousness. If one examines the suspiciousness rates identified by the second judge, again there is no significant difference between the two percentages (26 per cent for the similar group and 23 per cent for the dissimilar). The chi square comparing the frequencies of suspiciousness failed to reach significance ($X^2=0.04; d.f.=1; p > .70$). It is difficult to assess the absolute level of suspiciousness because of the problem of determining whether it is the act of questioning the subject about the experiment or the experimental procedure itself that arouses suspicion (see Page and Scheidt, 1971 and Berkowitz, 1971 for an examination of the controversy), and because some subjects are reluctant to express suspicions because of the fear of ruining the experiment (Orne, 1969). Notwithstanding this problem, the data from the pilot study indicate that the percentages of suspicion do not differ between the groups, if one assumes that the measuring instrument itself had the same effect on subjects in both conditions. Thus, whatever effect suspiciousness about the validity of the tape recording has on the results it should not be systematically distributed across conditions.

**Response measures.** -- As was noted above, the response measure included a question on recommended sanctioning and another on certainty of guilt. The sanctioning scale consisted of a ten-point scale of recommended prison sentences. The certainty of guilt question was a seven-point scale with responses ranging from extremely certain to
extremely uncertain. These measures followed procedures used in a number of "simulated jury" studies including those of Landy and Aronson (1969), Mitchell and Byrne (1971), and Stokes and Prestholdt (1972). Because of the failure of Landy and Aronson (1969) and Mitchell and Byrne (1971) to obtain differences along the certainty dimension, a legalistic definition of the crime in question taken from Black's Law Dictionary (1968) was added. The ambiguity of the definition was thought to provide the possibility for the subject biased towards innocence to rationalize his position by appealing to technicalities in the definition. It might be noted that jury instructions often contain such possibilities of rationalization.

The order of presentation of the questions was counterbalanced. "t" tests revealed no significant differences due to order in the initial decisions of the dissimilar condition for certainty (t=0.067; d.f.=78; p > .50) or sanctioning responses (t=1.509; d.f.=78; p > .10), and, no significant order effects in the initial decisions of the similar condition for certainty (t=0.498; d.f.=78; p > .50) or sanctioning (t=1.491; d.f.=78; p > .10). Thus, order of presentation of questions had no significant effect on the results.

Experimental Design

Similarity and sanctioning. -- In order to test for the effect of attitude similarity between the subject and
interviewee on sanctioning behavior and to test for any predisdiscussion differences in sanctioning tendencies of subjects assigned to experimental or control groups, the initial questionnaire answers of all 160 subjects were examined in two 2X2 completely randomized factorial ANOVAS (one for certainty and one for sanctioning scores). There were two levels of similarity (i.e., similar and dissimilar) and two levels of eventual group membership (i.e., experimental or control group). The only significant finding predicted was a main effect for similarity-dissimilarity with subjects in the similar condition recommending lighter sanctions and being less certain of guilt than those in the dissimilar condition.

**Group versus individual decisions.** — To test for the group polarization effect a series of 2X2 mixed design with repeated measures on the second factor was employed. The first factor had two levels of similarity (i.e., similar and dissimilar) and the second factor two levels of decision condition (individual and "group" decisions). Initial decision "group" scores were computed by determining the mean of the scores of the individual subjects who made up the experimental or control group. A group consensus score was obtained from the experimental group for the group decision situation. A "statisticized" control group was used where the group decision score was obtained by computing the mean of the four individual decisions made when subjects of the control condition
reconsidered their initial responses.

Four ANOVAS were run, with two examining the questionnaire answers of the control group subjects for certainty and sanctioning scores respectively and two examining the questionnaire answers of the experimental group subjects for certainty and sanctioning scores respectively. For the control group subjects, it was predicted that there would be a main effect of similarity on sanctions and certainty, no main effect for the first versus second decisions, and no interaction effects between the two levels of similarity and the two statisticized group decisions (i.e., first and second decisions). For the experimental group, an interaction between similarity-dissimilarity and group versus individual decisions was predicted. It was hypothesized that the group decisions would represent heavier sanctioning and greater certainty of guilt for subjects in the dissimilar condition and lighter sanctions and lesser certainty of guilt than was represented by the individual decisions of the subjects in the similar condition.
VI. RESULTS

Individual Decisions on Similarity and Sanctions

A 2X2 ANOVA was performed examining sanctioning scores as a function of two levels of similarity between subjects and interviewees (i.e., similar and dissimilar) and two levels of subject condition (i.e., membership in experimental or control groups). A highly significant main effect for similarity (F=11.80; d.f.=1/156; p < .01) was observed. An examination of Table 1 reveals that the means fell in the predicted direction with greater sanctions being recommended for the dissimilar than for the similar defendant. No other significant or main effects were observed. The fact that there was no main effect for the experimental versus control subject dimension indicated that the sanctioning tendencies of the subjects was not different before the group decision phase of the experiment.

Another 2X2 ANOVA was performed to examine certainty of guilt scores as a function of two levels of similarity between subjects and interviewees (i.e., similar and dissimilar) and two levels of subject condition (i.e., membership in experimental or control groups). As Table 2 indicates, no significant main effects or interactions were
Table 1

Initial Decisions On Sanctioning Analysis of Variance

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<th>Source</th>
<th>SS</th>
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* p < .01

Cell Means

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Table 2

Initial Decisions On Certainty of Guilt Analysis of Variance

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Cell Means

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observed ($F < 1.00$ in all cases). Thus, the hypothesis concerning similarity and certainty of guilt was not confirmed.

**Group Polarization Effects**

A 2X2 ANOVA with repeated measures on the second factor was performed examining sanctioning scores of the experimental group as a function of two levels of subject-interviewee similarity (i.e., similar and dissimilar) and with the repeated measures on individual and group decisions. A within-subject main effect for group versus individual decisions ($F=8.69, \text{d.f.}=1/18; p < .01$) was observed. No other significant main effects or interactions were found. An examination of the means in Table 3 indicates that there was a "leniency" effect in the group consensus scores with lighter sanctions being recommended as a result of group discussion. The predicted interaction was not found.

Another 2X2 ANOVA with repeated measures on the second factor was performed examining sanctioning scores of the control group as a function of two levels of subject-interviewee similarity (i.e., similar and dissimilar) and the repeated measures on individual and group decisions. A between-subjects main effect for similarity-dissimilarity ($F=4.91; \text{d.f.}=1/18; < .05$) was observed. No other main effects or interactions were found. As Table 4 indicates, the means for similarity-dissimilarity
fell in the predicted direction with greater sanctions being recommended when the interviewee expressed dissimilar attitudes than when he expressed similar attitudes. The fact that there was no significant main effect for the within-subject factor indicates that the lack of group discussion results in no shift in opinion. This finding points to the conclusion that decisions rendered by a group on the same type of question are the result of the group's arrival at a consensus through discussion.

A third 2X2 ANOVA with repeated measures on the second factor was performed examining certainty of guilt scores of the experimental group as a function of two levels of subject-interviewee similarity (i.e., similar and dissimilar) and the repeated measures on the individual and group decision factor. A significant within-subjects main effect for individual versus group decisions was observed (F=9.28; d.f.=1/18; p < .01). No other interactions or main effects were found. The cell means (see Table 5) indicate that the group consensus showed a greater certainty of the defendant's guilt than did the individual positions taken by the group members. The hypothesized interaction between similarity-dissimilarity and group versus individual decisions was not confirmed.

Finally, a 2X2 ANOVA with repeated measures on the second factor was performed examining certainty of guilt scores of the control group as a function of two levels of subject-interviewee similarity (i.e., similar and
Table 3

Experimental Group
Group Versus Individual Sanctioning Recommendations
Analysis of Variance

<table>
<thead>
<tr>
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<tr>
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*p < .01

Cell Means

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### Table 4

**Control Group**

Group Versus Individual Sanctioning Recommendations

Analysis of Variance

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* p < .05

**Cell Means**

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Table 5

Experimental Group
Group Versus Individual Certainty of Guilt Scores
Analysis of Variance

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* p < .01

Cell Means

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Control Group
Group Versus Individual Certainty of Guilt Scores
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Cell Means

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dissimilar) and the repeated measures on the first versus second individual decision factor. As one can note in Table 6, no significant main effects or interactions were found. As with the analysis of the sanctioning scores, the failure to find a main effect for the within-subjects factor in the control (statisticized) group indicates that the decisions rendered by the interacting groups with the same type of question are the result of the group's arrival at a consensus through group discussion.
VII. DISCUSSION

Similarity and Sanctioning

The data strongly confirmed the hypothesis that attitude similarity between subject and interviewee is related to the recommendation of prison sentences. Heavier negative sanctions were approved for those interviewees who expressed dissimilar attitudes to those of the subject than for those interviewees who expressed similar attitudes. It seems that the expression of similar or dissimilar attitudes produces an evaluative response which results in the recommendation of lighter or heavier sanctions as a function of that evaluative response.

This finding is interesting in that there is a more positive evaluative response (i.e., lighter sanctions) with higher attitude similarity even in the face of the fact that the similar person admitted to the commission of a deviate act (i.e., the crime of aggravated assault). McGuire (1969) points out that one may expect more of a person who is similar in attitudes because of the subject's feeling that because he is a good person, similar persons should likewise behave properly. Contrary to these assumptions, the results of this study suggest that people may be more lenient toward similar than toward dissimilar defendants.
In the area of similarity-attraction there is also some empirical support for the notion that similarity can breed dislike when the similar person commits deviant acts. Novak and Lerner (1968) found that when a stranger was presented as being emotionally disturbed that stranger was liked less when he expressed similar than when he expressed dissimilar attitudes. When Taylor and Mettee (1971) had a confederate behave obnoxiously towards the subject, the subject liked the confederate more when he was dissimilar in attitudes. As Byrne and Lamberth (1971) demonstrated, the effect of deviancy on the stranger's personality is one factor which is used by an individual in determining how much he likes another. In the present study the positive evaluative response to attitude similarity apparently outweighed the negative affect which might result from the observation of a similar person committing a deviant act.

The failure to find any relationship between attitude similarity-dissimilarity and the evaluative response of certainty of guilt parallels the results of other studies including those of Landy and Aronson (1969) and Mitchell and Byrne (1971). The lack of differences found with the use of this measure may be the result of its insensitivity as an indicator of certainty of guilt because of an absence in the subject of a personal definition of what the various points on the scale mean.

A more plausible alternative explanation, however, is that the role demands of the experimental situation
required the subject to be "objective" about assessing certainty of guilt. The statements of the interviewee about the fact that he committed the crime in question may have carried equal weight with the subjects in both of the two conditions and had greater impact than other sources of influence. It will be recalled that Griffitt and Jackson (1970) obtained similar findings in examining the question of the effect of attitude similarity on personnel selection. Their data showed that attitude similarity did affect the recommendation of whether or not to hire an individual but did not relate to the compensation which was considered appropriate for the person if he got the job. Griffitt and Jackson (1970) explained these findings in terms of the norms of fair distribution of rewards outweighing any negative or positive evaluative responses resulting from attitude similarity or dissimilarity. Further study is necessary to clear up this problem. One possibility of resolving the question would be to present a defendant who has been charged with a crime but who does not admit to having committed it. In this instance, the guilt of the defendant would be more ambiguous, thus reducing the role demands to be certain, if one's bias were to be uncertain. If attitude similarity had an effect on certainty of guilt, it might be more likely to show up in the context of such a situation.

The results of the present investigation seem to point to a possible "bias" in the imposition of sanctions
by persons charged with enforcing laws or other rules in our society. The finding of a relationship between attitude similarity and sanctioning suggests that those persons presently in the public eye because of their deviant political beliefs might face heavier sentences than that awarded to the average person when he is convicted of a crime. Of course, many jurists and other persons charged with the assignment of sanctions might recognize the potential for bias in such situations and "bend over backwards" to be fair in order to meet the role demands of their job. The lack of a finding of a significant relationship between certainty of guilt and attitude similarity suggests the need for further study to determine if the positive or negative evaluative response elicited by the presentation of similar or dissimilar attitudes affects the imposition of a guilty verdict. An understanding of these factors through scientific investigations will add a further basis which the society can depend on to rationally structure its system of justice.

Group Polarization Effects

The evidence from the present study concerning sanctioning scores indicated that group discussion to consensus produces recommendations by the group for lighter punishment than is represented by the average of the individual decisions of its members. Instead of increased sanctions assigned by groups in the dissimilar condition
and decreased sanctions recommended by groups in the similar condition as predicted by the hypothesis, a "leniency shift" was found across conditions. One possible explanation of this finding is that there existed a norm of leniency among group members. In a situation analogous to that found with the risky shift, a "leniency value" may have become dominant in the group discussion causing a "leniency shift" to occur. There is some experimental evidence concerning the existence of a leniency norm among the population in general. Kalven and Zeisel (1966) report data from their national survey of the jury system that indicate that there is a more lenient attitude in terms of the verdict rendered shown by the jury as a group than by the judge. Their results also indicated that this leniency often resulted when the jury thought the defendant had been already punished enough by the law. It might be noted, however, that defendant's lawyer may have advised him to waive his right to a jury trial in instances where experience has shown that the judge would tend to be lenient. Thus, a selection factor may have biased the sample of cases heard by the jury.

Other evidence on a leniency norm comes from a national survey of the public's opinions on the Calley trial. Kelman and Lawrence (1972) found that 75 per cent of those interviewed felt that the life sentence given to Lt. Calley was too harsh. Although the situation surrounding the Calley case represented an especially emotional
issue, there is some evidence here of a public reaction towards leniency. When one notes that the college student subjects in the present investigation were almost daily exposed to editorials and articles in their university newspaper and other mass media which condemned the prison system and the harsh sentences handed down by judges, it seems likely that any leniency norm would be highly salient and strongly reinforced for the participants in the present study. If such a leniency shift exists, further research is required to determine if it applies to a wide population, or is restricted to the comparatively liberal college student population.

Although a pure polarization effect was not obtained, one might have occurred in conjunction with the action of a "leniency shift." As noted above, the hypothesized pure polarization effect would have been reflected in an increase in the group sanctioning score over that of the average of the individuals for the dissimilar condition and a reduction in the group sanctioning from the average of the individuals for the similar condition. Such a finding is diagrammatically illustrated in Figure 1. However, in conjunction with the unexpected leniency effect, a polarization effect would be shown in an interaction with the lighter sanctions recommended by the groups in the similar condition being less than that for the dissimilar condition. This type of interaction is illustrated in Figure 2. The vectors at the right hand of the page point
FIGURE I.
PREDICTED POLARIZATION EFFECTS OF GROUP DISCUSSION
FIGURE 2.
COMBINED POLARIZATION AND LENIENCY EFFECTS
out the process involved. If one assumes that there is a force toward leniency of "X" units operating in the group discussion situation and that a pure polarization effect of "Y" units is generated by discussion to consensus, then the total leniency effect would be represented by a force of X+Y for the similar condition and X-Y for the dissimilar condition.

Such an interaction was not found in the present study, and, thus, this evidence does not support the existence of a polarization effect in this situation. However, there is a possibility of a "floor effect" having prevented the above mentioned interaction from being demonstrated. The initial individual decisions tended to be closer to the lower (more lenient) end of the scale. Thus, the subjects in the similar condition may have been limited in how far they could go in following the forces towards leniency. The dotted line in Figure 2 represents such a "floor" and it illustrates how such limits would prevent an interaction between polarization effects and a leniency shift from becoming apparent. Further study using a variety of scales might resolve the question of the existence of a floor effect.

It was also found in the present study that there was a group discussion shift towards more certainty of guilt. Again the hypothesis of a polarization effect was not confirmed with increased certainty after group discussion occurring across conditions. It may be that the information
and reinforcement provided by other members of the group allowed the subject to resolve his uncertainties. An explanation of the results in terms of a ceiling or floor effect seems unlikely in this instance because the subject's responses tended to cluster around the neutral point of the scale.

The evidence that group discussion results in a leniency shift, and an increased certainty of guilt, has interesting implications for the American jury system especially in instances where juries recommend sentences as well as determine guilt or innocence. Traditionally, thinkers on the jury system have emphasized the concept that the historical role of the jury is that of a fact-finding body where a group of citizens comes together and applies common logic to arrive at a true conclusion (Kadish and Kadish, 1971; Kalven and Zeisel, 1966). The fact that the opinions of the group represent more extreme positions than those of the average of the prediscussion attitudes of that group's members, points to a need to re-think the notion that juries represent a means by which a group can get together and average out biases so as to arrive at an accurate assessment of facts. If one considers that there is a leniency norm extant in the group, then a leniency shift represents an accentuation of a majority norm rather than a conclusion based on input from all positions.

Of course, this bias may not represent an entirely negative outcome. As Kadish and Kadish (1971) pointed out,
it might be well for the jury to represent a social change agent in the society by acquitting individuals who are guilty from a strictly legal point of view but whose incarceration would represent a negative event from the point of view of a concept of greater good. In any event, the results of the present study emphasize the necessity of taking into account the existence of this bias in considering what the optimal structure of the American legal system ought to be.
Appendix A
Pilot Study Questionnaire

The following statements have been made by various persons. The purpose of this questionnaire is to find out whether people agree or disagree with them. Circle the symbol which best represents your position on each statement.

AAA = Strongly Agree
AA = Agree
A = Slightly Agree
D = Slightly Disagree
DD = Disagree
DDD = Strongly Disagree

AAA AA A D DDD The Nazis' ideas might be a good thing for America today.
AAA AA A D DDD The concept of white racial superiority is not valid.
AAA AA A D DDD The white Anglo-Saxon race was mostly responsible for building up the country.
AAA AA A D DDD Inferior minority groups are trying to take over the country by rearing more children than majority racial groups.
AAA AA A D DDD There is no conspiracy of communist aided groups of ethnic minorities to take over the country.
AAA AA A D DDD Blacks should be returned to Africa.
AAA AA A D DDD Forced sterilizations should be employed to limit overpopulation of minority groups.
AAA AA A D DDD Nuclear bombs should be employed against other countries which interfere against U.S. policies.
AAA AA A D DDD The press is controlled by groups bent on taking the country away from whites.
AAA AA A D DDD The press should not be controlled by the government.
Appendix B

Frequency of Response to Pilot Questionnaire

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Appendix C
Script for the Experimental Interviews

A. Similar Attitudes

I. The experiment in which you are participating is a study of decision making processes and the law. You will hear a taped interview with an individual who has been charged with a felony. Please listen carefully to the interview as you will be asked to make some judgments at its conclusion. Your opinions are of great value in the attempt to better understand our system of justice.

(PAUSE)

I. Hello, Wilbur, would you tell us the nature of the crime with which you were charged.

S. Yes, it was aggravated assault.

I. Is this a felony?

S. Yes, it is.

I. What were the circumstances surrounding your arrest?

S. I became so mad at this fellow that I hit him over the head with a bottle.

I. Was he hurt badly?

S. He was taken to the hospital. I am afraid he had a rough time. He says he still has headaches which keep him from working.

I. How did this confrontation occur?

S. Well, it was a Saturday afternoon and I needed to get a few things at the store. I drove down to the shopping center and bought the things I needed. Then I stopped by a bar to have a drink. This place is one where a lot of people from the neighborhood stop in for a drink and some talk. A sort of local hang out. Anyway, there was a guy sitting at the next table shooting off his mouth. Some of the things he said got me so mad that I told him to
shut up. He said "do you want to make something of it?", and I got so mad I don't even remember how it happened, but I just went up and hit him with a bottle that was on the table. Someone pulled me off of him and called the police. They came and arrested me.

I. What did the man say to make you so angry?

S. Well, as I said there were a bunch of men sitting around, and I could easily overhear part of their conversation. One of them was saying what he thought about various things going on today. What he said made me mad. He said that he thought that the brilliant ideas of Hitler and the Nazis would be a good thing for America. Also he claimed that the white Aryans alone made this country great. He said that there has been a reversal of human evolution because of unlimited breeding of the inferior races, while the members of the superior white race limit themselves to a few offspring or none. He said the solution to the problem was that the blacks should be returned to Africa. He said that it all started because the Jews and communists are conspiring to gain power by giving the country to the coloreds and then controlling them. He also said that the Jews and the communists control the press which is out to destroy the country and the government should control these people. He then said that Jews, coloreds and all other such commie loving groups should be run out of the government and forced sterilization be the government should be required of all nonwhites. His final solution was that if other countries get in the way of our policies, we should blow the hell out of them with A-bombs. When he said all of these things, I became so mad that I hit him.

I. Why do you think that what he said made you so mad?

S. I have always felt rather strongly about these questions. I believe that there is no such thing as a superior race. I think that all racial groups have made contributions to the improvement of our country and should share in its benefits. All groups of people have a right to be in this country. The government should not force persons to be sterilized in order to maintain a certain racial balance. All groups must participate in the government, if this country is to be successful. The press is not conspiring to take over the country and the government should not control it. Also I think that nuclear weapons should not be used to attack countries which don't agree with our policies. Since these things are so important to me, I really got worked up, and that is why I got so mad and hit him.

I. If you could undo what you did, would you?
S. I'm not saying I was right to hurt the guy, but I think that I couldn't help myself. I think if it happened again I would get so mad that I'd hit him.

I. Do you think you were treated fairly by the law?
S. Well, all in all, I guess so.

I. Thank you very much.

B. Dissimilar Attitudes

I. The experiment in which you are participating is a study of decision making processes and the law. You will hear a taped interview with an individual who has been charged with a felony. Please listen carefully to the interview as you will be asked to make some judgments at its conclusion. Your opinions are of great value in the attempt to better understand our system of justice.

(PAUSE)

I. Hello, Wilbur, would you tell us the nature of the crime with which you were charged.

S. Yes, it was aggravated assault.

I. Is this a felony?
S. Yes, it is.

I. What were the circumstances surrounding your arrest?

S. I became so mad at this fellow that I hit him over the head with a bottle.

I. Was he hurt badly?

S. He was taken to the hospital. I am afraid he had a rough time. He says he still has headaches which keep him from working.

I. How did this confrontation occur?

S. Well, it was a Saturday afternoon and I needed to get a few things at the store. I drove down to the shopping center and bought the things I needed. Then I stopped by a bar to have a drink. This place is one where a lot of people from the neighborhood stop in for a drink and some talk. A sort of local hang out. Anyway, there was a guy sitting at the next table shooting off his mouth. Some
of the things he said got me so mad that I told him to shut up. He said, "Do you want to make something of it?" and I got so mad I don't even remember how it happened, but I just went up and hit him with a bottle that was on the table. Someone pulled me off of him and called the police. They came and arrested me.

I. What did the man say to make you so angry?

S. Well, as I said, there was a bunch of men sitting around, and I could easily overhear part of their conversation. One of them was saying what he thought about various things going on today. What he said made me mad. He said that as far as the stupid concepts of Hitler and the Nazis were concerned, they would be a bad thing for America. He said that all racial and ethnic groups have contributed to the greatness of this country. He also claimed that human evolution has not resulted in any superior race and any evolutionary advantages man might have are not because of any balance in the numbers of people from a particular racial group. He said that blacks have as much right to be in this country as anybody. He claimed that there is no communist or minority conspiracy to take over the country by catering to the blacks. He said that the press is not under the control of conspirators bent on the destruction of the country and that the government should not control the press. He said that our government should have the participation of all the people including members of minority groups. He said forced sterilization by the government of minorities should be prohibited. Also he said that nuclear weapons should not be used to attack countries which don't agree with our policies. When he said all of these things, I became so mad that I hit him.

I. Why do you think that what he said made you so mad?

S. I have always felt rather strongly about these questions. I believe that the white race is the superior race. Since the whites made this country what it is, they should be the ones who share in its benefits. I think that the blacks should be returned to Africa, and this overbreeding of the inferior races should be stopped by the government using forced sterilization of the blacks. Jews, coloreds and all other such commie loving groups should be run out of the government, and the Jew run communist press, which is helping the enemy take over the country should be controlled by the government. I also believe that if any country objects to our policies, we should blow the hell out of them with an A-bomb. Since these things are so important to me, I really got worked up and that's why I got so mad and hit him.
I. If you could undo what you did, would you?

S. I'm not saying I was right to hurt the guy, but I think that I couldn't help myself. I think if it happened again, I would get so mad that I'd hit him.

I. Do you think that you were treated fairly by the law?

S. Well, all in all, I guess so.

I. Thank you very much.
Appendix D
Response Questionnaire

Birthdate

OPINION QUESTIONNAIRE

Please write your birthdate in the upper right hand corner of the page. In this part of the study you will be asked to give your opinions about the taped interview to which you have previously listened. Please answer your own questionnaire and do not talk to others participating in this project.

NOTE: The order of presentation for the questions was reversed for one half of the subjects.

1. Assuming that the person in the interview is found guilty, please circle in the space below the number of months of prison sentence which you would recommend that he receive.

0 4 8 12 16 20 24 28 32 36
mos. mos. mos. mos. mos. mos. mos. mos. mos.

2. The statute defines aggravated assault as an assault where the means or instrument used to accomplish the injury is highly dangerous or where the assailant has some ulterior motive in committing the assault with other than a mere desire to punish the injured person or where the assault was committed with a deadly weapon under circumstances not related to an intent to do murder. Aggravated assault is seen as different from simple assault where serious bodily injury is inflicted.

Using the above definition of aggravated assault as a guide, please indicate in the space below how certain you feel about the guilt of the person interviewed by checking the answer which is appropriate to your opinion.

__________ Extremely Uncertain
__________ Very Uncertain
__________ Uncertain
__________ Neither Certain or Uncertain
__________ Certain
Very Certain

Extremely Certain
Appendix E
Instructions for Group Discussion

INSTRUCTIONS

In this part of the study you will be asked to agree as a group on the questions presented on the ballot which has been provided. Discuss among the four of you each question separately and come to an agreement as to what the group feels the best answer to be. It is important that you reach a consensus. You have ten minutes to decide on each question. There is a clock provided to tell you how much time has elapsed in your discussion. When the group has made their decision, each of you should record it on his copy of the ballot.
GROUP DECISION BALLOT

NOTE: The order of presentation of the questions was reversed for one half of the subjects.

1. Assuming that the person in the interview is found guilty, please circle in the space below the number of months of prison sentence which the group would recommend that he receive.

   0  4  8  12  16  20  24  28  32  36
   mos. mos. mos. mos. mos. mos. mos. mos. mos.

2. The statute defines aggravated assault as an assault where the means or instrument used to accomplish the injury is highly dangerous or where the assailant has some ulterior or malicious motive in committing the assault with other than a mere desire to punish the injured person or where the assault was committed with a deadly weapon under circumstances not related to an intent to do murder. Aggravated assault is seen as different from simple assault where serious bodily injury is inflicted.

   Using the above definition of aggravated assault as a guide, please indicate in the space below how certain the group feels about the guilt of the person interviewed by checking the answer which is appropriate to the group's opinion.

   ________ Extremely Uncertain
   ________ Very Uncertain
   ________ Uncertain
   ________ Neither Certain or Uncertain
   ________ Certain
   ________ Very Certain
   ________ Extremely Certain
Appendix F
Instructions for Second Individual
Decisions of Control Group Members

At times people wish to reconsider their earlier decisions. You have been provided with another opinion questionnaire concerning the interview to which you listened at the beginning of the session. This is not a test of your memory. Think about your answers and mark the questionnaire to reflect your opinions as they now stand. Please do not discuss your answers with others.
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BIOGRAPHICAL SKETCH

Lee Anderson Jackson, Jr. was born November 1, 1946, at Washington, D.C. In June, 1965, he was graduated from St. Stephen's Episcopal School for Boys, Alexandria, Virginia. In June, 1969, he received the degree of Bachelor of Arts, \textit{cum laude}, with a major in Psychology from Hampden-Sydney College, Hampden-Sydney, Virginia. He was a member of Psi Chi and Delta Sigma Rho, Tau Kappa Alpha honorary societies. In 1969 he was enrolled in the Graduate School of the University of Florida from which he received the degree of Master of Arts in 1970.
I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Guillermo F. Mascaro, Chairman
Assistant Professor of Psychology

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Marvin E. Shaw
Professor of Psychology

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

James C. Dixon
Professor of Psychology

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Richard K. McGee
Associate Professor of Psychology
I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

James L. Lister
Professor of Education

This dissertation was submitted to the Department of Psychology in the College of Arts and Sciences and to the Graduate Council, and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

August, 1972

Dean, Graduate School