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AN EMPIRICAL COMPARISON OF SHERIF'S SOCIAL JUDGMENT APPROACH AND FESTINGER'S DISSONANCE THEORY AT THEIR POINTS OF CONTRAST: EGO INVOLVEMENT AND DISCREPANCY OF COMMUNICATION

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MELVIN AARON RAND
Norman, Oklahoma
1967

AN EMPIRICAL COMPARISON OF SHERIF'S SOCIAL JUDGMENT APPROACH AND FESTINGER'S DISSONANCE THEORY AT THEIR POINTS OF CONTRAST: EGO INVOLVEMENT AND DISCREPANCY OF COMMUNICATION

APPROVEZ BY

DISSERTATION COMMITTEE

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AN EMPIRICAL COMPARISON OF SHERIF'S SOCIAL JUDGMENT APPROACH AND FESTINGER'S DISSONANCE THEORY AT THEIR POINTS OF CONTRAST:

EGO INVOLVEMENT AND DISCREPANCY OF COMMUNICATION

CHAPTER I

INTRODUCTION AND PROBLEM

In recent years there have been a number of approaches to attitude change conceptualized by such theorists as Osgood & Tannenbaum (1955); Festinger (1957); Katz and Stotland (1959); Rosenberg (1960); Sherif, Sherif, and Nebergall (1965b). Of these, two in particular have recently received a good deal of attention: Festinger's cognitive-dissonance theory and Sherif, Sherif, and Nebergall's social judgment-involvement approach.

Festinger's Dissonance Theory

In 1957, Festinger introduced the concept of cognitive dissonance. Dissonance, or psychological discomfort, is said to be created when two or more cognitive elements in a person's repetoire are inconsistent with one another, i.e., when one of the person's cognitions follows psychologically from the contradiction of another. Dissonance creates psychological tension which is said to have drive characteristics. Therefore, when dissonance is aroused the person will tend to

avoid the discomfort he is experiencing by attempting to achieve a state of greater consonance.

The theory of cognitive dissonance is an attempt to specify the circumstances which create dissonance for an individual and how this dissonance can be reduced. The theory makes the assumption that the individual strives toward consistency in his cognitions. Thus, the individual's opinions, attitudes, knowledge, or his beliefs will tend to be internally consistent with each other. Cognitions which are not in agreement with one another are considered to be "dissonant" or inconsistent, and therefore, the individual will make an attempt to reduce the dissonance and restore consistency. More specifically, the theory rests on three basic assumptions:

- 1. The existence of dissonance, being psychologically uncomfortable, will motivate the individual to attempt to reduce the dissonance and achieve consonance.
- 2. When dissonance is present, in addition to trying to reduce it, the person will actively avoid situations and information which would likely increase the dissonance.
- 3. Manifestations of the operation of these pressures include behavior changes, changes in cognition, and circumspect exposure to new information and new opinions. (Festinger, 1957, pp. 30-31).

In a discussion of the reduction of dissonance which has been aroused by social disagreement Festinger (1957, pp. 182, 192) puts forward several ways this process can take place: (1) bringing about a change in the opinions of those individuals who initially disagreed so that they conform more closely to one's own; (2) changing one's own opinion making it conform more closely to the opinion of others; (3) by evaluating the other person so that he is seen as being different from oneself (this can be done by a number of different ways, i.e., viewing

him as being stupid, bigoted, having ulterior motives); (4) finding support for the opinion one holds.

When the individual is in a position whereby he cannot influence those who disagree, cannot devalue the other person, and cannot find support for his opinion, his alternative for dissonance reduction is the changing of his own opinion. The greater the amount of this dissonance the greater is the exertion on the individual to change in the direction of the communication.

Festinger's theory states further that the amount of dissonance created by a discrepant opinion will be greater: (1) when there is an increase in the attractiveness of the person or group with whom the individual is in disagreement; (2) when there is a lessening of social support for the opinion the individual is advocating; (3) the greater the relevance of the person or group disagreeing with the particular opinion; (4) the larger the discrepancy between the person and the communicator; (5) with a decline in the number of cognitive elements which were consonant with the opinion.

Sherif's Social Judgment-Involvement Approach

The approach of Sherif, Sherif, and Nebergall (1965b), is based on the belief that an individual's position or attitude on specific issues cannot be fixed by one alternative of the many available. Sherif & Sherif (1965a) define an attitude as "the individual's set of categories for evaluating a stimulus domain, which he has formed as he learns about the domain in interaction with other persons (p. 4)." Information about a person's attitude can therefore be acquired by observing how an

individual evaluates and categorizes relevant objects, persons or communications, into categories which are acceptable or objectionable. An individual's categories are obtained by having him evaluate a series of statements which have been ordered and which represent various positions, from favorable to unfavorable, toward the object, person, or communication under study.

When an individual has an attitude, he has evaluated the object of the attitude in either a positive or negative way, which then causes him to view related objects in a selective way. The judgment of placement of communication which represent positions on an important issue is affected by the individual's own stand on that issue. Using a number of studies from the area of psycho-physical judgments, Sherif contends that the individual's position on an issue becomes, for him, an internal anchor and that his placement or categorization of specific communications varies systematically with their discrepancy from his stand and results in the assimilation-contrast effect. Assimilation is prevalent when a communication which is not too distant from an individual's position is regarded by him as being acceptable, and therefore is incorporated into his region of acceptance. Contrast is seen when an individual rejects a specific communication because it is categorized as being too distant from or discrepant with his position.

Based on this approach, Sherif, Sherif, and Nebergall (1965b) list three necessities which are required in order to have an adequate technique to assess attitudes:

1. Indicators of the range of positions toward the object of the attitude that is encompassed by the individual's evaluative categories (acceptable or objectionable, in some degree).

- 2. Indicators of the degree of the individual's personal commitment to his own stand toward the object; that is, of the degree of his ego involvement with the issue.
- 3. Ways and means to ensure that the individual responds in terms of his attitude toward the object rather than with what he thinks the investigator or other persons conceive as a socially desirable response. (pp. 20-21).

The development of Sherif's scale for assessing attitudes came about because he felt the existing scales for attitude evaluation did not fulfill these requirements. The scale developed by Bogardus (1925) dealing with social distance was inadequate because not all social dimensions can be considered to be cumulative. Thus, it is common to find a strongly committed individual who endorses an extreme statement on a specific issue will not accept a less extreme statement, though it may also be supporting his point of view. Guttman (1950) developed a technique whereby he hoped to obtain a score for an individual which would indicate how many statements on a particular issue the individual would agree to. Guttman conceived of this technique as being "unidimensional" in that the individual who accepts one position will also accept less extreme positions on the same issue. Sherif contends that the approach taken by Osgood, Suci, and Tannenbaum (1957) is an inadequate technique for the study of attitudes in that it provides no information concerning the appraisal of various alternative positions on the issue. Thus, the semantic differential is applicable only to attitude research which entails evaluative content.

Sherif's attitude assessment technique includes the concepts latitude of acceptance, latitude of rejection, and latitude of noncommitment. The latitude of acceptance is a range of positions including the most acceptable position and other acceptable positions. Similarly

the latitude of rejection is a range of positions which include the most objectionable position plus other objectionable positions. The latitude of noncommitment consists of those positions on an issue which are not responded to by the individual as either acceptable or objectionable. Sherif makes no assumption about the relative sizes between the positions nor does he assume that the scale is cumulative.

Comparison of Cognitive Dissonance Theory and Social Judgment-Involvement Approach

Sherif's social judgment-involvement approach and Festinger's cognitive dissonance theory both attempt to predict attitude change and the conditions under which it will take place. Both approaches include what takes place when discrepant communication is given to an individual and the way the individual copes with the discrepancy. It is at this point that the implications of the two theories differ. When varying differences exist between the initial position of the individual and communications presented to him, Sherif's approach specifies that the individual will change in the direction of a communication only when the communication falls within his initial latitude of acceptance. If the position advocated by the communication is within the individual's initial latitude of rejection his response to it will be similar to that found in psycho-physical research, that is, the discrepant communication will serve as a contrasting anchor and the individual will change his position away from that advocated in the communication. Thus the social judgment-involvement approach would predict that with small discrepancies between the initial position of the individual and the position

advocated in a communication, the greater the probability that it will fall within his latitude of acceptance and thereby create some position change. The greater the discrepancy between the individual's initial position and advocated position the greater the probability that it will fall into the latitude of rejection. With very large discrepancies, since they fall well within the latitude of rejection they generally produce contrast or boomerang effects. Once a discrepant position exceeds the range of acceptable positions no change will take place.

Dissonance theory, on the other hand, predicts greater attitude change with greater discrepancy. Festinger (1957) states:

The greater the difference between the opinion of the person and the opinion of the one voicing disagreement, and, hence, the greater the number of elements which are dissonant between the cognitive clusters corresponding to the two opinions, the greater will be the magnitude of dissonance (p. 243).

Elaborating further, Brehm and Cohen (1962) contend that

When a person . . . agrees to expose himself to [a discrepant communication] . . . dissonance arises and may be reduced by coming to accept the advocated contrary position (p. 246).

. . . the greater the communication discrepancy . . . the more dissonance is experienced. . . . The greater the dissonance, the more the person must reduce it and, therefore, the greater may be the consequent change in his attitudes to conform with the discrepant stand.

Sherif, et al., (1965b), discussing the relationship between the individual's stand and discrepant communication points out that if one adheres to Festinger's cognitive dissonance theory, and Brehm and Cohen's interpretation of it, it follows that since "persons whose stands are most discrepant from a communication frequently take an extreme position, it would also be logical to predict that those with extreme stands would change most in the face of a discrepant

communication" (p. 187). If one uses Festinger's theory, the prediction thus would be that the individuals with extreme stands would show the most amount of change following discrepant communication.

Proponents of each approach offer evidence supporting their prediction. Supporting Sherif's contention that some change in attitude will take place with a slight discrepancy and no change when the discrepancy is great are the studies of Sherif & Hovland (1961); Sherif, Taub, & Hovland (1958); Whittaker (1958); and Manis (1960). Sherif and Hovland (1961), for example, in a study dealing with the election issue and using as subjects pro-Republican, middle-of-the-road subjects and pro-Democrats, asked subjects to rate political statements as being either pro-, or anti-, Republican or Democrat or moderate. The statements were rated before and after a persuasive communication. communication was either strongly Republican or strongly Democrat and given to subjects according to their own position. The measure used was the percentage of change toward or away from the position advocated in the communication. The results showed the majority of the subjects not changing their opinion, especially the subjects who initially held extreme positions. The "moderate" subjects were the ones noted to change most. If the communication was near their original position they changed toward it. When the position advocated by the communication was far from the moderate's position they changed away from it.

In support of the dissonance viewpoint on the other hand, greater change with greater amounts of discrepancy has been found by a number of authors (Cohen, 1959; Goldberg, 1954; Fisher & Lubin, 1958; Fisher, Rubinstein, & Freeman, 1956; Harvey, Kelley, & Shapiro, 1957;

Hovland & Pritzker, 1957; and Zimbardo, 1960). Goldberg, for example, hypothesized that greater conformity would take place when the individual's norm was greatly discrepant from the norm of his group, when the size of the group increased, and when the individual was confronted with the norms of the group at more frequent intervals. The results tended to support these hypotheses. A reduction in the amount of disagreement was found to take place when the individual was made aware of the group norm. Conformity toward the group norm was found to be a function of the distance or discrepancy between the individual's norm and the group's norm. The greater this discrepancy the greater the amount of conformity. Cohen found that when a subject encountered information contrary to his opinion, greater changes took place when the individual found information which was at a greater distance from his opinion.

This apparent contradiction between the two sets of studies

Sherif maintains, arises from the failure of dissonance theorists to
take the involvement of subjects into account. Sherif contends that
there is less susceptibility of a person changing his position when the
issue is "very important to the person, that is, when he is ego involved"
(1965a, p. 14). The evidence for this Sherif has obtained by noting
that subjects with greater personal involvement in an issue exhibit
wider latitudes of rejection. With a wider latitude of rejection, an
ego-involved individual will change with slightly discrepant communication, but that there will be no change from the initial position with
widely discrepant communication. In fact, individuals who are highly
committed, the approach points out, will either displace the

communication which is discrepant away from their own position, or change by moving in the direction contrary to that advocated by the communication. Thus, whether an individual will change or not can be determined by looking at the size of his latitude of rejection, which Sherif has shown to be related to his involvement. Since there is generally a difference in the level of ego involvement for individuals evaluated by the use of reference scales, Sherif contends that "degree of ego involvement is a crucial variable in predicting reaction to discrepant communication" (Sherif, Sherif & Nebergall, 1965b, p. 187). The concept of ego involvement is defined as "the arousal, singly or in combination, of the individual's commitments or stand in the context of appropriate situations, be they interpersonal relations or a judgment test in actual life or an experiment" (Sherif, et al., 1965, p. 65). An operational definition devised by Sherif for commitment or ego involvement is the individual's active membership in a group which has taken a stand on a specific issue.

Based on the above, Sherif lists a number of conditions which have occurred either singly or in combination in studies supporting the dissonance viewpoint, i.e., studies obtaining results indicating that there is a change toward the communication with increasingly greater discrepancies between one's attitude and the communication:

- 1. The object (stimulus, topic) of evaluation is unstructured, that is, permits a wide margin for alternative modes of response or interpretation.
- 2. The topic (issue) is unfamiliar to the subjects or is not highly involving in their scheme of priorities, so that internal standards are labile or lacking.
- 3. The discrepancy between the individual's initial evaluation (or attitude) and the communication is not near its maximum, that is, is not as great as it could be.

4. The communicator is acceptable in terms of the subject's reference group ties, and especially if he is highly prestigious. (Sherif, et al., 1965b, p. 189).

Those studies supporting the social judgment-involvement approach, i.e., studies which have obtained results indicating that an individual's attitude will change in the direction of the communication with small amounts of discrepancy and which will result in no change or a change against the communication with increasingly greater discrepancies are usually dependent on one or more of the following conditions:

- 1. The object of evaluation is well-structured, providing clearcut differences and external standards for evaluation, that is, offers few alternatives for response or interpretation.
- 2. The topic (or issue) is familiar to the subjects and they are highly ego-involved in their stands on it.
- 3. The discrepancy between the subject's initial evaluation (or attitude) and the communication is increased to its possible limits.
- 4. The communicator is not highly prestigious or is a member of an unfriendly reference group (Sherif, Sherif & Nebergall, 1965b, p. 189).

Thus the contradiction between the sets of studies is seen by Sherif as basically due to differing levels of involvement of the subjects in each set. But examining dissonance theory for a consideration of involvement leads only to further contradiction. The closest variable to personal involvement in Festinger's approach is "importance" which he comes closest to defining as follows:

The magnitude of the total dissonance will also depend on the importance or value of those relevant elements which exist in consonant or dissonant relations with the one being considered (Festinger, 1957, p. 17).

Festinger goes on to say:

The magnitude of the dissonance (or consonance) increases as the importance or value of the elements increases.

The term "weighted proportion" is used because each relevant relation would be weighed according to the importance of the elements involved in that relation (1957, p. 18).

It is at this point, Sherif maintains, that the two approaches are in most direct conflict: less change with more involvements; greater change with more importance. This conflict however is only a conflict if we assume ego involvement and importance to be the same thing. Sherif apparently does in stating:

. . . there is a high probability that the individual who endorses an extreme position will rank that issue high in importance, within his scheme of personal priorities. But those adopting a moderate position with equal ardor display patterns of acceptance-rejection-noncommitment similar to their more extreme counterparts (Sherif, 1964, in Singer's unpublished dissertation, 1965).

Sherif maintains that in order for a theory of communication, social influence, or psychological conflict to be adequate it is necessary for the theory to include ways of evaluating what is relevant and important to the individual. "The issue of what personally concerns individuals is at least as important as the problem of what they do when two or more salient elements conflict" (Sherif, et al., 1965b, p. 73).

In summary, the comparison between Festinger's theory and Sherif's approach reduces to the question of the relationship between ego involvement and importance, and resolution of differential predictions concerning size of the discrepancy and attitude change.

Ego Involvement vs Importance: Relevant Evidence

In an attempt to explore the relationship between ego involvement and importance a study was recently performed by Richter (1966). He maintained that if ego involvement and importance were identical, as Sherif's statements imply, it would be possible to derive differential predictions

when important issues were concerned. In order to test Sherif's assumption, Richter administered a pre-questionnaire to 375 introductory psychology subjects under the guise of obtaining an index of their opinions and interests on eleven different issues. This was done to obtain the latitudes of acceptance, rejection, and noncommitment of the subjects. One month later 195 of the original subjects were placed in a dissonance arousing situation; that is, they were asked to listen to a tape recording of a speaker, purported to be an authority, and to rate his personality along several dimensions. Richter explained that he was interested in how people evaluate personality subsequent to hearing their voice. The topic of the communication consisted of one of the issues included in the pre-questionnaire. After hearing the communication another questionnaire was administered.

Correlations obtained by Richter for the most part failed to indicate any relationship between importance and ego involvement with the exception of females on the issues of athletics. A slight correlation was obtained between importance and attitude change (-.12 p < .09), but no correlation was found between ego involvement and attitude change. When Richter analyzed the data with regard to attitude change, support was neither found for Sherif's nor Festinger's predictions. It appeared that the manipulation of the subjects failed. When Richter examined the results of those subjects who were aware of the experimenter's intent and those who were unaware, he expected, but did not find, those who were aware should show more resistance to the communication than the unaware subjects. Support for this contention is found in a study performed by Allyn and Festinger (1961). They were interested in the

degree of influence that can be brought about in subjects who suspected that attempts were being made to persuade them as compared to individuals who were asked to assess the personality of a speaker. Their findings indicated that when subjects were made aware of the content of a communication, which was counter to their own, they responded by little or no position change, and/or perceiving the communicator as biased and rejecting him. For the individuals who were asked to evaluate the speaker's personality greater change of attitude was noted. Stated specifically: "Those subjects who expected the communication to disagree with their opinions were actually less influenced by it (Allyn & Festinger, 1961, p. 39). An analysis of the ratings concerning the communicator's personality was performed in Richter's study indicated that there was a significant dislike for and rejection of the communicator. Thus, it appears that the attitude change manipulation failed, and therefore, this study was inconclusive.

Of interest in Richter's study is the fact that he obtained significant correlations between the dimension of sports fan and importance. For both males and females, the significance level exceeded p < .001. Richter suggests that since there was only a borderline relationship between ego involvement and the dimension of sports fan; importance would appear to be more of an indicator of "involvement than the latitude of rejection" (p. 27).

Richter's data suggest that importance of the issue was related to the extremeness of one's position while ego involvement was not thus related. The issue was rated as being more important when the individual's position was more extreme. Importance was found to be a better

indicator of one's involvement than the latitude of rejection. Some relationship was obtained between importance and attitude change (p ~ .09) while no relationship was noted between attitude change and ego involvement.

Freedman (1964) was interested in the effect of size of discrepancy between an individual's initial position and subsequent amount of change. Maximum change was expected to occur at a moderate level of discrepancy for individuals who were highly involved, whereas for subjects less involved it was expected that greater discrepancy would induce greater change. Freedman began with an issue that was unfamiliar to the subjects. The task or issue used was of the concept formation variety requiring subjects to correctly identify a concept after seeing a number of "concept instances." Discrepant information was introduced by having the subjects view additional "concept instances" and try to determine what the final concept would look like. A measure of position change was obtained by examining the difference between the initial concept and the final description. The amount of discrepancy was determined by the number of elements in common between the advocated concept and the concept initially held. Freedman found that for all levels of discrepancy highly involved subjects change less than those not so involved.

The degree of involvement was manipulated by giving the subjects instructions which either made them believe the task was important and an indication of their "intelligence and perceptiveness," or unimportant with their first responses not being marked.

Freedman contends that the analysis given the results of Hovland, Harvey, and Sherif's study with respect to their discussion of latitudes of acceptance and rejection is merely a description of what is taking place rather than an explanation. Freedman noted in his interpretation that as the amount of discrepancy increased it would become more difficult to change position. This is due to the fact that as discrepancy increases it requires more effort on the part of the subject to change his position. As Freedman states, "it is harder to change a great deal than to change only a little" (p. 294).

Whittaker (1964) performed a study using communication with varying degrees of discrepancies from an individual's initial position. Whittaker chose his subjects so as to ensure that he had some subjects who were intensely ego involved in the issue. He was interested in testing the following hypotheses: a curvilinear relation would exist between change and the size of communication discrepancy; very large discrepancies would bring about "boomerang" effects; subject's position would determine how he perceived incoming communication; and subjects with extreme positions would reject more positions than they would accept. The issue used by Whittaker concerned the question of federal controls of American agriculture. Assessment of the 107 subjects' initial positions was obtained by using nine statements which ranged from strongly pro-control to strongly anti-control. A fifteen minute tape recording advocating the acceptance of federal control was given to the subjects from one to four weeks following the initial session. The subjects were asked to evaluate the "fairness" and "objectivity" of the communicator with regard to his presentation; to check one of four

statements which represented the position of the communicator. Following this, evaluation of the subjects' latitude of acceptance and rejection was accomplished.

The results of this study are equivocal in that there was no control group utilized with the four experimental groups. Consequently, any change shown could have been due to intervening events rather than to the communication. Due to a serious confounding present between extremeness and selection of subjects according to their involvement, the fact that the extreme subjects rejected more statements than the moderate subjects comes as no surprise. In discussing his results, Whittaker states that he obtained a slight negative change in his Farm Group A. This negative change is reported as being -.02, which can hardly be considered a change. With regard to his discussion of his t-test results, he is not clear, and consequently, no meaning can be obtained from their significance. Whittaker's rejection of the theory of cognitive dissonance does not seem warranted as his experimental design does not block alternative modes of explanation.

In a study undertaken by Zimbardo (1960) mention is made, in discussing dissonance theory, that "while discrepancy and involvement play key roles in the theory, nevertheless they remain rather vague and insufficiently specified" (p. 87). Zimbardo proceeds to point out that involvement has most frequently been used, "to mean concern with a given issue because it is intrinsically involving and is related to the individual's needs and values" (p. 87).

Involvement, for Zimbardo, was used in a way which differed from that of most other investigators. Zimbardo called involvement

response-involvement and defines it as "involvement in terms of the relationship of one's opinion to the achievement of a desired goal.

..." (p. 87). He goes on to elaborate the definition of response-involvement as being, "the instrumental relationship of a given opinion or response to the achievement of a desired goal. The opinion becomes a means of securing reward, approval, or recognition, of avoiding punishment, or of raising the individual's self-esteem" (p. 92).

Using what he terms "a previously neutral opinion area" which dealt with juvenile delinquency, he asked 80 college girls to give opinions about who was to blame in a case study dealing with a juvenile delinquent. The low involvement manipulation was obtained by telling half the subjects that the report on the delinquent was short, and therefore, not too much could be expected from their responses. The other half of the subjects were told that their responses would indicate such things as their personalities, social values, and what they considered important problems. This manipulation was intended to bring about high involvement.

After reading the study on the juvenile delinquent, each subject rated the point of blame and the strength of their conviction. The subjects were then shown pictures of individuals and were required to make judgments as to which were delinquents. Zimbardo then told the girls that since they came to the experiment in pairs and were good friends, they would probably want to know how they were doing. One girl in each pair was told that while she judged the photos well, her friend had judged every delinquent correctly. This Zimbardo hoped would make one girl in each pair appear to be an expert on rating juvenile

delinquency. By giving the "non-expert" a slip of paper indicating how the friend or "expert" rated the blame as well as how sure she was, Zimbardo introduced slight and wide discrepancies in half the subjects.

These subjects were then permitted to make another evaluation of both the study and the photos. Zimbardo states, "they were told that it did not matter whether or not they changed their opinions as long as they tried to make new, independent evaluations and did not try to duplicate what they had done merely to be consistent" (p. 89).

Zimbardo lists his results as the following:

- 1. Highly involved Ss changed significantly more than Ss not involved.
- 2. Opinion change increased significantly as the extent of the discrepancy between communicator and recipient increased.
- 3. The interaction between these variables was not significant.
- 4. The maximum dissonance group changed significantly more than the other groups, while the minimum dissonance group consistently changed least (p. 93).

Zimbardo's results indicated that there existed a positive relationship between the size of the discrepancy and opinion change. In evaluating this study, we find Zimbardo using involvement in a manner contrary to that used by Sherif and the majority of other investigators. Furthermore, we find him using Sherif's latitude assessment technique which was developed on the basis of involvement meaning issue-involvement, rather than response-involvement. The question can also be raised as to whether Zimbardo suggested an attitude change by the instructions to the individual when they were told "that it did not matter whether or not they changed their opinions as long as they tried to make new, independent evaluations and did not try to duplicate what they had done merely

to be consistent" (p. 89). It would seem that what Zimbardo has actually shown is that with low ego involvement and communicators who are well liked greater change can be brought about with greater discrepancy. These findings would not be counter to the predictions of the social judgment-involvement approach.

The Present Study

The present study examines the two approaches at their points of conflict. Issues were chosen to maximize the number of ego-involved subjects as much as possible. By selection of subjects on the basis of their responses to social judgment, importance, and behavioral involvement scales, the following evaluations were made possible: (1) the relationship between ego involvement and importance; and (2) the relationship between involvement, degree of discrepancy, and attitude change. Included in these evaluations were assessments of differential responses by sex and type of issue.

CHAPTER II

METHOD

This chapter will describe the methods involved in the construction and administration of the pre and posttest as well as a discussion of the questionnaires and relevant methodological consider-The general design of this study includes a prepost group of subjects, consisting of several classes, who received the premeasure, the experimental manipulation, and the postmeasure. This group of subjects composed the major portion of the study (N = 340). tion, a pre-pre group was included as a control group. This group received the pretest twice, once with the experimental group at the beginning of the study and again when the posttest was administered (N = 31). The control group was included to determine if any attitude change over time had taken place. In an additional control group, the pretest was administered at the time the posttest was given (N = 62). This group received the identical questionnaire as the pretest sample.

Pre-experimental Procedures

Selection of the issue. During the summer preceding the present study, a pilot study was run at the University of Nevada to aid in the selection of issues to be used in the pretest. The selection was based on the following four criteria: the issues must be relevant

to a college population; they must yield distributions of committed and noncommitted subjects; they must be unambiguous; they must be issues for which a behavioral index could be derived. Four issues emerged from application of the above criteria: (1) the value of intercollegiate athletics on a college campus; (2) the necessity for religion in living a meaningful life; (3) the place of sororities and fraternities on a college campus; (4) the need for our country to be involved in Vietnam.

Of primary concern to this study was the issue of athletics.

This was based upon the fact that at the University of Oklahoma athletics has always had a large following and a number of strongly committed supporters.

The pilot study permitted the development of scales for the assessment of latitudes of subjects in compliance with the suggestions of Sherif, et al., (1965b). Nine statements were prepared for each issue based on positions of individuals who were known to be pro and anti each issue. These scales were again used on the campus of the University of Oklahoma with a small sample with the indication that they were adequate for the study. The extreme statements had been designed so that they would not provide a ceiling effect and restrict the range of positions due to too moderate statements at the extremes.

Selection of Sample. To insure that the sample would include those individuals who were committed or involved in the issue the same procedure used by Sherif (Sherif & Hovland, 1961) was followed. Because athletics was the primary issue, the study required a sample of subjects who were publicly committed to that issue. This objective was accomplished by the examination of class schedules of athletes on file in

the coach's office. After determining which classes contained athletes, permission was sought from the instructors for use of their classes in this research. Details of the research were not revealed to the instructors until after the second testing.

The final pretest sample consisted of six classes totaling 519 subjects. Two classes were obtained from the geology department; two from the education department; one from the history department; and one from the sociology department. All students attending a class on the day of testing were included in the sample, with no prior knowledge given to the class that they were to take part in a research project.

Administration of the Pretest

Two experimenters were used for the administration of the pretest, with each experimenter being randomly assigned to three classes. Assistants were used to aid in passing out and collecting materials.

The research was introduced to the class as a large scale survey conducted by the Institute of Group Relations concerning the feelings of college students toward various issues. As the question-naires were distributed face down to the subjects, they were asked not to turn them over nor to move ahead of the class, as there were specific instructions necessary to correctly fill out each page. They were then asked to pick up their booklets and turn them over. Attached to each booklet by paper clip was a two page form designed to obtain personal data from the subjects (see Appendix A). They were told that the "subject data sheets" would be filed in the psychology office to be used by future researchers who were looking for individuals interested in

participating in research. One of the questions on the data sheet, aside from such things as name, age, ordinal position, sex, etc., was a question asking how interested the subject would be in taking part in future research. It was pointed out that this two page form was the only one they were to write their name on as we wanted the survey to remain anonymous. Unknown to them a code number was written on the back of the questionnaire booklet in invisible ink so that individual pretest scores could be matched to subsequent posttest scores to obtain attitude change.

After completion of the subject data sheet the forms were passed back to the experimenter and the request was again made to please not put any names on the questionnaire booklet, to emphasize anonymity. The examiner then gave the following instructions for the completion of each of the attitude scales in turn (see Appendix B, pp. 91-94):

Read each of the nine statements carefully before you put any marks on your paper (time was allowed for reading the statements).

After reading the nine statements carefully put the letters MA (most acceptable) next to the \underline{ONE} statement which comes closest to your stand on this issue.

Put the letter A (acceptable) next to any other statement or statements which are also acceptable to you from your point of view.

Reading through the statements again, put the letters MO (most objectionable) next to the \underline{ONE} statement which is most objectionable to you from your point of view.

Put the letter 0 (objectionable) next to any other statement or statements which are also objectionable to you from your point of view.

The letters used on the attitude scales were written on the blackboard with their meanings to assure uniformity of responses. After the first scale was completed, it was emphasized that there should be only one MA and one MO for each scale. The examiner went through the instructions slowly enough to be certain that all the subjects were

working together and had enough time to make all the responses they wanted. The subjects were asked to please not turn the page until everyone in the class had finished the scale. Issues used on the pretest in the order presented were sororities and fraternities, athletics, religion, and Vietnam.

After completion of the attitude scales, subjects were instructed to turn the page and the following instructions (which appeared on the top of the page) were read to them (see Appendix B, p. 95).

Considering all the things you think about from day to day, activities you engage in from day to day, etc., answer <u>each</u> of the statements on this page with regard to the following question. "HOW IMPORTANT IS THE <u>ISSUE</u> TO YOU?" Put a circle around the number which best indicates the importance of the issue to YOU.

Emphasis was placed on the fact that what was of concern was the issue itself rather than the truth or falsity of the statement. The first statement, concerning Red China, was used as an example. It was pointed out that interest revolved around Red China and the importance of it as an issue rather than whether they agreed with Red China being admitted to the United Nations. The next two pages consisted of questions included as part of data collection for the generation of future hypotheses and were not directly relevant to this study. On these pages (see Appendix B, pp.96-97) were questions and instructions which required the subject to respond for his best friend and for another friend. The questions were identical to the ones the subject completed from his own viewpoint but the instructions requested that he answer them as he believed his friends would.

Of interest to this study was an additional scale of importance (see Appendix B, p. 98), which was preceded by the following instructions:

Below is a sample list of 50 items listed by several individuals in response to the question, "make a list of items which are important to you." The ones listed may not be the same ones you would include in your list. Think of all the things in your life which are important to you. Starting with the most important as number 1, list the top 10 things which are important to you.

It was explained that the list presented was obtained from a sample of 25 college students and it was very possible that what was important to them may not appear on the list at all. The 50 items were merely listed as a guide for them to use to help them think of the wide nature of the task.

The final two pages of the pretest (see Appendix B, pp. 99-100) contained the Marlowe-Crowne Social Desirability Scale (Marlowe & Crowne, 1960). This scale, as with the previous estimates of friends' feelings, was included for the generation of future hypotheses and was not directly relevant to the present study.

Selection of Issues for the Posttest

To test the hypotheses stated in the first chapter, it was necessary to examine issues that would yield a large number of subjects holding an extreme position on the pretest. This would insure a wide spread in discrepancy between the subjects' positions and that of the communicators. The selection of the issues to be used in the posttest was accomplished by taking the four issues and reducing them to distributions of the most acceptable position taken by the subjects. These distributions are shown in Figures 1, 2, 3, and 4, where it can be seen that 95 percent of the males chose statements in favor of athletics on

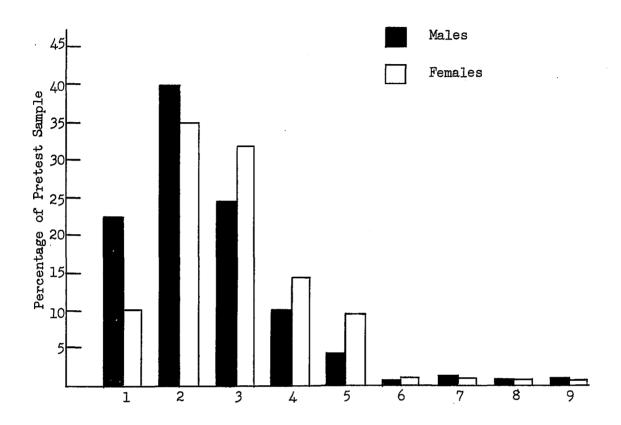


Fig. 1. Most Acceptable Position on Athletics (Pretest)

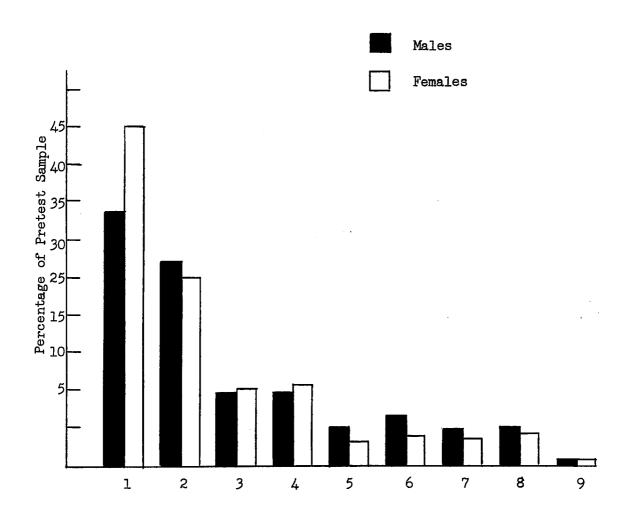


Fig. 2. Most Acceptable Position on Religion (Pretest)

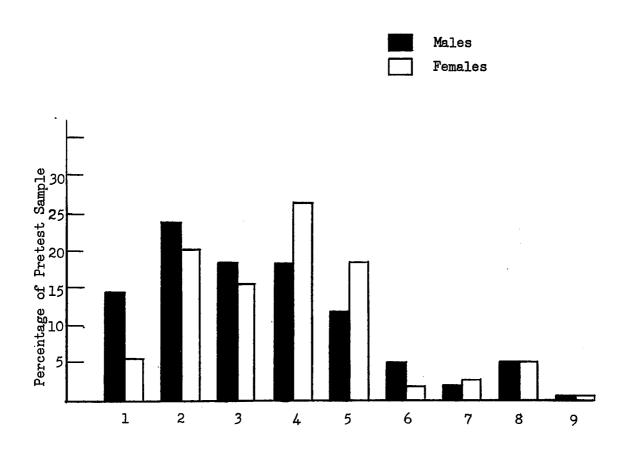


Fig. 3. Most Acceptable Position on Vietnam (Pretest)

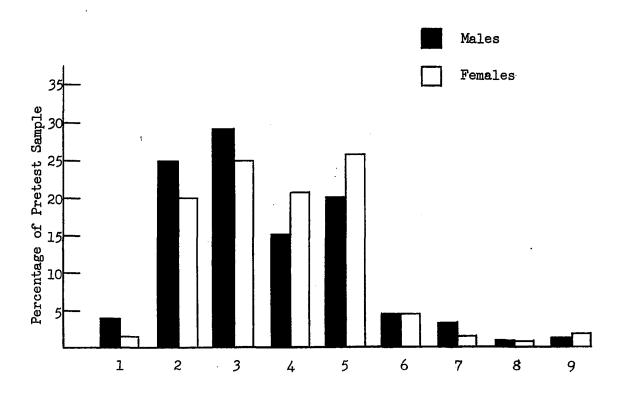


Fig. 4. Most Acceptable Position on Sororities or Fraternities (Pretest)

a college campus as compared to 90 percent of the females. Believing in religion, on the other hand, was seen "to be necessary to live a meaningful life," by 81 percent of the males and 87 percent of the females. Statement one on the religion scale was the most acceptable for 46 percent of the females and 34 percent of the males. Statement one on athletics received the most acceptable response from 22 percent of the males and 10 percent of the females. Similar results were not obtained on the other two issues. The issues of athletics and religion were therefore chosen.

Preparing the Communications

The next step was the writing of the discrepant athletic and religion communications to be used in the posttest. It was necessary that they be creditable and yet discrepant to the subjects' positions. To insure credibility a method of presentation which would guarantee their acceptance was needed. It was decided to present them as articles in the school newspaper, the Oklahoma Daily. Several versions of the articles were written and given to individuals for evaluation of content and journalistic style prior to the acceptance of the two actually used in the study.

The article on athletics presumably reported the results of a news conference by Dr. William MacInree, Dean of Social Sciences at Johns Hopkins University. It represented a strong stand against intercollegiate athletics in universities. Quotes from a number of hopefully creditable sources were sprinkled liberally throughout the article such as, "Federal Government studies demonstrated that students at participating universities have lower aptitude scores as measured by the ACT

and SCAT tests given to freshmen," etc. The complete text of the article is shown in Appendix C.

The article on religion was based on a recently published article by Milton Rokeach in the journal <u>Transaction</u>, January, 1965. The intent of this article was to discredit religion by reporting findings such as the following: "the devout tend to be extremely intolerant of criminals, delinquents, prostitutes, homosexuals, and those individuals in need of psychological assistance," that those individuals who belong to religions, "express more intolerance and prejudice toward racial and ethnic groups than do nonbelievers," etc. The complete article is shown in Appendix D.

The two articles were planted in reproduced pages of the school paper. The dates on the pages were November 5, 1966, and September 20, 1966. These pages were selected because they contained actual articles on the ineffectualness of cigarette filters and the censorship of movies which were used in the posttest session. It was hoped that the inclusion of these real articles might be recognized by at least some subjects, thus adding more credibility to the devised articles. The text of these legitimate articles is shown in Appendix E. The planted article concerning athletics was published on the reverse side of the page containing the article on cigarettes, while the planted article on religion appeared on the reverse side of the page containing the censorship article.

Administration of Posttest

The administration of the posttest to the classes began thirty-seven days after the pretest. The posttest required one hour to administer with the six classes being tested by the two experimenters in a three day period. One of the pretest classes was drawn at random and used for the control group. The experimenters exchanged their pretest classes so they would be unfamiliar to the subjects during the posttest. The examiner and assistants who had administered the pretest for that class readministered the pretest at the time the other classes were given the posttest. Students in the control group were told that the reason for the retest was due to the loss of the original data by the computer center. At this time a second control group was also given the pretest. This class was obtained from the history department and tested during a regular class period.

The posttest was introduced by the following instructions:

We are interested in finding out how people go about forming impressions about others. We do so all the time whether it be from seeing a person, listening to something he says, reading a book he has written or reading an article he has written in a newspaper. This latter is what we are interested in. Specifically, we are interested in how impressions are formed about a person after reading an article written about some of the things he has said or found after doing research on a subject. I am going to pass out two different pages taken from Oklahoma Daily's published in recent weeks containing articles you will read. You will be asked to carefully read the article, evaluate the opinion of the person involved as well as evaluate his personality.

In order to match the individual posttest data with the pretest data, the invisible ink coding process was again used on the booklet itself and on a cover sheet containing the subjects' names (see Appendix F). This was torn off and passed in ostensibly to mark their extra

credit "forms in the psychology office" with the fact that they had participated in this particular research. Again, anonymity of the test booklets was stressed; subjects were asked not to put their names on the booklet itself.

The subjects were then asked to look at the pages of the Oklahoma Daily and note that they were taken from two different issues. The examiner told them that he was interested in having them evaluate four different individuals discussed in the articles. The order of presentation of the articles was fixed: censorship, intercollegiate athletics, religion, and cigarette smoking. The first article was then introduced as follows:

Look at page four of the November 5 issue of the paper. There in the second column circled in red you will find an article dealing with the censorship of movies. Read the article carefully keeping in mind that we will be asking you to evaluate the opinion and the personality of Mr. Joseph Strick.

After reading the article, the subjects were asked to turn to their questionnaire and read the nine statements dealing with censorship (see Appendix G, p. 109). They were asked to respond to the questionnaire as they believed Joseph Strick would. The instructions given to the subjects were:

Read each of the nine statements dealing with censorship carefully before putting any marks on your paper. Keep in mind that you are to evaluate the opinion of Mr. Joseph Strick. Now that you have carefully read all the statements, put the letters MA next to the one statement that comes closest to Mr. Strick's position on this issue. Now considering all of the statements, indicate any other statement or statements which would also be acceptable to him. Of all of the statements, which one statement would be most objectionable to Mr. Joseph Strick from his point of view. Put the letters MO next to that one statement. Next to any other statement or statements which you think Mr. Strick would find objectionable place the letter O.

When the subjects had completed filling in the attitude scale for Mr. Strick they were asked to turn the page and fill out the scale evaluating his personality. This scale included seven questions dealing with such things as subjects' ratings of his intelligence, his expertness, his sense of humor, etc. (see Appendix G, p. 110).

After rating Strick's personality, the subjects were told to turn the page. Instructions were given to obtain responses to the attitude scale as it applied to them.

This procedure was then followed for each of the three remaining articles (see Appendix G, pp. 112-120).

The two pages following the attitude and personality scales dealt with the behavioral commitment of the individual to athletics and religion (see Appendix G,pp.121-122). The page dealing with athletics asked the following four questions: (1) Are you actively involved in any formal sport activities? This would include such activities as intercollegiate football, wrestling, baseball, track, etc. Indicate the kind and average number of hours per week. (2) Are you actively involved in any informal sport activities? This would include such things as touch football, swimming, sandlot baseball, etc. Indicate the kind and approximately the hours per week. (3) Indicate what kind of sport activities you attend as a fan as well as the average number of hours per week. (4) How many hours a week do you watch, or listen to sport activities on the television or radio?

The behavioral commitment questions dealing with religion consisted of the following: (1) What is your religion? (2) How do you classify that religion? (3) How often do you attend church services?

(4) To what extent do you participate in church activities other than church services?

The final page included the pretest questionnaire dealing with the importance of ten different issues. As with the pretest questions dealing with friends and social desirability, this page was included for generation of future hypotheses and was not directly relevant to this study.

At the conclusion of the posttest the examiner asked the subjects to answer five questions dealing with the experiment. The questions were asked one at a time with the subjects writing their responses in rectangular boxes each being numbered from one to five (see Appendix H). These questions were designed to assess the subjects' perception of the purpose of the study in the hopes of providing enough information to evaluate any demand characteristics operating in the experiment.

Throughout the study, beginning forty days before the pretest, local newspapers were scanned for articles involving the issues of athletics and religion. Articles deemed relevant to the present study were isolated and saved. Summaries of these articles (by displaying the headlines accompanying them) are shown in Table 1.

Table 1

Newspaper Articles Involving Athletics and Religion

Date	Head	line
	Athletics	Religion
9/15	Football Pep Rally	Several School Districts Ignore Prayer Law
9/20	Raiders Splurge in Third Quarter & Win Against Oregon 17-0	
9/22		Voluntary Prayer Bill Fails to Win Approval. Prayers Offered by Students at Game.
9/23	Captains Selected for Iowa State Clash	Mike Monroney Voted Against Prayer Amendment
9/24	Sooners Score 33-11 Victory Against Iowa State	
9/28	Spartans Top UPI Poll, Sooners 19th	
9/29	Sophomore Sensations Top Big Eight Statistics. Tougher Schedules Cause Grid Atten- dance to Surge.	
10/1	Frosh Challenges K-State	Nuns Adopt New Dress. Controversies Due Probing by Catholics. Baptists Hold Special Class.
10/4	Texas Just Another City Game to Riley. Bring on Steers! Liggins is Waiting. Irish Game is Sellout.	•
10/6	OU Senate Joins Rally. All Routes Go Toward Cotton Bowl. Sooners, Longhorns Tie as 'Big D' Date Nears It All Depends	
10/7	Sooner Victory Means Holiday. UPI Predicts Texas Victory. Holiday Contingent on Win.	

Table 1--(Continued)

Date	Head	line
	Athletics	Religion
10/8	Now It's Time for the Football Game	Texas U. Discontinuing All Pre- Game Prayers
10/11	Big Red Rolls, Upsets Texas 18-9 Sooners Snap String Fans Go Wild as Big Red Dehorns Longhorns Famished Sooners Feast on Cooked Longhorns	
10/15	Surging Sooners Battle Jayhawks Boomers Battle KU Monday	Quakers Open Refugee Camp UCCF Sets 1 Act Play Catholics Hear Faith Speech 40 Church of Christ Students Attending Weekend Retreat Bishop Faces Heresy Count
10/18	Sooners Blank Jayhawks, 35-0. Bring on the Irish	
10/10	Pounce on the Fighting Irish Luck of the Irish Earns Top Rating Sooners Lead Loop Statistics Come Fans: Let's Rally Too!	-
10/22	Sooners Out to Tame No. 1 Notre Dame Loyal Fan Attends Practice Sessions 40 Years Sooners Real to Irishmen Sooners Challenge No. 1 Notre Dame Oddsmakers Nix Big Red	
10/22	Game with Notre Dame (see 10/25)	

PRETEST TOOK PLACE ON OCTOBER 24, 25, and 26 $\,$

Table 1--(Continued)

Date		Headline
	Athletics	Religion
	Pow! Zap! 'Packers' 38. Sooners 0,0,0,0. Irish Loss May Help Sooners Top Rated Fighting Irish Stew Sooners 38-0. (Date of game: 10/22)	
10/26	Notre Dame Still No. 1 After Crushing Sconers	
10/27	Sooners Out for Revenge	
10/29	Big Red Attempts to Herd Buffaloes	Campus UCCF Members Attend Seminar
11/2	OU Loses to Colorado 24-21	OU Hosts Jon Braun
11/5	Red Raiders Seek Streak Against OSU	New Bible is Revised
11/8	OU Rambles, Makes 'Cats' Scramble Big Red Stomps 'Cat' Upset Hopes OU 37, Kansas State 6	
11/30	Nebraska Dominates State Race Nine of Top Ten Given Nod: Sooners Tulsa Also Favored	
11/12	Will Missouri Lose No. 3? Sooners Aiming to Show Missouri	Gathering Set by Mennonites Baptists Urge Racial Peace
11/15	Tigers Beat OU 10-7 Dejection Fills Locker Room Tigers Erase Sooners Title Hopes	
11/16	Beefy Cornhuskers to Pose Problem	
11/18	Frosh Footballers Ready for Aggies	

Table 1--(Continued)

ate	Headline					
	Athletics	Religion				
1/23	Cook Nebraska's Goose Thanksgiving Ground Trembles; Huskers on Move	"Dynamic Religion" Goal for Discussion Group				
1/24	Game with Nebraska (see 11/29)					
	POSTTEST TOOK PLACE ON NOVEMB	ER 29, 30, and DECEMBER 1				
1/29	Sooners Blemish Nebraska's Spotless Record Vachon's Toe Gives OU 10-9 Edge Oklahoma Triumph in "Big Red Bowl" 10-9 Win over Fourth- Ranked Huskers Happiness Hovers as Sooners Celebrate (Date of game: 11/24)	,				
2/6	Hot Cowboys Freeze Out Sooners 15-14					

CHAPTER III

RESULTS

Subsequent to the collection of the pretest data, all the subjects' responses were scored to permit punching them on IBM cards for analysis. Each subject was given a code number corresponding to the code used on the back of the personal data sheet and the pretest questionnaire. Demographic data obtained on the personal data sheet was coded as well as each of the responses made to the questionnaire by the subject. Latitudes of acceptance and rejection were then obtained by counting the number of responses acceptable and the number objectionable, respectively. The latitude of acceptance, included the most acceptable position and the latitude of rejection included the most objectionable position. The location of the most acceptable statement and the most objectionable statement was coded by considering statements A through I as a nine point scale. As an example, if a subject chose statement A as his most acceptable position and also accepted statements B. C. D. his latitude of acceptance would be (4) and the location of his MA (most acceptable) position would be (1). If the most objectionable statement to him was H and he also objected to statements F, G, and I, his region of rejection would be (4), and the location of his MO (most objectionable position would be (8).

The importance scale was scored with the value circles by the subject in response to each of the ten issues. The value (1) was assigned to the category "not at all important" while the value (9) was assigned to the category "very important." Importance scales for best friend, other friend, and open ended importance scale, as well as the Marlowe-Crowne Social Desirability scale were included for the purposes of generating future hypotheses, but will not be reported in the results.

The posttest (see Appendix G) was scored in a fashion similar to the pretest. Subjects' latitudes of acceptance and rejection were derived, along with their estimates of how the individuals in the articles would respond if they were taking the questionnaires. The subjects' evaluations of the personality dimensions were also coded.

In order to index the degree of behavioral commitment for each subject for athletics, the four questions dealing with number of hours spent at athletic activities (see Appendix G, p. 121), i.e., participation in varsity sports, intramural sports, as attending sports fans, and as listening sports fans, was recorded for each subject. Frequency distributions were set up for each of the four questions separately and the median for each was determined. Each subject's response to each question was then coded according to whether or not he fell above (1) or below (0) the median number of hours for that question, resulting in the sixteen ordered patterns shown in Table 2. The pattern scores were then recorded for each subject as a rough index of his behavioral commitment to athletics.

An approximate scale of degree of religions behavioral involvement was similarly constructed by tabulating frequency

Table 2
Patterns of Behavioral Commitment to Athletics

Pattern Score	Varsity	<u>Intramural</u>	Attending Fan	Listening Fan
16	1	1	7	1
15	ī	า ี	ī	Ō
14	ī	ī	Ō	- 0
13	ī	ī	0	Ō
12	ī	0	1	ĺ
11	ī	Ō	· 1	0
10	1	0	0	1
9	1	0	0	0
8	0	1	1	1
7	0	1	1	0
6	0	1	0	1
5	0	1	0	0
4	0	0	1	1
3	0	0	1	0
2	0	0	0	1
1	0	0	0	0

aMedian hour cut offs for each distribution were as follows: (a) varisty: scored as (1) if greater than 0, scored as (0) if 0; (b) intramural: scored as (1) if greater than 0, scored as (0) if 0; (c) attending fan: scored as (1) if greater than 3, scored as (0) if 1, 2, or 3; (d) listening fan: scored as (1) if greater than 2, scored as (0) if 1 or 2.

Table 3

Patterns of Behavioral Commitment to Religion^a

Pattern Score	Church Attendance	Church Activities
4	1	1
3	1	0
2	0	1
1	0	О

Median hour cut offs for each distribution were as follows: (a) church attendance: scored as (1) if greater than 4, scored as (0) if 1, 2, 3, or 4; (b) church activities: scored as (1) if greater than (0), scored as (0) if 0.

distributions of the number of hours that subjects spent in attending church and in participating in church activities (see Appendix G, p. 122), determining the medians, and coding the subjects according to whether they fell above or below the median for each of the two categories, resulting in the four ordered patterns shown in Table 3. The pattern scores were then recorded for each subject as a rough index of his behavioral commitment to religion.

Awareness was scored by applying the following criteria to the open ended questions administered at the end of the posttest: if the answer in block one to question one (see Appendix G) was: "change due to article," the response was given (2); for the "change only," a (3) was assigned. If, after reading question two the subject replied with something like "change due to exposure of fake article," he was given the value (4); if he replied with "change due to article" to question three he was given (5); if "change only" to question four with no elaboration he received (6); if the subject replied on his paper with "yes" to question five his score was (7); if "no" it was (8). The questions were read to the subjects one at a time. Their answers were recorded to each question prior to going on to the next question in order to reduce chances of their going back and filling in responses from additional information presented to them.

Ego Involvement vs Importance

The first concern of this study was to determine the relationship between ego involvement and importance. Correlations were obtained for each of the four issues in the pretest between the

subject's latitude of rejection (Sherif's index of ego involvement) and his position on the importance scale. Separate correlations were obtained for males and females. These correlations are displayed in Table 4. Significant relationships between ego involvement and importance were obtained on all correlations with the exception of females on the issue of Vietnam. Although these relationships are far from perfect, they are sufficiently significant to warrant acceptance for purposes of this study of the assumption that the two measures are measuring much the same things.

It is of additional interest to note the relationship between ego involvement and importance as a function of extremity of most acceptable position. These relationships for both athletics and religion are shown in Figures 5 and 6. They are strikingly similar for the two issues. As would be expected from previous studies (Sherif, Sherif and Nebergall, 1965b), the more extreme the most acceptable position the more important and more ego involved are the subjects. Of interest is the tapering off of the relationship between extremity and ego involvement for athletics toward the extreme position (see Figure 5). Males in particular appear to be more ego involved at a less extreme position.

On the importance scale the range of values used by the subjects extended from "not at all important" (1) to "extremely important" (9). The median values when graphed (see Figs. 5 and 6) indicated a wider range used for athletics (1.5 - 8.25) than for religion (4.75 - 8.25) with males showing the wider range on both. With respect to the ego involvement scale, on the issue of athletics individuals who chose the most acceptable position of 1 and rated the issue as 8.25 (median)

Table 4 Correlations Between Ego Involvement and Importance for Each of the Four Issues

<pre></pre>	Females
+.23 ^e	+.18 ^d
+.11ª	+.13 ^b
+.31 ^e	+.31 ^e
+.13 ^b	05
	(№230) +.23 ^e +.11 ^a +.31 ^e

ap < .05 bp < .025 cp < .01 dp < .005 ep < .0005

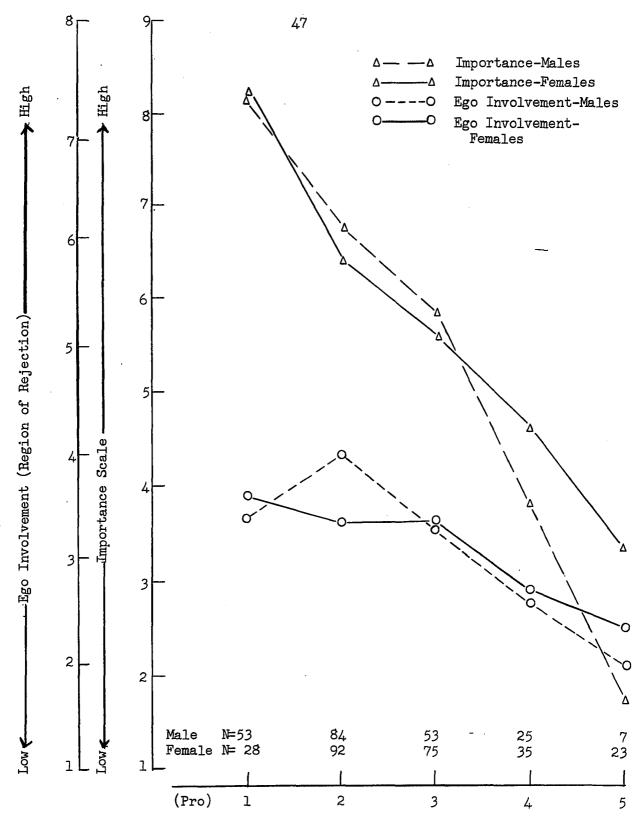


Fig. 5. Extremeness of Athletics Attitude (On the nine point pretest scale)

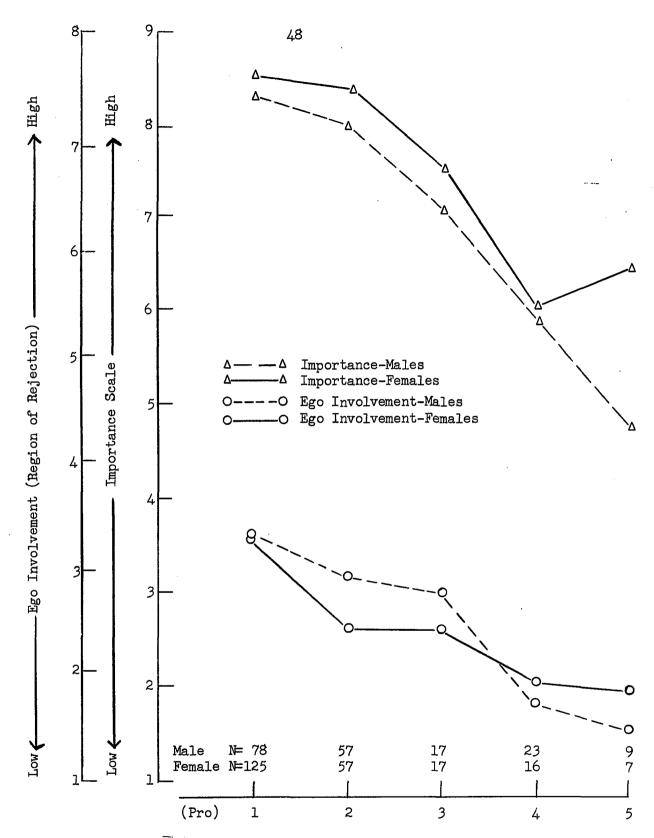


Fig. 6. Extremeness of Religion Attitude (On the nine point pretest scale)

in importance had the ego involvement score of 3.25 (males) and 3.50 (females). Females seemed to have somewhat of a higher ego involvement score than males on the issue of athletics. Those individuals who chose position (2) as their most acceptable statement showed interesting differences. Males choosing position (2) ranked the issue 6.75 in importance and had the ego involvement score of 4.00 whereas, females ranked the issue 6.25 in importance and had the median ego involvement value of 3.25.

It is interesting to note (see Figure 6) that females who chose the most acceptable position of (5) (neutral point) rated the issue with a higher degree of importance than individuals whose most acceptable position was at (4). For them it would appear that being undecided about religion was important. Individuals choosing position (5) typically rejected extreme statements either pro or anti religion. This mode of responding was not noted on the athletic issue.

Awareness and Attitude Change

Evaluation of the results of the awareness questions (see Appendix H) indicated no awareness at all that the articles were "fake" (see Figure 7). Only 15 percent of the students felt that the purpose of the study dealt with how an article would influence a person.

"Influence" was not spelled out and could mean "influence the perception of the individual" rather than "influence one's attitude on the issue." These 15 percent "aware" subjects did not differ significantly in attitude change from the remaining "unaware" 85 percent of the subjects: mean change for aware males (8%) was .86 and .91 for athletics

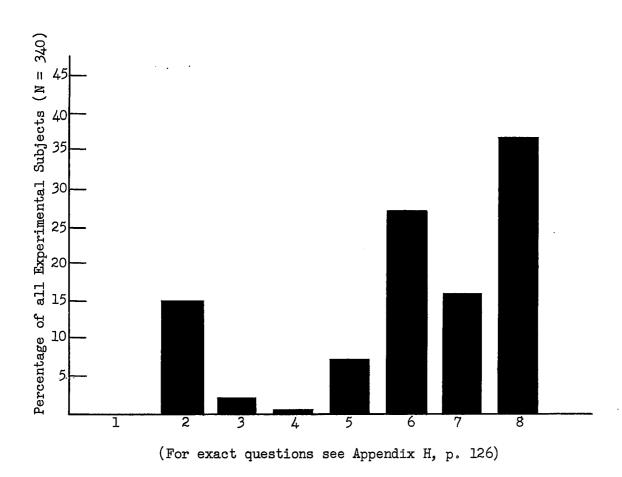


Fig. 7. Distribution of Awareness Scores

and religion, respectively, as opposed to 1.05 and .68 for unaware males; while mean change for aware females (7%) was .93 and .96 for athletics and religion, respectively, as opposed to .89 and .59 for unaware females.

The eight awareness questions were designed to make up a rough eight point scale of "level of awareness" where (1) indicates the highest level and (8) indicates no awareness. Correlations for males (r = -.01) and females (r = -.06) between level of awareness and attitude change for athletics were not significant. Correspondingly, correlations for males (r = -.08) and females (r = -.09) between level of awareness and attitude change for religion were also not significant.

In response to question four (see Appendix H, p. 126) concerning the falsity of the articles, several individuals actually repudiated the results of the legitimate article. For example, the article on cigarette smoking received such responses as, "how can filters permit more tar through," or even more unique, "the study was done in New York where the smog level is very high and this was responsible for the results." The articles dealing with both athletics and religion, on the other hand, received no responses which indicated they were thought to be "fake."

One individual stated that they could have been published for the study but then said he did not think so.

Comparison of Experimental Group to Control Groups

Since a comparison of Festinger's theory to Sherif's approach is the major concern of this study, a point estimate of attitude position seemed most appropriate. Consequently an individual's most acceptable

position was used throughout the following analyses as an indicator of his attitude. Attitude change was assessed by subtracting the subject's most acceptable position on the first testing from his most acceptable position on the second testing. Thus, for both the pre-pre control and the prepost experimental groups, a positive change indicates change in the direction of the communication.

To measure the effect of the communication in altering attitudes of the subjects, the change scores of the prepost subjects were compared to the change scores of the subjects who received the pretest twice: the mean change of the prepost group on athletics (.94) was significantly greater (F = 4.16, p < .05) than the mean change of the pre-pre group (.32); for religion the prepost mean change score (.63) was not significantly different (F = 1.63) from the mean pre-pre change score (.26). Thus, using change scores, the experimental groups did show change in the most acceptable position for athletics but not for religion.

Comparing the most acceptable positions on the posttest for the experimental subjects to the position of those subjects who received the pretest only (at the time of the posttest) did yield significant differences for both athletics and religion: the mean posttest position (3.57) for athletics was significantly closer to the discrepant communication (F = 23.81, p < .0005) than the mean pretest only position (2.39); similarly for religion, the mean posttest position (3.38) was significantly closer to the discrepant communication (F = 11.12, p < .0005) than that of the pretest only (2.27). These means are summarized in Table 5.

Table 5

Comparison of Means of the Most Acceptable Positions
Among the Experimental and Control Groups

	First Testing		Second Testing	
	Athletics	Religion	Athletics	Religion
<pre>Experimental Group (prepost, N = 340)</pre>	2.63	2.74	3.57	3.38
<pre>Control Group (pre-pre, N = 31)</pre>	2.81	1.90	3.13	2.16
<pre>Control Group (pre only, N = 62)</pre>				

To determine if a change over time had taken place, the means of the most acceptable positions on the pretest for the experimental subjects and the pretest only subjects were compared (see Table 5). The mean most acceptable position on athletics for subjects tested early in the study (all first testing pretest subjects, N = 371) was 2.65, while the mean of pretest only subjects (tested 37 days later) was 2.39 (F = 2.32, NS); for religion the mean most acceptable position of the first group was 2.69, while the mean most acceptable position of the second group was 2.27 (F = 2.04, NS). Thus, there appeared to be no change as a function of time.

Attitude Change

The next step was to appraise attitude change as a function of ego involvment and discrepancy of communication.

In order to analyze the change scores on the basis of ego involvement, the median rejection region was determined. Subjects were sorted according to whether they fell above, or at or below, the median. They were further classified according to their choice of the most acceptable position on the pretest. Table 6 gives the frequencies of individuals in each cell in the resulting 2 x 4 matrix for each sex separately.

Since the classification of the most acceptable position on the issue of athletics yieldied only four subjects who responded with a most acceptable position of either 7, 8, or 9, they were not used in the following analyses.

Table 6

Frequency of Pretest Subjects' Most Acceptable Position on Athletics by Rejection Region

Rejection Region	1	2,3	4,5,6	7,8,9
		(<u>Males</u>)		
4-8	18	63	5	1
0-3	15	43	17	1
		(<u>Females</u>)		
4-8	10	65	17	1
0-3	4	57	22	1

Table 7 shows the mean change scores for each of the cells for males and females separately. The corresponding analysis of variance is displayed in Table 8. The method of unweighted means (Winer, 1962) was used to analyze the $3 \times 2 \times 2$ design. Significance of the main effect (A) supports the assumption that for athletics the manipulation was successful in bringing about attitude change: individuals with the most acceptable position of (1) had an average change of 1.41 after discrepant communication, those with the most acceptable position at statement (2) and (3) had an average change of 1.073, and those who chose statements (4), (5), or (6) had an average change of .198. A contrast between the three extreme most acceptable positions (1, 2, and 3) vs the "moderate" acceptable positions (4, 5, and 6) resulted in an F = 14.59 (p < .001) and accounts for 92.6 percent of the variance in the main effect.

Turning to religion, Table 9 displays the frequency of subjects in each cell after the median ego involvement was defined; males and females are shown separately. Since categories 7, 8, 9, contained so few subjects they were not included in the following analysis. The mean change for each cell is shown in Table 10. The results of the analysis of variance using unweighted means (Winer, 1962) is shown in Table 11. Analysis of variance of discrepancy vs high and low ego involvement for religion resulted in no significant factors.

Since behavioral commitment is assumed to be another index of ego involvement the next step was to obtain the median behavioral commitment for athletics. This was done separately for males and females because of the obvious unequivalence of such a scale between sexes.

Subjects were categorized according to their most acceptable position

Table 7

Mean Attitude Change for Discrepancy and Ego Involvement for Males and Females on Issue of Athletics

	Most Ac	<u>Males</u> cceptable	Position	Most. Ac	<u>Females</u> ceptable I	Position
	1	2,3	4,5,6	1	2,3	4,5,6
High Ego Involved	.67	1.031	400	1.700	1.12	06
Low Ego Involved	1.533	1.28	1.28	1.750	.859	•545

Table 8

Analysis of Variance Performed on Attitude Change Scores

Discrepancy vs. High and Low Ego Involvement

(Athletics)

Source	MS	df	F ·	р
Most Acceptable Position (A)	20.764	2	7.87	.01
Ego Involvement (B)	7.499	1	2.84	NS
Sex (S)	1.349	1	.51	NS
AxB	2.47	2	•94	NS
AxS	2.14	2	.81	NS
B x S	3.69	1	1.39	NS
AxBxS	.11	2	.04	NS
Error	2.63	328		

Table 9

Frequency of Pretest Subjects' Most Acceptable Position on Religion by Rejection Region

ejection	_	eptable Position	Position		
Region	1	2,3	4,5,6	7,8,9	
		(<u>Males</u>)			
4-8	29	17	2	-	
1-3	21	36	38	-	
		(<u>Females</u>)			
4-8	45	19	2	-	
1-3	39	39	20	_	

Table 10

Mean Attitude Ohange for Discrepancy and Ego Involvement
For Males and Females on Issue of Religion

		<u>Males</u>		<u>Females</u>			
	Most Acceptable Position			Most Acceptable Position			
	. 1	2,3	4,5,6	1	2,3	4,5,6	
High Ego Involved	.52	•94	1.00	.29	.58	 50	
Low Ego Involved	.71	1.00	.79	.62	1.41	.5 5	

Table 11

Analysis of Variance of Attitude Change Scores Discrepancy versus High and Low Ego Involvement (Religion)

Source	MS	df	F	p
Most Acceptable Position (A)	2.80	2	1.43	NS
Ego Involvement (B)	3.71	1	1.25	NS
Sex (S)	2.98	1	1.52	NS
A x B	.08	2	.04	NS
AxS	1.93	2	•99	NS
B x S	3.41	1	1.74	NS
AxBxS	.71	2	.36	NS
Error	1.96	295		

and whether they were above, or at or below the median. Table 12 shows this categorization for males and females separately. Due to the fact that positions 7, 8, and 9 totaled only 4 subjects, they were dropped from the subsequent analysis of variance.

The mean change for each of these cells is shown in Table 13.

The corresponding analysis of variance resulted in a number of significant factors: the (A) main effect (discrepancy), the (B) main effect (behavioral commitment), and the interaction between (A) and (B) were all significant (p < .01, .01, and .05, respectively). Because of the significant interaction, it is more meaningful to examine the simple main effects of (A) and (B) rather than the main effects. Turning first to the (A) simple effects (discrepancy) for levels of behavioral commitment (B), it can be seen from Table 14 and Figure 8 that, for those subjects of low behavioral commitment, the more extreme their initial attitude positions the more their attitudes changed; in fact, this comparison was highly significant (F = 10.56, p < .01) and accounted for 83 percent of the pooled (A) main effect and (A)(B) interaction variance. The corresponding comparison between most acceptable positions for high ego involvement on the other hand was not significant. Turning next to the comparisons between levels of behavioral commitment (B) for each discrepancy category (A), Table 14 (see Figure 8) indicates a significantly greater change for subjects at the most extreme position who are on the low behavioral commitment group than for subjects in the high behavioral commitment group (F = 15.33, p < .01); this comparison accounts for 94 percent of the variance due to the pooled (B) main effect and (A)(B) interaction. Comparisons between levels of ego

Table 12

Frequency of Pretest Subjects' Most Acceptable Position on Athletics by Behavioral Commitment

		Most Acceptable Position			
		1	2,3	4,5,6	7,8,9
·			(<u>Males</u>)		
Above Median Behavioral Commitment	5,616	29	. 77	14	1
Below Median Behavioral Commitment	1,2,3,4	4	. 29	8	1
			(<u>Females</u>)		
Above Median Behavioral Commitment	4	5	54	12	0
Below Median Behavioral Commitment	1,2,3	9	68	27	2

Table 13

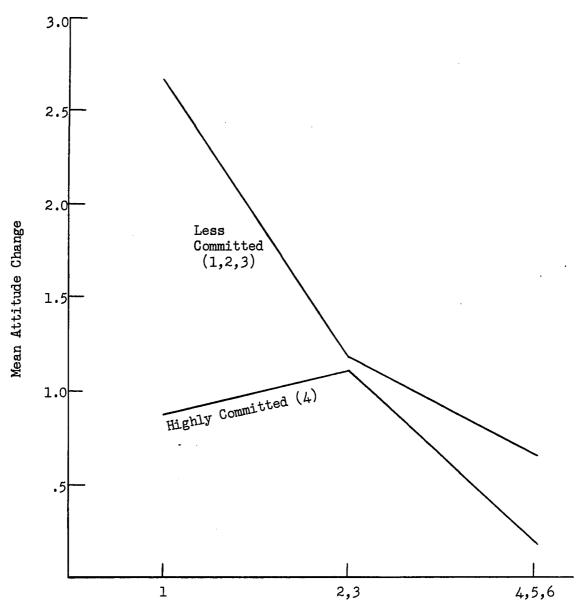
Mean Attitude Change for Discrepancy and Behavioral Commitment for Males and Females on Issue of Athletics

	Males			Females		
	1	2,3	4,5,6	1	2,3	4,5,6
Above Median in Athletic Commitment	.76	.97	.14	1.00	1.26	.25
Below Median in Athletic Commitment 3.25		1.55	1.00	2.11	.80	.30

Table 14

Analysis of Variance of Attitude Change Scores Discrepancy versus Athletic Behavioral Commitment

Sot	urce .	MS	đf	F	р	Percentage of Pooled Variance
	Most Acceptable Position (A)		2	8.72	.01	
	Athletic Behavioral Commitment (B)		1	8.39	.01	
Sex (S))	3.89	1	1.52	NS	
АхВ		10.13	2	3.96	.05	
	A for B ₁	11.04	2	2.16	ns	17
	A for B ₂	53.84	2	10.56	.001	83
	B for A	39.21	1	15.33	.01	94
	B for A ₂	.04	1	.01	ns	0
	B for A ₃	2.47	1	.97	ns	6
AxS		.15	2	.06	NS	
B x S		10.55	1	4.12	.05	
	B for S _l	31.06	1	12.18	.001	97
	B for S ₂	.96	1	.38	NS	3
AxBxS		.25	2	.10	NS	
Error		2.55	324			



Levels of (A); Most Acceptable Position on Pretest (Discrepancy)

Fig. 8. Interaction of Athletic Behavioral Commitment and Discrepancy

involvement for the remaining two discrepancy categories were not significant.

Also significant was the interaction between behavioral commitment and sex (F = 4.12, p < .05). Simple effects for this interaction (see Table 14 and Figure 9) disclose that change was greater for low behavioral commitments subjects than for high behavioral commitment subjects only in the case of males (F = 12.18, P < .001); in fact, this comparison accounts for 97 percent of the pooled (B) main effect and (B)(S) interaction variance.

Next, the median was obtained for religions behavioral commitment. Cross-clarifying by most acceptable position and position, above, or at or below the median behavioral commitment yielded the frequencies shown in Table 15. The individuals who responded with most acceptable positions of 7, 8, and 9 were dropped in the subsequent analysis of variance due to inadequate number in the cells. The mean change for these cells is given in Table 16. Table 17 gives the results of the corresponding analysis of variance.

The (A) main effect (discrepancy) was significant (p < .05) with the greatest change taking place for individuals who initially chose a most acceptable position of 2 or 3: the change for those individuals who selected the most extreme pro religious statement (1) was .63, for those selecting statements (2) and (3) was 1.15, and those at the MA of (4), (5), and (6), .45.

In addition the significant (B) main effect (behavioral commitment) indicates that those individuals who were above the median

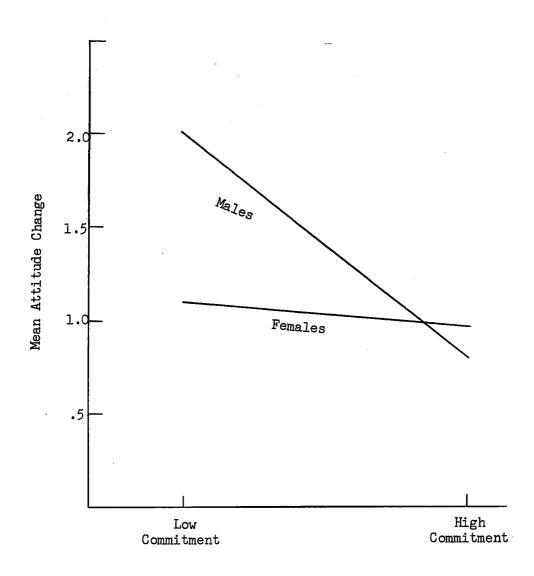


Fig. 9. Interaction of Sex and Athletic Behavioral Commitment

Table 15

Frequency of Pretest Subjects' Most Acceptable Position on Religion by Behavioral Commitment

			Most Accept	able Position	<u>-</u> .
		1	2,3	4,5,6	7,8,9
			(<u>Males</u>)		
Above Median Behavioral Commitment	4	33	34	7	2
Below Median Behavioral Commitment	1,2,3	17	19	33	18
			(<u>Females</u>)		
Above Median Behavioral Commitment	4	64	27	5	2
Below Median Behavioral Commitment	1,2,3	20	31	17	11

Table 16

Mean Attitude Change for Discrepancy and Behavioral Commitment for Males and Females on Issue of Religion

		Males			Females	
	1	2,3	4,5,6	1	2,3	4,5,6
Above Median in Religious Commitment	.45	•53	.14	.31	1.195	.20
Below Median in Religious Commitment	.88	1.79	•94	.85	1.09	.53

Table 17

Analysis of Variance of Attitude Change Scores Discrepancy versus Religious Behavioral Commitment

Source	MS	df	F	р
Most Acceptable Position (A)	8.58	2	4.50	.05
Religious Behavioral Commitment (B)	14.42	1	7.56	.01
Sex (S)	•44	1	.23	NS
AxB	.06	2	.03	NS
AxS	.11	2	.06	NS
BxS	3.95	1	2.07	NS
AxBxS	2.18	2	1.14	NS
Error	1.91	295	•	

in religious behavioral commitment (\overline{X} = .47) changed significantly less (p < .01) than those below the median (\overline{X} = 1.01).

Perceptions of the Communicator

Several correlations were obtained between the subjects' perceptions of the communicator, amount of change, and behavioral commitment (see Table 18). For females there were no correlations between behavioral commitment to athletics and such things as viewing the communicator as an expert (r = -.06), liking him (r = -.05), and attitude change (r = .06). There was, however, a significant correlation for females between liking the communicator on athletics and seeing him as an expert (r = .34, p < .01). If he was liked change was induced (r = .23, p < .01). These correlations are displayed in Table 18. On the issue of religion (see Table 18), the more females saw the communicator as expert, the more they liked him (r = .49, p < .01), and the more they were behaviorally committed to religion the less they liked him (r = -.27, p < .01).

Of additional interest, when females saw the athletics communicator as an expert on athletics they also saw the religious communicator as an expert on religion (r = .28, p < .01); when they liked the athletics communicator they also liked the religious communicator (r = .17, p < .05); and when they changed their most acceptable position on athletics they also changed their most acceptable position on religion (r = .21, p < .01).

Turning to males, first on the issue of athletics, the more subjects were behaviorally committed to athletics the less they saw the

Table 18

Correlations on Athletics and Religion

		Athletic	s		Religion	
	Liking	Change	Behavior	Liking	Change	Behavior
	-		(<u>Females</u>)			
Expert	•34 ^b	.14	06	•49 ^b	.04	14
Liking		.23 ^b	05		.13	27 ^b
Change			.06			.09
			(<u>Males</u>)			
Expert	.43 ^b	.30 ^b	37 ^b	.47 ^b	.06	11
Liking		.40 ^b	33 ^b		.21 ^b	18 ^a
Change			26 ^b			17 ^a

a - p < .05

b - p < .01.

communicator as an expert (r = -.37, p < .01) and the less they liked him (r = -.33, p < .01). Also, liking and expertness were highly correlated (r = .43, p < .01). In addition, the more subjects were behaviorally committed to athletics the less they changed their attitudes (r = -.26, p < .01). Similarly, on the issue of religion, the more an individual was behaviorally committed to religion the less he liked the communicator (r = -.18, p < .05). Although expertness and liking were high correlated, however, (r = .47, p < .01), the correlation between behavioral commitment and expertness reached only borderline significance (r = -.11, p < .08). As in the case of athletics, the more males were behaviorally committed to religion the less they changed their attitude (r = -.17, p < .05).

As did the females, when the males saw the athletics communicator as an expert on athletics they also saw the religious communicator as an expert on religion (r = .26, p < .01) and when they liked the athletics communicator they also liked the religious communicator (r = .37, p < .01). Unlike the females, however, male change in most acceptable position on athletics was not correlated significantly with change in most acceptable position on religion.

Table 18 indicates the correlations for both males and females on athletics and religion.

CHAPTER IV

DISCUSSION

Sherif's (1964) position of equating importance and ego involvement receives some support from the results of this study. As seen in the previous chapter, importance and ego involvement measured on the pretest on the four issues (sororities, athletics, religion, and Vietnam for males) were significantly correlated. One can therefore say that the more ego involved an individual is, using Sherif's latitude of rejection as the measure, the more important he tends to view the issue.

However, it should be noted that this conclusion is arrived at by examining the relationship between the two variables for each issue separately. Recall from a comparison of the two issues as is done in Figures 5 and 6 on pages 47 and 48 of the previous chapter: though males and females both rate religion higher in importance than athletics, the ego involvement scale for athletics is higher than the ego involvement scale for religion. One can only speculate as to this apparent contradiction. Perhaps, in a university setting such as the University of Oklahoma, involvement in athletics has been situationally heightened by the great emphasis on campus sports. Athletics are probably discussed daily as opposed to religion which does not receive such a prominent role

in campus activities; hence involvement, to the extent that it mirrors such activities, would be higher for athletics. On the other hand, an individual encounters religion over a much greater period of his life; it permeates many more areas of his life, his moral, ethical, and personal values. When students attend college they are expected to be tolerant of other individuals and their religious beliefs. In order for the subject to display this tolerance it becomes difficult to reject statements which perhaps would be acceptable to nonbelievers. Thus college students may deem religion more important but yet be involved more in athletics. A cross-issue analysis such as this may indicate subtle but very salient differences between the concepts of ego involvement and importance.

Awareness

In the present study every attempt was made to keep the subjects unaware of the experimenter's interest in influencing them with false communications by enhancing the creditability of both the communication and the communicators. Also different experimenters and assistants were used in the pre and posttests in order to disassociate the two testing sessions from one another; several students, in fact, when handing in the posttest commented that they felt, "this research was much more interesting than the research done earlier in this class."

To insure credibility, the discrepant communication was printed in what appeared to be the <u>Oklahoma Daily</u>. The fact that not even the former editor of the school paper (one of the subjects) detected the version used in the study gave support for the excellent reproduction of the

paper. Many subjects after recalling the two articles actually published (cigarettes and censorship) assumed that they had all (four) been published.

By reducing the cues to the subject and thereby chances of their determining the experimental hypothesis it was hoped that the "demand characteristics of the experimental situation," (Orne, 1959) would be kept to a minimum. Orne has pointed out that individuals who have been given a test twice with an intervening treatment administered can very easily see through the intent of the experimenter, know that some change is expected, and consequently give it to him. By utilizing all the precautions in this experiment it was hoped that such a connection would not be realized. When asked what they believed to be the purpose of the experiment the majority of the subjects responded by parroting back what was told to them as the reason for the experiment. Some felt the purpose was to evaluate their personality (subject's).

The belief in the subjects' anonymity was supported by statements which most certainly would not have been included had the individuals felt they would be identified. One subject indicated he was interested in the name of one of the female assistants, while another wrote, "does that chick lay." Still another wrote: "fuck this questionnaire." By making the subjects feel the questionnaires were to be anonymous and keeping them unaware it was hoped more honest responses could be obtained.

In looking at the results of subjects determined to be "aware" and those who were "unaware," the 15 percent "aware" subjects did not differ from the rest of the pretest sample. The amount of change

observed in the "aware" group was comparable to that of the "unaware" subjects. This finding was dissimilar to that of Allyn and Festinger (1961) who noted little change in individuals who felt they were being manipulated (aware) as compared to unaware subjects who showed greater change. In that study, the individuals who were aware of the experimenter's intent appeared to be suspicious and perhaps even hostile toward the communication and the communicator and resisted change. In the present study, although there was significant relationship between acceptance of the communicator (as measured by expertness and liking) and attitude change there was no relationship between awareness and attitude change; further, for the males, at least, the more aware subjects gave less favorable ratings to the communicators. However, awareness in the Allyn and Festinger study was defined by the manipulation of the independent variable, whereas, awareness in this study was a self report on the part of the subjects.

Attitude Change

With at least a significant relationship between importance and ego involvement and no apparent problem of aware subjects accounting for the results, it then becomes possible to evaluate Sherif's arguments in comparing his position to that of Festinger's. Recall from Chapter I the listing of the studies supporting the social judgment involvement approach and dissonance theory. According to Sherif, the contradiction between the studies seemed to be due to different degrees of subject involvement.

Turning first to self reports of behavior as a measure of subject involvement and looking at the results of the median split on behavioral commitment and most acceptable position for athletics, one finds clear support for Sherif's conclusions: low committed subjects changed more than highly committed subjects, the greater the discrepancy. Highly committed subjects with extreme positions changed less than those with moderate positions. For males below the median in athletic behavioral commitment who chose the most acceptable position of (1), the mean change following discrepant communication was 3.25 as compared to 2.11 for the female counterparts. The results of this division (behavioral commitment vs most acceptable position) are consistent with the findings of Freedman (1964) that for highly involved subjects the relationship between change and discrepancy is nonmonotonic, while for low involved subjects this relationship is monotonic.

When the issue of religion is examined with respect to the median split for behavioral commitment and subjects' most acceptable position, somewhat different findings are observed. Those subjects who initially hold a definitely favorable but less extreme view toward religion (2,3) change more than subjects at the extreme (most acceptable position of 1). Low committed subjects did change more than highly committed subjects but there was no interaction between discrepancy and commitment.

The fact that individuals who are below the median in behavioral commitment toward religion and who hold an extreme position (1) showed less change than those who were favorable but less extreme can perhaps be explained by an interesting study recently completed by Powell

(1966). Powell hypothesized that those individuals who respond with the most extreme position on Sherif's latitude scale would also be the most close minded. Dogmatism was thus found to be positively correlated with extremeness of one's position, while negatively correlated with the size of the region of rejection. Close minded subjects were found to have a larger region of rejection. On the other hand, openminded subjects had a larger region of acceptance than rejection.

Athletics in a university setting is certainly more commonly discussed and closer to the surface of one's everyday life than religion. This is attested to by the headlines noted in Table 1 of the methods section which indicate a far greater proportion of articles in the school newspaper dealing with athletics than religion. Subjects, during an active football season, are more "situationally aroused" with respect to athletics.

The athletic events prior to the pre and posttest are of significant interest in evaluating a change in attitudes toward athletics. Just before the pretest the University football team lost a very big game with the University of Notre Dame. This event would suggest that attitudes toward athletics would be less favorable at the time of the pretest. The weekend before the posttest, on the other hand, the varsity football team defeated the University of Nebraska in a nationally televised football game. This event could be expected to increase favorable attitudes toward athletics. Thus, one would expect a change, if any, toward athletics. The discrepant communication, however, did produce change away from athletics.

It is interesting to note that while these changes are very supportive of Sherif using the measure of behavioral commitment, when turning to ego involvement they are less supportive. For the issue of athletics, the males are in accord with Sherif's predictions; i.e., high ego involved with the most acceptable position of (1) change less than males who chose positions (2) and (3). Low ego-involved males who chose position (1) receiving the most discrepant communication charged more than those who accepted statements (2) or (3). The females did not show this trend. Both high and low ego involved (as defined by median split on region of rejection) who held an extreme position changed most. For the issue of religion, no significant changes resulted.

Sherif's concept of ego involvement was developed by using individuals with known behavioral commitments toward particular issues. He noted that highly committed individuals had larger regions of rejections than individuals not so committed. In the present study splits between ego involvement and most acceptable position on the one hand, and behavioral commitment and most acceptable position on the other led to differences in patterns of attitude change.

This result is clarified by the fact that, as you will recall from the methods section, the sample of the issue of athletics included a number of known male athletes who were obtained by examining class files in the coach's office. This was not done for female athletes nor was it done for the issue of religion. The ego involvement split for males was similar to that expected since it included those individuals who publicly displayed their commitment toward the issue. If those

individuals who were publicly committed to religion had been included similar results would probably have been obtained.

The patterns of attitude change discussed in this section strongly support Sherif's clarification of the conditions under which the dissonance hypothesis will hold. Sherif, although he would not choose to work out of a dissonance framework, would not deny that dissonance occurs; he would merely say that dissonance occurs only in certain situations, i.e., those situations involving low ego involvement and high discrepancy. This is clearly supported in the present study.

Evidence of dissonance mechanisms in effect are shown very clearly by correlations of the degree of behavioral commitment and perceptions of the communicators. The more the subject was behaviorally committed toward an issue the more he degraded the communicator as an expert and disliked him. For males on both the issues of athletics and religion there was also a significant negative correlation between behavioral commitment and attitude change.

One final note regarding attitude change: to assume that the communication used in this study which took a position against athletics and religion caused a change in an individual's attidue would be going beyond the design used. What can be said is that as a result of reading the communication, a situational change in one's attitude was noted. How long this change would exist was not the purpose of this study and therefore was not examined.

Implications for Future Research

The earlier comparison of importance and ego involvement still leaves some doubt as to the relationship between them. An extensive study using Sherif's ego-involvement scale across a number of different issues and importance ratings would perhaps shed further light on these concepts. It may be that importance is similar to intensity of feeling on an issue and therefore would explain why less change was found on the religion issue along with higher importance ratings. This is given additional support by those individuals who held the most acceptable position of (5) yet viewed the issue as being more important than individuals who held a favorable attitude toward religion. Here the neutral attitude seems to be held nore strongly than the more favorable one. What seems to be needed is a method not only of measuring one's attitude, whether it be a point estimate or a latitude scale, but a way of determining how intense the individual is concerning his attitude.

The results of this study suggest that the behavioral index adheres more closely to findings which are expected following the introduction of discrepant communication than ego involvement. It may be that rather than using the intervening measure of ego involvement (region of rejection) it would be more fruitful to simply rely on self reports of behavior. Those individuals who indicated that they were behaviorally committed toward an issue showed less attitude change than individuals who indicated lesser commitment toward the issue. Highly ego-involved individuals (above the median) and those less ego involved (below the median) did not yield such clearly defined results.

Subsequent to the introduction of discrepant communication a significant change in the most acceptable position was noted. A number of subjects, in the open ended interview, readily admitted that the communication raised points concerning the issue which seriously made them reevaluate their original position. Very little research has involved follow up studies to determine how long the effect of a discrepant communication will last. Does the individual who seems to change his attitude after a short time return to his original position or perhaps move slightly back? Is there a difference between those individuals who change permanently as opposed to those who adopt their original position? Does the individual with a little amount of information on the issue change a great deal as compared to the individual who has more information on the issue?

Finally, the possible relationship discussed earlier between dogmatism and extremeness of position to lack of attitude change suggests a closer examination of individual response styles as determiners of attitude change. Just as dogmatism may be accountable for lack of change in a number of subjects, great change may take place in highly submissive individuals. These individual factors and their interactions with the variables of concern to the present study would probably provide a more complete picture of the determinants of attitude change.

CHAPTER V

SUMMARY

A number of recent studies differentially support two approaches to the study of attitude change. Both approaches evaluate what takes place when the individual is presented information which is discrepant from his initial position. The social judgment involvement appraoch of Sherif predicts that with small discrepancies between a person's own position and the position advocated in a communication attitude change will occur; with great discrepancy between one's initial position and that advocated in a discrepant communication, either little or no change (or change in the opposite direction) will occur. From the framework of Festinger's dissonance theory, on the other hand, a greater change is predicted when greater amounts of discrepant communication are introduced. Sherif contends that this contradiction is due to the failure of dissonance theorists to consider the involvement of subjects in the The concept most related to involvement in dissonance theory is the "importance" of issues to individuals, but to the extent that this concept is equivalent to involvement the two approaches differ further in their predictions: Sherif predicts less change with greater involvement while Festinger predicts greater change with more impor-The present study was conducted to evaluate these differential

predictions in a dissonance arousing situation involving discrepant communications.

The sample of subjects included in this study consisted of three groups: an experimental group which received pre and post measures with intervening discrepant communications; a group which received the pretest twice; and a group which received the pretest at the time the posttest was administered. Four issues were used in a pretest (sororities and fraternities, athletics, religion, and Vietnam). These issues were of interest in a university setting and provided a number of committed individuals.

After a period of 37 days subjects read two articles dealing with athletics and religion which had been planted in reproduced pages of the school paper. The articles were two of four included in a study of "how impressions are formed about a person after reading an article written about some of the things he has said or found after doing research on a subject."

Analysis of the data indicated significant positive relationships between ego involvement and importance for all four issues with the exception of females on the issue of Vietnam. There was also a significant change in the direction of the discrepant communication of individuals on the posttest, for both athletics and religion. Comparison of means on the pretest given at the beginning of the study and the pretest at the end of study showed no significant differences for either issue.

Median splits were obtained for behavioral commitment and most acceptable position and for ego involvement and most acceptable position, for both issues, for both sexes. For athletics, low committed individuals who held extreme positions changed more than high committed subjects;

for religion, individuals at extreme positions changed less than individuals at more moderate positions and highly committed subjects changes less than low committed subjects. The data yielded by the ego involvement split was consistent with these results only for males for the issue of athletics. These results support Sherif's clarification of the discrepant communication situation.

In addition to the analysis of attitude change, subject perceptions of the communicators was examined. Behavioral commitment to an issue and attitude change toward the discrepant communication were inversely related to liking the communicator and the degree to which he was judged to be an expert. These correlations are consistent with dissonance theory predictions.

These results were evaluated in terms of the contradiction between Sherif and Festinger. In general, Sherif's contentions were supported. Suggestions for future research were offered, including:

(a) a more thorough examination of the relationship between importance and ego involvement; (b) a further examination of behavioral commitment; (c) more consideration of individual determinants of attitude change.

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APPENDIX A

SUBJECT DATA SHEET

Name:	Date:
Norman address:	Norman phone:
Semesters in school: 1 2 3 4 5 6 7	8 (circle one) Other
Major:	Sex: M F (circle one)
Date of birth:	Age(to nearest year)
Age of brothers: A	ge of sisters:
Right handed: Left handed:	Wear glasses? Yes No
How interested are you in participating:	
Not at all Slightly Very	Extremely
List the organizations you belong to putt belonged to each in parenthesis.	ing the length of time you have
Do you smoke? Yes No If yes, In $\frac{1}{2}$ packs 2 packs	how much? $\frac{1}{2}$ pack l pack

CROSS OUT THE BLANKS for all the hours below that you $\underline{\text{will}}$ be available for participation during the semester:

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8							
9							
10							
11							
12							
1			•				
2							
3							
4							
5							
6							
7		•					
8							
9							
10							

DO NOT WRITE BELOW THIS LINE

Exp. #	Contact	# of hours	Comments

APPENDIX B

- A. Sororities and fraternities are an absolutely essential influence on a college campus.
- B. Sororities and fraternities are an extremely valuable influence on a college campus.
- C. Sororities and fraternities definitely have a more valuable influence than a detrimental influence on a college campus.
- D. Sororities and fraternities are probably more of a valuable influence on a college campus.
- E. It is very difficult to decide whether or not sororities and fraternities are a valuable or a detrimental influence on a college campus.
- F. Sororities and fraternities are probably more of a detrimental influence on a college campus.
- G. Sororities and fraternities definitely have a more detrimental influence than a valuable influence on a college campus.
- H. Sororities and fraternities have an extremely detrimental influence on a college campus.
- I. Sororities and fraternities are absolutely detrimental to a college campus—they should be abolished.

- A. Intercollegiate athletics are an absolutely essential influence on a college campus.
- B. Intercollegiate athletics are an extremely valuable influence on a college campus.
- C. Intercollegiate athletics definitely have a more valuable influence than a detrimental influence on a college campus.
- D. Intercollegiate athletics are probably more of a valuable influence on a college campus.
- E. It is very difficult to decide whether or not intercollegiate athletics are a valuable or a detrimental influence on a college campus.
- F. Intercollegiate athletics are probably more of a detrimental influence on a college campus.
- G. Intercollegiate athletics definitely have a more detrimental influence than a valuable influence on a college campus.
- H. Intercollegiate athletics have an extremely detrimental influence on a college campus.
- I. Intercollegiate athletics are absolutely detrimental to a college campus—they should be abolished.

- A. To live a meaningful life, I feel it is absolutely essential for me to believe in a religion.
- B. To live a meaningful life, I feel it is essential for me to believe in a religion.
- C. To live a meaningful life, it seems to me that I should believe in a religion.
- D. Although it is hard for me to decide, it is probable that I should believe in a religion to live a meaningful life.
- E. From the point of view of living a meaningful life, it is hard for me to decide whether or not I should believe in a religion.
- F. Although it is hard for me to decide, it is probably that it is not necessary for me to believe in a religion to live a meaningful life.
- G. To live a meaningful life, it seems to me that it is not necessary for me to believe in a religion.
- H. To live a meaningful life, I feel it is not essential for me to believe in a religion.
- I. To live a meaningful life, I feel it is absolutely not essential for me to believe in a religion.

- A. It is absolutely essential from all angles in our country's interests to be involved in the war in Vietnam.
- B. Essentially the interests of our country will be served best by our involvement in the war in Vietnam.
- C. It seems that our country's interests would be better served by our involvement in the war in Vietnam.
- D. Although it is hard to decide, it is probable that our country's interests will be better served by our involvement in the war in Vietnam.
- E. From the point of view of our country's interests, it is hard to decide whether or not we should be involved in the war in Vietnam.
- F. Although it is hard to decide, it is probable that our country's interests will be better served if we were not involved in the war in Vietnam.
- G. It seems that our country's interests would be better served if we were not involved in the war in Vietnam.
- H. Essentially the interests of our country will be served best if we were not involved in the war in Vietnam.
- I. It is absolutely essential from all angles in our country's interests not to be involved in the war in Vietnam.

Considering all the things you think about from day to day, activities you engage in from day to day, etc., answer <u>each</u> statement on this page with regard to the following question. "HOW IMPORTANT IS THE <u>ISSUE</u> TO YOU?" Put a circle around the number which best indicates the importance of the issue to \underline{YOU} .

l. Red Chi Not at all important		ould be							Extremely important
2. Cheatin Not at all important		11d be t							lege campuses. Extremely important
-	cuals s	should be	e ostra	acized	 l fro	m soci	ety.		Extremely important
•	cies an		rnities	are	abso	lutely	esse	ential o	on college campuses. Extremely
5. The Uni Not at all important		tions sl 23_					_8	9	Extremely important
6. Mothers their o Not at all important	hildre		•	•	it s _6		not b _8	e allow	ed to keep Extremely important
7. Interco	_		etics a	ire an	ext	remely	valu	able in	
Not at all important	1	23_	4	5	6_	7	8	9	Extremely important
8. Cigaret Not at all important		king imp					8	9	Extremely important
9. To live			·	_				•	Extremely
important	1;	23	4	5	6_	7	8	9	important
		ely esse to be i							•
Not at all important	1;	23_	4	_5	_6	7	8	_9	Extremely important

Next, think of your best friend. Suppose that friend were responding to these statements. What points do you think he (she) would circle for each statement? Think carefully about your best friend and respond to these statements as you think he (she) would.

BEST FRIEND

	Red Chi at all	na s	hould	be ad	lmitt	ed to	the	United	l Nati	ions.	Extremely
	ortant	1	2	_3	4	5	_6_	7	_8	9	important
	Cheating at all	g sh	ould b	e tre	ated	as a	seri	ous of	ffense	e on col	lege campuses. Extremely
impo	rtant	1	2	_3	4	5	_6_	7	_8	_9	
	Homosext	uals	shoul	d be	ostra	acized	fro	m soci	Lety.		Extremely
	rtant	1	2	_3	_4	5	_6_	7	8	_9	
	Sororit:	ies	and fr	atern	ities	are	abso	lutely	r esse	ential o	n college campuses. Extremely
	rtant	1	2	_3	_4	_5	_6	7	_8	_9	
	The Uni	ted	Nation	s sho	uld h	oe dis	solv	ed.			
	at all rtant	1	_2	_3	_4	_5	_6	7	_8	_9	Extremely important
	Mothers childre	•	ged le	gally	to l	o e unf	it s	hould	not b	oe allow	ed to keep their
Not	at all rtant		_2	_3	_4	_5	_6	7	_8	_9	Extremely important
	Intercol college			thlet	ics a	are an	ext	remely	valu	lable in	fluence on a
Not	at all rtant		=	3	1.	5	6	7	¢	ο.	Extremely important
•										_	
	Cigarett at all	se si	noking	ımpa	ırs (one's	neal	tn.			Extremely
impo	rtant	1	_2	_3	_4	5	_6	7	_8	_9	important
	To live at all	a me	eaning	ful l	ife,	relig	ion	is abs	olute	ly esse	ntial. Extremely
	rtant	1	_2	_3	_4	_5	_6	7	8	_9	important
	not to b								in o	our coun	try's interests
	at all	٦	2	3	,	5	6	7	¢	0	Extremely

Now, think of another very good friend. Suppose that friend were responding to these statements. How do you think he (she) would respond to each statement? Think carefully about that friend and answer each statement as you think he (she) would.

OTHER FRIEND

	Red Chi	na s	hould	be a	dmitt	ed to	the	Unite	d Nati	Lons.	W+
	at all ortant	1	_2	_3	4	5	6	7	8	_9	Extremely important
	Cheating at all	g sh	ould h	e tre	eated	as a	seri	ous o	ffense	on co	llege campuses. Extremely
impo	ortant	1	_2	_3	4	5	_6_	7	8	_9	
	Homosex	uals	shoul	.d be	ostr	acize	î fro	m soc	iety.		T
	at all ortant	1	_2	_3	4	5	6	7	8	_9	Extremely important
4.	Sororit:	ies a	and fr	aterr	nitie	s are	absc	lutel	y esse	ential (on college
	at all rtant	7.	2	3	۷.	5	6	7	8	9	Extremely important
			_	. –							- Impor ours
Not	The Unit										Extremely
impo	rtant	1	_2	_3	4	5	6	7	8	_9	important
	their ch			gally	to '	be unf	it s	hould	not b	e allo	wed to keep
	at all rtant	1	_2	_3	4	5	_6	7	_8	_9	Extremely important
	college			thlet	ics a	are ar	ext	remely	valu	able in	nfluence on a
	at all rtant	1	_2	_3	_4	_5	_6	7	_8	9	Extremely important
8.	Cigarett	e sm	oking	impa	irs (one 's	heal	th.			
	at all rtant	1	2	3	4	5	6	7	8	_9	Extremely important
9.	To live										•
Not	at all										Extremely
тшро	rtant	Τ	_<		_4	^	_6		_8	_9	important
	not to b	solu e in	tely volve	essen d in	tial the v	from var in	all a Vie	angles tnam.	in o	ur cour	ntry's interests
	at all rtant	1	_2	_3	_4	5	_6	7	_8	9	Extremely important.

Below is a sample list of 50 items listed by several individuals in response to the question, "Make a list of items which are important to you." The ones listed may not be the same ones you would include in your list. Think of all the things in your life which are important to you. Starting with the most important as number 1, list the top 10 things which are important to you.

Traveling

Church

Class

Military activities (R.O.T.C.)

Car Going home Chores Hobbies Laughing Socializing Club meetings Foreign affairs Looking at girls Listening to people Flying Paying bills Setting goals Writing Arguing United Nations Impressing others
Chores Hobbies Laughing Socializing Club meetings Foreign affairs Looking at girls Listening to people Flying Paying bills Setting goals Writing Arguing United Nations Impressing others
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Writing Arguing United Nations Impressing others
Arguing United Nations Impressing others
Impressing others
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Loafing
Singing
Poetry
Participation in sports
Flirting
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9
9

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally. Then indicate your decision by circling "T" or "F".

- T F 1. Before voting I thoroughly investigate the qualifications of all the candidates.
- T F 2. I never hesitate to go out of my way to help someone in trouble.
- TF 3. It is sometimes hard for me to go on with my work if I am not encouraged.
- T F 4. I have never intensely disliked anyone.
- T F 5. On occasion I have had doubts about my ability to succeed in life.
- TF 6. I sometimes feel resentful when I don't get my way.
- T F 7. I am always careful about my manner of dress.
- T F 8. My table manners at home are as good as when I eat out in a restaurant.
- T F 9. If I could get into a movie without paying and be sure I was not seen I would probably do it.
- T F 10. On a few occasions, I have given up doing something because I thought too little of my ability.
- T F 11. I like to gossip at times.
- T F 12. There have been times when I felt like rebelling against people in authority even though I knew they were right.
- T F 13. No matter who I'm talking to, I'm always a good listener.
- TF 14. I can remember "playing sick" to get out of something.
- T F 15. There have been occasions when I took advantage of someone.
- TF 16. I'm always willing to admit it when I make a mistake.
- T F 17. I always try to practice what I preach.
- T F 18. I don't find it particularly difficult to get along with loud mouthed, obnoxious people.
- TF 19. I sometimes try to get even rather than forgive and forget.

- T F 20, When I don't know something I don't at all mind admitting it.
- T F 21. I am always courteous, even to people who are disagreeable.
- T F 22. At times I have really insisted on having things my own way.
- T F 23. There have been occasions when I felt like smashing things.
- T F 24. I would nevsr think of letting someone else be punished for my wrong-doings.
- T F 25. I never resent being asked to return a favor.
- T F 26. I have never been irked when people expressed ideas very different from my own.
- T F 27. I never made a long trip without checking the safety of my car.
- T F 28. There have been times when I was quite jealous of the good fortune of others.
- T F 29. I have almost never felt the urge to tell someone off.
- T F 30. I am sometimes irritated by people who ask favors of me.
- T F 31. I have never felt that I was punished without cause.
- T F 32. I sometimes think when people have a misfortune they only get what they deserve.
- T F 33. I have never deliberately said something that hurt someone's feelings.

APPENDIX C

ATHLETICS ARTICLE

Athletics, Academics Discussed

Universities that participate in intercollegiate athletics have lower academic standards and produce fewer top quality professional people, according to a renowned authority of health and education.

In a recent news conference, Dr. William MacInree, Dean of Social Sciences at Johns Hopkins University, spoke out against the strong emphasis on intercollegiate athletics in American universities. He feels that such emphasis has resulted in a general lowering of academic standards.

Frequently citing recent research. Dr. MacInree noted several aspects of intercollegiate athletics that he felt were a detrimental influence to a college campus.

"Federal Government studies demonstrated that students at participating universities have lower aptitude scores as measured by the ACT and SCAT tests given to freshmen," said Dr. MacInree. "The reason for this," he pointed out, "is that these schools do not attract good scholars." Data gathered by the Hofra School of Social Research shows that athletically strong schools seem to attract many students who are interested in college only as an opportunity for a good time. On the other hand, universities that have dropped their intercollegiate athletic programs have demonstrated higher academic excellence as compared to the era when their curriculum included such programs. He noted, for example, that the University of Chicago, since dropping intercollegiate football, has become one of the most respected academic centers in the country.

Besides influencing the quality of students attending universities, a strong athletic program affects the faculty. Quoting a recent study in the Journal of Health and Education, Dr. MacInree said, "the existing high salaries paid to the athletic staff creates friction and dissension among the university faculty. Many professors feel that

coaching salaries are so high as to make college teaching a farce: hence, emotional conflicts result in an atmosphere detrimental to the learning process."

The same research has also indicated that professors become hostile to the fact that athletic funds remain with the athletic department, providing new and better equipment for athletic personnel, while areas such as physics, chemistry, engineering, and the social sciences, often are faced with inadequate facilities and equipment, as well as lower salaries.

Dean MacInree concluded by stating what he felt was probably the most vicious aspect to intercollegiate athletic program, the effect it has on the players. Research has shown that the athlete is under constant pressure from several sources: the coaches, his parents, his friends, and the press. "The student who takes part in intercollegiate athletics and carries a full-time academic load is bound to pay a penalty somewhere along the line," he said. "Such a student usually pays a high price by cheating himself of what the value of college education is all about." For example, significantly fewer athletes distinguish themselves in Forensic societies, by receiving scholarships for academic abilities, and by receiving awards for academic excellence.

The answer to the negative impact of intercollegiate athletics has to come from within the universities themselves. They determine what is the purpose of education and the relationship, if any, of athletics to such a purpose. Dr. MacInree expressed the need "for a strong deemphasis of athletics in our universities." He stated that "the urgent social problems present in the world today demand the upgrading of academic excellence that generally follows the reduction of intercollegiate athletic activities."

APPENDIX D

RELIGION ARTICLE

Religious Less Humanitarian

Devoutly religious persons tend to be less humanitarian, more intolerant and express more anxiety than atheists, a recent study by a noted psychiatrist shows. After years of studying major religious denominations, Dr. Kenneth Walster, a psychiatrist with the National Institute of Psychiatric Research, released some very surprising conclusions concerning the relationship between religious sentiments and humanitarianism.

The devout tend to be extremely intolerant of criminals, delinquents, prostitutes, homosexuals, and those individuals in need of psychological assistance.

In addition, Dr. Walster points out, those who identify themselves as belonging to a religious organization express more intolerance and prejudice toward racial and ethnic groups than do non-believers.

Organized religion contends that the religious have greater "peace of mind" and mental balance. However, Walster's findings show that believers, compared with non-believers, are much more anxious. Furthermore, believers complain more often that they work under great tension, sleep fitfully, and exhibit other such neurotic symptoms.

During one phase of his study, Dr. Walster examined the records of over 600 mental patients. The majority of them showed strong religious sentiments and suffered from many religious delusions. Religion appeared to facilitate mental conflict, anxiety and psychosis. These findings suggest that religion is not only a force for good; it can also lead to some very uncomfortable mental difficulties.

Dr. Walster notes that these adverse effects of religion may be attributed to conflicting sets of beliefs. While religion teaches mutual love and respect, the love of justice and mercy, and to regard all men as equal in the eyes of God, it also teaches that only "believers" can be saved.

In addition, those who have been inspired by religious motives have also committed some of the most horrible crimes and wars in the name of religion—the massacre of St. Bartholomew, the Crusades, the Inquisition pogroms, and burning of witches and heretics.

On the basis of this research, Dr. Walster has recommended a serious appraisal of organized religion, and has proposed a more personalized commitment to humanitarian values.

APPENDIX E

CENSORSHIP ARTICLE

Ulysses Film Breaks Era of Censorship

(AP) - In holy Ireland an American movie maker has all but completed the first film version of one of the world's most controversial novels--James Joyce's "Ulysses."

If the picture reaches the screen in its present form, it will crash through the last barriers of censorship and take movie production into an area of language freedom.

Joyce laced his epic with all the blunt, vigorous words that most men and women know but seldom speak in public.

"I've got to make the film Joyce's way," said Pittsburgh-born Joseph Strick. "There's no other way. I don't intend to try to rewrite Joyce. You can't rewrite him."

"They're all Anglo-Saxon words, words of the human experience, and Joyce said that the human experience is not dirty. That it is something very lovely and very beautiful."

"Joyce believed that an investigation into the human experience is something that the artist is entitled to, and this film will be a popular attempt to interpret the essentials of the human experience—the sexual experience—the experience of the relationship between people which is the test of any human being."

What about the censor?

"Oh, I think 'Ulysses' is going to pose him a problem. I don't envy him his job because I think the job of censor is essentially impossible. If you set yourself—or someone else sets you up—to judge what someone else may or may not mean, I think you, ipso facto, put yourself in an impossible positions."

Are you challenging the censor?

"All I can do is to say--I think this is a fair approximation of what Joyce intended."

APPENDIX F

CIGARETTE ARTICLE

Filter Cigarettes 'Flunk' Test

Editor's Note: This article by Jeffrey L. Field is reprinted

from The Washington Post, Monday, August 29, 1966.

BUFFALO, Aug. 28 - (UPI) - Dr. George E. Moore, a leading authority on cancer research, labeled certain filter tip cigarettes "ineffectual" today and claimed some varieties actually pass more tar and nicotine on to the smoker than do non-filtered cigarettes of the same brand.

Dr. Moore, director of Roswell Park Memorial Institute. urged the cigarette industry to accept "the responsibility of protecting its customers." He asserted that none of the tested filters is really protecting the smoker from possible lung cancer, emphysema, cardiovascular difficulties and other diseases.

According to the study, True filter cigarettes -- a new brand being test marketed in the New York City area--were the most effective in removing tar and nicotine from the smoke, while Pall Mall filter tips proved to be the worst of the eight brands tested.

"It is alarming to note that Pall Mall filter tip cigarettes pass more tar and nicotine on to the smoker than do the regular Pall Malls without filters," the researcher said. The same results, he added, were found with Chesterfield plain and filtered cigarettes.

Pall Mall filters are longer than the unfiltered Pall Mall, thereby allowing the smoker to smoke more tobacco "and it apparently has a poor filter," he explained.

Closely following True filters, which showed 16.9 milligrams of tar and .79 milligrams of nicotine per cigarette, were filter-tipped Kents with 18.8 milligrams of tar and 1.10 milligrams of nicotine per cigarette.

The other brands tested, in order of rank, were Marlboro, Winston, Lark, Salem, Lucky Strike, Chesterfield and Pall Mall.

The research, performed at the Institute's Orchard Park Laboratory, was conducted by Dr. Fred Bock, laboratory director, he said.

"The current results destroy the myth that all filters are helping to protect the smoker against the deadly effects of cigarette smoking," Dr. Moore said.

"Many filters are just not doing a job until the cigarette industry accepts the responsibility of protecting their customers who refuse to stop smoking regardless of health warnings, we will continue to see a staggering and unnecessary death rate due to cigarette smoking," he said.

The breakdown of tar and nicotine content of the tested brands were shown as follows, with information on non-filters where available:

							Filtered Tar Nicotine
True							16.9 mg79 mg.
Kent		•	٠	•	۰		18.8 mg 1.10 mg.
Marlboro				۰	٥		22.4 mg. 1.24 mg.
Winston	•	•		•			22.9 mg. 1.32 mg.
Lark	٥	۰					23.1 mg. 1.26 mg.
Salem	•						23.6 mg. 1.43 mg.
Lucky Strike	٠						27.3 mg. 1.34 mg.
Chesterfield		۰				•	27.6 mg. 1.72 mg.
Pall Mall	•	•			٠		43 3 mg. 2.13 mg.

(The figures for non-filter cigarettes: Lucky Strikes were 27.2 mg. and 1.42 mg.; for non-filtered Chesterfields 27.0 mg. and 1.18 mg.; and for non-filtered Pall Malls 32.7 mg. and 1.75 mg.)

APPENDIX G

SUBJECT PARTICIPATION FORM

Research Project EI-14

NAME	 	 	
DATE			

- A. Censorship of movies is absolutely essential for the best interests of the public.
- B. Censorship of movies is extremely essential for the best interests of the public.
- C. Censorship of movies is definitely a more valuable influence than a detrimental influence for the best interests of the public.
- D. Censorship of movies is probably more of a valuable influence for the best interests of the public.
- E. It is very difficult to decide whether or not censorship of movies is a valuable or a detrimental influence for the best interests of the public.
- F. Censorship of movies is probably more of a detrimental influence for the best interests of the public.
- G. Censorship of movies is definitely a more detrimental influence than valuable influence for the best interests of the public.
- H. Censorship of movies is extremely detrimental for the best interests of the public.
- I. Censorship of movies is absolutely detrimental for the best interests of the public.

Listed below are a number of questions referring to personality characteristics. Rate Mr. Joseph Strick on each of these characteristics as best you can. Put a circle around the number which you think best categorizes him on each characteristic.

How intelliger	nt is	the	speak	er, (or au	thor)	Ÿ			
Not at all Intelligent	1	_2	3	4	5	6	7	8	9	Extremely Intelligent
To what extent	does	he a	appea:	r to	be an	expe	rt in	his	field?	
Not at all Expert	1	_2	_3	4	5	6	7	_8_	9	Extremely Expert
How responsibl	e do	you 1	pelie	ve th	is pe	rson	to be	?		
Not at all Responsible	1	_2	_3	4	5	6	7	_8	9	Extremely Responsible
How much of a	sense	of h	numor	does	he ha	ave?			,	
No sense of Humor	1	_2	_3	4	5	_6	7	8	9	Excellent Sense of Humor
To what extent	do y	ou tł	ink j	ou w	ould]	like l	him as	ac	lose fr	iend?
Not at All	1	_2	_3	4	5	6	7	_8	9	Very Much
How ambitious	do yo	u thi	nk he	is?						
Not at all Ambitious	1	2	_3	_4	5	_6	_7	_8	9	Extremely Ambitious
How aggressive	do y	ou th	ink t	his	speake	r (or	auth	or) :	is?	
Not at all Aggressive	1	2	_3	_4	5	_6	_7	_8	9	Extremely Aggressive

- A. Censorship of movies is absolutely essential for the best interests of the public.
- B. Censorship of movies is extremely essential for the best interests of the public.
- C. Censorship of movies is definitely a more valuable influence than a detrimental influence for the best interests of the public.
- D. Censorship of movies is probably more of a valuable influence for the best interests of the public.
- E. It is very difficult to decide whether or not censorship of movies is a valuable or a detrimental influence for the best interests of the public.
- F. Censorship of movies is probably more of a detrimental influence for the best interests of the public.
- G. Censorship of movies is definitely a more detrimental influence than valuable influence for the best interests of the public.
- H. Censorship of movies is extremely detrimental for the best interests of the public.
- I. Censorship of movies is absolutely detrimental for the best interests of the public.

- A. Intercollegiate athletics are an absolutely essential influence on a college campus.
- B. Intercollegiate athletics are an extremely valuable influence on a college campus.
- C. Intercollegiate athletics definitely have a more valuable influence than a detrimental influence on a college campus.
- D. Intercollegiate athletics are probably more of a valuable influence on a college campus.
- E. It is very difficult to decide whether or not intercollegiate athletics are a valuable or a detrimental influence on a college campus.
- F. Intercollegiate athletics are probably more of a detrimental influence on a college campus.
- G. Intercollegiate athletics definitely have a more detrimental influence than a valuable influence on a college campus.
- H. Intercollegiate athletics have an extremely detrimental influence on a college campus.
- I. Intercollegiate athletics are absolutely detrimental to a college campus—they should be abolished.

Listed below are a number of questions referring to personality characteristics. Rate Dr. William MacInree on each of these characteristics as best you can. Put a circle around the number which you think best categorizes him on each characteristic.

How intellige	ent i	s the	spea	ker,	(or a	uthor	·)?			
Not at all Intelligent	1	2	3	4	5	6	7_	8	9	Extremely Intelligent
To what exter	nt do	es he	appe	ar to	be a	n exp	ert i	n his	field?	
Not at all Expert	1	_2	3	4	5	6	7	8	9	Extremely Expert
How responsib	ole d	o you	beli	eve t	his p	erson	to b	e?		
Not at all Responsible	1	_2	3	4	5	6	7	8	9	Extremely Responsible
How much of a	a sen	se of	humo	r doe	s he	have?			,	
No sense of humor	1	_2	3	4	5	6	7	8	9	Excellent Sense of Humor
To what exter	nt do	you ·	think	you ·	w ould	like	him a	as a	close fr	iend?
Not at all	1	2	_3	4	5	6	7	8	9	Very Much
How ambitious	s do j	you tl	hink l	ne is	?					
Not at all Ambitious	1	_2	3	4	5	6	7	8	9	Extremely Ambitious
How aggressiv	re do	you 1	think	this	speal	ker,	(or a	uthor) is?	
Not at all Aggressive	1	_2	_3	_4	5	6	7	_8	_9	Extremely Aggressive

- A. Intercollegiate athletics are an absolutely essential influence on a college campus.
- B. Intercollegiate athletics are an extremely valuable influence on a college campus.
- C. Intercollegiate athletics definitely have a more valuable influence than a detrimental influence on a college campus.
- D. Intercollegiate athletics are probably more of a valuable influence on a college campus.
- E. It is very difficult to decide whether or not intercollegiate athletics are a valuable or a detrimental influence on a college campus.
- F. Intercollegiate athletics are probably more of a detrimental influence on a college campus.
- G. Intercollegiate athletics definitely have a more detrimental influence than a valuable influence on a college campus.
- H. Intercollegiate athletics have an extremely detrimental influence on a college campus.
- I. Intercollegiate athletics are absolutely detrimental to a college campus—they should be abolished.

- A. To live a meaningful life, I feel it is absolutely essential for me to believe in a religion.
- B. To live a meaningful life, I feel it is essential for me to believe in a religion.
- C. To live a meaningful life, it seems to me that I should believe in a religion.
- D. Although it is hard for me to decide, it is probable that I should believe in a religion to live a meaningful life.
- E. From the point of view of living a meaningful life, it is hard for me to decide whether or not I should believe in a religion.
- F. Although it is hard for me to decide, it is probable that it is not necessary for me to believe in a religion to live a meaningful life.
- G. To live a meaningful life, it seems to me that it is not necessary for me to believe in a religion.
- H. To live a meaningful life, I feel it is not essential for me to believe in a religion.
- I. To live a meaningful life, I feel it is absolutely not essential for me to believe in a religion.—

Listed below are a number of questions referring to personality characteristics. Rate Dr. Kenneth Walster on each of these characteristics as best you can. Put a circle around the number which you think best categorizes him on each characteristic.

How intellige	nt is	the	speak	ær, (or au	thor)	?			
Not at all Intelligent	1	_2	_3	_4	_5	6	_7	_8	_9	Extremely Intelligent
To what exten	t doe	s he	appea	ır to	be an	expe	rt in	his	field?	
Not at all Expert	1	_2	_3	_4	_5	_6	_7	_8	_9	Extremely Expert
How responsible	le d o	you	belie	ve th	is pe	rson	to be	?		
Not at all Responsible	1	_2	_3	_4	_5	_6	_7	_8	_9	Extremely Responsible
How much of a	sens	e of	humor	does	he ha	ave?				
No sense of Humor	1	2	_3	_4	_5	6	_7	_8	_9	Excellent Sense of Humor
To what exten	t do ;	you t	hink	you w	ould I	Like	him a	s a c	lose fr	iend?
Not at All 1	_2	_3	_4	_5	_6	7	_8	9	<u>.</u>	Very Much
How ambitious	do y	ou th	ink h	e is?						
Not at all Ambitious	1	_2	_3	_4	_5	_6	_7	_8 <u></u>	_9	Extremely Ambitious
How aggressive	e do j	70u t	hink	this s	speake	er, (or aut	thor)	is?	
Not at all Aggressive	1	2	_3	_4	_5	6	_7	8	_9	Extremely Aggressive

- A. To live a meaningful life, I feel it is absolutely essential for me to believe in a religion.
- B. To live a meaningful life, I feel it is essential for me to believe in a religion.
- C. To live a meaningful life, it seems to me that I should believe in a religion.
- D. Although it is hard for me to decide, it is probable that I should believe in a religion to live a meaningful life.
- E. From the point of view of living a meaningful life, it is hard for me to decide whether or not I should believe in a religion.
- F. Although it is hard for me to decide, it is probable that it is not necessary for me to believe in a religion to live a meaningful life.
- G. To live a meaningful life, it seems to me that it is not necessary for me to believe in a religion.
- H. To live a meaningful life, I feel it is not essential for me to believe in a religion.
- I. To live a meaningful life, I feel it is absolutely not essential for me to believe in a religion.

- A. Cigarette smoking is absolutely essential for good health.
- B. Cigarette smoking is extremely valuable for good health.
- C. Cigarette smoking definitely has a more valuable effect than a detrimental effect on good health.
- D. Cigarette smoking probably has a valuable effect on good health.
- E. It is very difficult to decide whether or not cigarette smoking has a valuable or a detrimental effect on good health.
- F. Cigarette smoking probably has a detrimental effect on good health.
- G. Cigarette smoking definitely has a more detrimental effect than a valuable effect on good health.
- H. Cigarette smoking has an extremely detrimental effect on good health.
- I. Cigarette smoking is absolutely detrimental to good health.

Listed below are a number of questions referring to personality characteristics. Rate Dr. George Moore on each of these characteristics as best you can. Put a circle around the number which you think best categorizes him on each characteristic.

How intellige	nt is	the	speak	er, (or aut	thor)	?			
Not at all Intelligent	1	_2	_3	_4	_5	6	_7	_8	9	Extremely Intelligent
To what exten	t doe	s he	appea	r to l	be an	expe	rt in	his	field?	
Not at all Expert	1	2	_3	_4	_5	6	_7	_8	_9	Extremely Expert
How responsible	le do	you	belie	ve thi	is per	rson	to be	?		
Not at all Responsible	1	_2	_3	_4	_5	6	_7	_8	_9	Extremely Responsible
How much of a	sense	e of	humor	does	he ha	ve?				
No sense of Humor	1	_2	_3	_4	_5	6	_7	_8	9	Excellent Sense of Humor
To what extent	t do g	you t	hink :	you wo	ould l	ike :	him as	s a c	lose fr	iend?
Not at All	1	22	_3	_4	_5	6	_7	8	_9	Very Much
How ambitious	do y	ou th	ink he	e is?						
Not at all Ambitious	1	2	_3	_4	_5	6	_7	8	_9	Extremely Ambitious
How aggressive	e do y	rou t	hink t	chis s	speake	r, (d	or aut	hor)	is?	
Not at all Aggressive	1	2	_3	4	5	6	_7	_8	9	Extremely Aggressive

- A. Cigarette smoking is absolutely essential for good health.
- B. Cigarette smoking is extremely valuable for good health.
- C. Cigarette smoking definitely has a more valuable effect than a detrimental effect on good health.
- D. Cigarette smoking probably has a valuable effect on good health.
- E. It is very difficult to decide whether or not cigarette smoking has a valuable or a detrimental effect on good health.
- F. Cigarette smoking probably has a detrimental effect on good health.
- G. Cigarette smoking definitely has a more detrimental effect than a valuable effect on good health.
- H. Cigarette smoking has an extremely detrimental effect on good health.
- I. Cigarette smoking is absolutely detrimental to good health.

1.	include such activities as inte	tercollegiate football, wrestling, te the kind and average number of hours
	<u>Activities</u>	Hours per Week
2.	would include such things as to	any informal sport activities? This couch football, swimming, sandlot base-and approximately the hours per week.
	<u>Activities</u>	Hours per Week
3.	Indicate what kind of sport act the average number of hours per	tivities you attend as a fan as well a
	What Event?	Hours per Week
	· · · · · · · · · · · · · · · · · · ·	
4.	How many hours a week do you wathe TV or radio?	atch, or listen to sport activities on
	Activities	Hours per Week
	· · · · · · · · · · · · · · · · · · ·	
		

1.	What is your religion?
2.	How do you classify that religion? (check one)
	Protestant
	Catholic
	Baptist
	Jewish
	Other
	None
_	***
3.	How often do you attend church services? (check one)
	Never
	Rarely: for some special events, such as weddings, etc.
	Occasionally: weddings, some religious holidays, etc.
	About every two months
	About once a month
	About twice a month
	About once a week
	More than once a week
. •	To what extent do you participate in church activities other than church services? (check one)
	Not at all What kind of activities:
	Rarely
	Occasionally
	Quite often
	Very regularly

Considering all the things you think about from day to day, activities you engage in from day to day, etc., answer <u>each</u> of the statements on this page with regard to the following question. "HOW IMPORTANT IS THE <u>ISSUE</u> TO YOU?" Put a circle around the number which best indicates the importance of the issue to <u>YOU</u>.

	Red China	shou	ld be	e admi	tted	to th	ne Uni	ted 1	Vation	ns.	
	at all ortant	1	2	_3	4_	5	66	7	8	_9	Extremely important
2.	Cheating										ge campuses
	at all ortant	1	_2	_3	_4	_5	_6	_7	_8	_9	Extremely important
	Homosexua	ls sh	ould	be os	traci	zed f	rom s	ociet	у.		
	at all ortant	1	_2	_3	_4	_5	_6	_7	_8	_9	Extremely important
	Sororitie campuses.	s and	frat	ernit	ies a	re at	solut	ely e	ssent	tial on	college
Not	at all ortant	1	_2	3	_4	_5	_6	_7	8	_9	Extremely important
	The United	d Nat	ions	shoul	d be	disso	lved.				
	at all ortant	1	_2	_3	_4	_5	_6	_7	_8	_9	Extremely important
6.	Mothers j	udged ldren	lega •	lly t	o be	unfit	shou	ld no	t be	allowed	to keep
	at all ortant	1	2	_3	_4	_5	_6	_7	_8	_9	Extremely important
	Intercolle college ca			letic	s are	an e	xtreme	ely v	aluab	ole infl	uence on a
Not	at all ortant	•		_3	_4	_5	6	_7	_8	_9	Extremely important
8.	Cigarette	smok	ing i	mpair	s one	's he	alth.				
	at all rtant	1	2	_3	_4	_5	_6	_7	_8	9	Extremely important
9. Not	To live a at all	mean	ingfu	l lif	e, re	ligio	n is a	absol	utely	essenti	ial. Extremely
	rtant	1	_2	_3	_4	_5	_6	7	_8	_9	important
	not to be	lute invol	ly es Lved :	senti	al fro	om al in V	l angl ietnan	les in	n our	country	y's interest
	at all rtant	1	2	3	4	5	6	7	8	9	Extremely important

1.		
<u></u>	 · · · · · · · · · · · · · · · · · · ·	
		······································
2.		
3.		

4.					
		•			
			 	<u> </u>	
5.					
!					
	-				
6.					

APPENDIX H

OPEN ENDED INTERVIEW

- 1. We are interested in knowing what you believed to be the purpose of this experiment. What do you think the experimenter was interested in?
- 2. Did you suspect any trickery; in other words did you at any point think the experimenter was trying to deceive you in any way? If so, describe. If not, just put "no."
- 3. Do you recall seeing any of these questions before? Where? If so, why do you think we asked you to answer them again.
- 4. Were there any doubts in your mind concerning the authors of the articles you read? Did you at any time think they were fake articles? If so, tell us about your suspicions.
- 5. After reading the article against athletics or religion and subsequently filling out the questionnaire, did you think we might be interested in determining whether your attitude toward athletics or religion would change.

APPENDIX I

RAW DATA

Column Key

PRETEST DATA ON CARD 11

1, 2.	Card
3.	Experimenter
4.	Class
	Identification Number
	Test (l=pre, 2=post)
9.	Sex (1=male, 2=female)
•	Age
, -	Month of Birth
	Day of Birth
	Year of Birth
18.	Interest in Participating in Research (1= not at all, 4= extremely)
19.	Twin (0=not twin)
20.	Ordinal position
21.	Family size
22-30.	Sororities and Fraternities (nine point scale) (MA=1; A=2; MO=3;
	0=4)
31.	Most Acceptable position on sororities and fraternities
32.	Region of acceptance on sororoties and fraternities
33.	Most objectionable position on sororities and fraternities
34.	Region of rejection on sororities and fraternities
35-43.	Athletics (nine point scale)
44.	Most acceptable position on athletics
45.	Region of acceptance on athletics
46.	Most objectionable position on athletics
47.	Region of rejection on athletics
48-56.	Religion (nine point scale)
57.	Most acceptable position on religion
58.	Region of acceptance on religion
59.	Most objectionable position on religion
	Region of rejection on religion
61-69.	Vietnam (nine point scale)

Column <u>Key</u>	
70. 71. 72. 73.	Most acceptable position on Vietnam Region of acceptance on Vietnam Most objectionable position on Vietnam Region of rejection on Vietnam
	PRETEST DATA ON CARD 12
1-21. 22-31. 32-41. 42-51. 52-71.	Importance questions for best friend Importance questions for other friend
	PRETEST DATA ON CARD 13
1-21. 22-54.	· · ·
	POSTTEST is Indicated by 7 in Column 1
	<u>Card 70</u>
1,2. 3. 4. 5,6,7. 8-16. 17. 18. 19. 20. 21.	Card number Experimenter Class Identification number Censorship rating for author of article (latitude Scale) Most acceptable position on censorship for author Region of rejection on censorship for author Most objectionable position on censorship for author Region of Rejection censorship for author Order of presentation
	Card 71 (Censorship)
1-7. 8. 9. 10. 11.	Repeat of data on preceding card Personality Scale (Intelligence) (on nine point scale) Rating of expertness Rating of Responsibility Rating of sense of humor Rating of friendship

Column
Key

- 13. Rating of ambitiousness
- 14. Rating of aggressiveness
- 15-23. Latitude scale (nine point scale) (Self)
- 24. Most acceptable position
- 25. Region of rejection
- 26. Most objectionable position
- 27. Region of rejection

Card 72 (Intercollegiate Athletics)

- 1-7. Repeat of data on preceding card
- 8-16. Latitude scale (nine point) (Author)
- 17. Most acceptable position
- 18. Region of acceptance
- 19. Most objectionable position
- 20. Region of rejection
- 21. Order of presentation

Card 73 (Intercollegiate Athletics)

- 1-7. Repeat of data on preceding card
- 8. Personality scale (intelligence) (on nine point scale)
- 9. Rating of expertness
- 10. Rating of responsibility
- 11. Rating of sense of humor
- 12. Rating of friendship
- 13. Rating of ambitiousness
- 14. Rating of aggressiveness
- 15-23. Latitude scale (nine point) (self)
- 24. Most acceptable position
- 25. Region of acceptance
- 26. Most objectionable position
- 27. Region of rejection

Card 74 (Religion)

- 1-7. Repeat of data on preceding card
- 8-16. Latitude scale (nine point) (author)
- 17. Most acceptable position
- 18. Region of rejection
- 19. Most objectionable position
- 20. Region of rejection
- 21. Order of presentation

Column Key

Card 75 (Religion)

- 1-7. Repeat of data on preceding card
- 8. Personality scale (Intelligence) (on nine point scale)
- 9. Rating of expertness
- 10. Rating of responsibility
- 11. Rating of sense of humor
- 12. Rating of friendship
- 13. Rating of ambitiousness
- 14. Rating of aggressiveness
- 15-23. Latitude scale (nine point) (self)
- 24. Most acceptable position
- 25. Region of acceptance
- 26. Most objectionable position
- 27. Region of rejection

Card 76 (Cigarette Smoking)

- 1-7. Repeat of data on preceding card
- 8-16. Latitude scale (nine point) (Author)
- 17. Most acceptable position
- 18. Region of acceptance
- 19. Most objectionable position
- 20. Region of rejection
- 21. Order of presentation

Card 77 (Cigarette Smoking)

- 1-7. Repeat of data on preceding card
- 8. Personality Scale (Intelligence) (on nine point scale)
- 9. Rating of expertness
- 10. Rating of responsibility
- 11. Rating of sense of humor
- 12. Rating of friendship
- 13. Rating of ambitiousness
- 14. Rating of aggressiveness
- 15-23. Latitude scale (nine point) (self)
- 24. Most acceptable position
- 25. Region of acceptance
- 26. Most objectionable position
- 27. Region of rejection

	131
Column <u>Key</u>	<u>Card 78</u>
8,9. 10,11. 12,13. 14,15. 16. 17. 18. 19-26.	Repeat of data on preceding card Hours of involvement in formal sport activities. Hours of involvement in informal sport activities. Hours of involvement as sports fan Hours of involvement as listener or watcher of sports Classification of religion Church attendance Church participation Importance questions with the exception of question 1 and 6 which were not included. Awareness rating
	PRETEST DATA ONLY ON CARDS BEGINNING WITH 3
	<u>Card 30</u>
1-21.	Similar to data on card 11 (Demographic)
	Card 31 (Sororities and Fraternities)

1-7. Repeat of data on preceding card 8-16. Latitude scale (nine point)

- 17. Most Acceptable position
- 18.
- Region of acceptance
- Most objectionable position 19.
- Region of rejection 20.
- 21. Order of presentation

Card 32 (Intercollegiate Athletics)

- 1-7. Repeat of data on preceding card
- 8-16. Latitude scale (nine point)
- 17. Most acceptable position
- 18. Region of acceptance
- 19. Most objectionable position
- 20. Region of rejection
- 21. Order of presentation

Card 33 (Religion)

- Repeat of data on preceding card 1-7.
- Latitude scale (nine point) 8-16.
- Most acceptable position 17.

	132
Column <u>Key</u>	
18. 19. 20. 21.	Region of acceptance Most objectionable position Region of rejection Order of presentation
	<pre>Gard 34 (Vietnam)</pre>
1-7. 8-16. 17. 18. 19. 20. 21.	Repeat of data on preceding card Latitude scale (nine point) Most acceptable position Region of acceptance Most objectionable position Region of rejection Order of presentation

Card 35

- Repeat of data on preceding card
- 8-17. Ten importance questions (self) 18-27. Ten importance questions (best friend)

Card 36

- 1-7. Repeat of data on preceding card
- 8-17. Ten importance questions
- 18. Sports ranking

<u>Card 37</u>

- 1-7. Repeat of data on preceding card
- 8-27. Ranking of 50 importance items

<u>Card 38</u>

- 1-7. Repeat of data on preceding card
- 8-27. Marlowe-Crowne social desirability scale

Card 39

- Repeat of data on preceding card 1-7.
- Continuation of 33 item Marlowe-Crowne social desirability scale 8-20.

Card 6 Series

PRETEST SUBJECTS WHO RECEIVED PRETEST TWICE

Column location is similar to data on 30 series.

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MALE PRE POST SUBJECTS
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