A STUDY OF THE EFFECTS OF EGO-IN INVOLVEMENT ON
THE ABILITY OF STUDENTS TO PRESENT CONTRARY
VIEW-POINTS TO AN AFFECTIVELY CHARGED TOPIC

by

CHARLES ROBERTSON JILLINGS

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS
in the Department
of
PHILOSOPHY AND PSYCHOLOGY

We accept this thesis as conforming to the
standard required from candidates for the
degree of MASTER OF ARTS

Members of the Department of
Philosophy and Psychology.

THE UNIVERSITY OF BRITISH COLUMBIA
September, 1951
A STUDY OF THE EFFECTS OF EGO-IN INVOLVEMENT ON
THE ABILITY OF STUDENTS TO PRESENT CONTRARY
VIEW-POINTS TO AN AFFECTIVELY CHARGED TOPIC

Abstract

What difficulties will a person encounter, and what defenses will he use, if placed in a position where he must verbally attack a group with which he has strongly identified himself? In an attempt to gain some insight into this problem, two groups of people were selected. One group was made up of fifteen male university students who had strongly ego-involved attitudes toward the Christian Church. The second group, the controls, consisted of fifteen male students who scored in the neutral zone of the Thurstone-Chave scale of Attitudes Toward the Church.

Both groups found it more difficult to attack the church than to support it. Also, when attacking the church, both groups tended more to weaken their arguments by qualifications and by making concessions to the opposing view-point. In terms of group differences, the religious group were much more effective (convincing) in their arguments in favor of the church than were the neutrals. There was no significant difference, however, in their relative abilities to attack the church in a convincing manner. The religious group showed the greatest disparity in terms of ratings gained when supporting the church, minus ratings gained when attacking it. This difference in disparity scores was not statistically significant. Therefore, our principal hypothesis was not supported.

Continuous G.S.R. records were made while the subjects were engaged in the two tasks. From the data obtained, we are unable to say that either of the two activities is more tension-producing for either group.
# CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>THE PROBLEM AND RELATED RESEARCH</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>The Problem</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Related Research</td>
<td>2</td>
</tr>
<tr>
<td>II</td>
<td>THE EXPERIMENTAL DESIGN; MATERIALS AND SUBJECTS EMPLOYED</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Experimental Design</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Materials</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>The Subjects</td>
<td>13</td>
</tr>
<tr>
<td>III</td>
<td>THE PROCEDURE AND THE CONTROLS EMPLOYED</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>The Procedure</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Controls</td>
<td>20</td>
</tr>
<tr>
<td>IV</td>
<td>THE DATA AND THEIR TREATMENT</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>The G.S.R. Data</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>The G.S.R. Results</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Treatment of the Verbal Material</td>
<td>29</td>
</tr>
<tr>
<td>V</td>
<td>THE RESULTS OF THE VERBALLY OBTAINED DATA</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>Hypothesis I</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>Hypothesis II</td>
<td>39</td>
</tr>
<tr>
<td>CHAPTER</td>
<td>PAGE</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>VI</td>
<td>DISCUSSION OF THE RESULTS</td>
<td>42</td>
</tr>
<tr>
<td>VII</td>
<td>SUMMARY AND CONCLUSIONS</td>
<td>46</td>
</tr>
<tr>
<td>VIII</td>
<td>IMPLICATIONS FOR FUTURE RESEARCH</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>REFERENCES</td>
<td>52</td>
</tr>
</tbody>
</table>

APPENDICES

<table>
<thead>
<tr>
<th>I</th>
<th>Circuit Diagram of the Sargent-Heyrovsky Polarograph, Model XI</th>
</tr>
</thead>
<tbody>
<tr>
<td>II A</td>
<td>Graphs obtained from the G.S.R.s of fifteen Religious Subjects in response to Stimulus B and Stimulus C</td>
</tr>
<tr>
<td>II B</td>
<td>Graphs obtained from the G.S.R.s of fifteen Neutral Subjects in response to Stimulus B and Stimulus C</td>
</tr>
<tr>
<td>III</td>
<td>Instructions to the three Raters</td>
</tr>
</tbody>
</table>
TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>Description</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Comparison of the G.S.R.s of fifteen Religious Subjects to Stimulus B and Stimulus C</td>
<td>27</td>
</tr>
<tr>
<td>II</td>
<td>Comparison of the G.S.R.s of fifteen Neutral Subjects to Stimulus B and Stimulus C</td>
<td>28</td>
</tr>
<tr>
<td>III</td>
<td>Coefficients of Agreement among the Raters as to the effectiveness of the thirty Arguments presented</td>
<td>32</td>
</tr>
<tr>
<td>IV</td>
<td>Coefficients of Agreement among the Raters as to the extent to which Instructions were obeyed when thirty Subjects responded to Stimulus C</td>
<td>33</td>
</tr>
<tr>
<td>V</td>
<td>The number of times and the extent to which the three Raters differed in their Assessments of the Data pertaining to Judgement II, Stimulus B</td>
<td>34</td>
</tr>
<tr>
<td>VI</td>
<td>Extent of Agreement among three Raters as to the Category into which each of the Responses of thirty Subjects were placed</td>
<td>35</td>
</tr>
<tr>
<td>TABLE</td>
<td>PAGE</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>VII</td>
<td>Religious and Neutral Group Mean Scores regarding the strength of the Arguments presented to Stimuli B and C</td>
<td>38</td>
</tr>
<tr>
<td>VIII</td>
<td>Religious and Neutral Group Mean Scores regarding the extent to which Instructions were followed</td>
<td>40</td>
</tr>
</tbody>
</table>
ACKNOWLEDGMENT

The writer is indebted to his advisor, Dr. E. Signori, for helpful criticism and encouragement, to his colleagues, Miss L. Wilson and Mr. J.S. Scott, for their conscientious and very time consuming efforts in making the necessary assessments, to Dr. O. Blüh for the equipment he made available, and for his kind co-operation throughout, to the thirty assistants who acted as subjects, and to Miss M. Massey and Miss E. Milne for their careful work in typing this thesis.
CHAPTER I

THE PROBLEM AND RELATED RESEARCH

The Problem

Snygg and Combs sum up rather well the theoretical structure from which this problem was derived. In describing the relation of the individual to the social group, they outline the following as one of their points:

Identification of an individual with a group leads him to adopt and defend the standards and behavior of the group.

To think well of himself it is necessary to think well of his group, thus introducing distortion into the individual's phenomenal field. An attack upon the group is an attack upon himself, aggrandizement for the group is aggrandizement for himself. (25, p. 188)

The purpose of the experiment to be outlined was to demonstrate, under specific conditions, the existence, or non-existence, of the distortion to which Snygg and Combs refer. Supposing we have a number of
people who have identified themselves strongly with a group, what will be their reactions if they are placed in a situation where they must either verbally attack their group or face loss of self-esteem because of other factors? Will they be able to attack their group effectively? If not, what means of defense will be employed against the threatening stimulus situation? To what extent will the situation produce tension (emotionality)? To provide some idea of the answer to these problems, and to locate further means of solving them, was the purpose of this experiment.

Related Research

A great deal of material on ego-involvement, frames of reference, affectively charged attitudes, need-perception, and the like, is available in the literature. All of this material is directly or indirectly related to the experiment discussed here. Sherif and Cantril have based much of their work, including a text book in social psychology (24) on such concepts. Attitudes are seen to function in well formed frames, in referential settings. This framework is a guiding pattern of belief and action. A person tends consciously or unconsciously to structure situations according to his frame of reference. His
perceptions are to a considerable extent determined by the strength and direction of his needs, deprivations and anchorages.

Few experiments similar to the one described here have been attempted. In 1939, Watson and Hartman (28) published an account of an experiment through which they were testing the hypothesis that an attitude which is highly charged affectively will result in an individual's resisting material which does not fit into the "frame". They used ten theological students and ten atheists. The subject material chosen was a number of arguments pro and con as to the existence or non-existence of a personal God. They wished to discover if there would be a significant difference between the recall of relatively innocuous opposing material compared with quite disturbing opposition arguments. Would a series of balanced pro and con arguments on an issue tend to shift subjects in extreme positions toward a more neutral position, or would the frame act in such a way that the subject would accept only that portion of the material presented which supported his own original attitude? Their findings, briefly, were as follows. The attitudinal frame did not prevent the recall of opposing arguments but these were often mis-interpreted, or the wording changed, so as to make the
arguments seem ridiculous. The individuals in each group were equally able to sort out the arguments, for each point of view, according to their relative strength. But when asked to compare the effectiveness of the pro arguments with the effectiveness of the con arguments, the two groups disagreed in accordance with the direction of their attitudes. Responses to the Thurstone and Chave scale of "Attitudes toward the Church" showed that no change had taken place in the strength of any individual's attitudes on being exposed to opposing argument.

In 1943, Wood (29) cited by Sherif (23, p. 64) had her subjects, whose racial prejudices were known, write an abstract on an article on Negro-White differences. They also verbally transmitted the contents of their abstracts to other subjects. In both processes, Wood found that statements in the journal article were distorted and omitted, and other statements added, so that the reports were more in harmony with the individuals' attitudes.
Experimental Design

Fifteen students who identified strongly with the Christian Church, and fifteen subjects who considered themselves as neutral, being neither active supporters nor particularly critical of the Christian Church, were selected. They were asked, individually, to carry out, orally, the following two procedures, which will be called "Stimulus B" and "Stimulus C".

1. Stimulus B
Conceding nothing to any opposing point of view which might exist, verbally support the following statement:-

THE CHRISTIAN CHURCH IS AN INSTITUTION WHICH MERITS THE ACTIVE SUPPORT OF EVERYONE.

Do not use humor. Please begin.

2. Stimulus C
Conceding nothing to any opposing
The order in which the two stimuli were presented was varied, odd numbered subjects responding first to Stimulus B. The only preparation which the subjects had was a practice session on a neutral topic. The instructions for this example were exactly parallel to the above.

While the subject was carrying out the two exercises, a continuous measure of his palmer skin reactions (G.S.R.) was recorded. These were treated in terms of area under the curve. The individual's reaction to Stimulus C was compared with his reaction to Stimulus B.

The verbal responses were recorded and later transcribed on paper. These were analyzed in three different ways by three raters, as follows:

Judgement 1

How effective (strong) was the argument put forward in support of each of the stimulus statements?
Judgement 2

To what extent were the instructions - conceding nothing to any opposing point of view which might exist - obeyed or disobeyed?

Judgement 3

What changes, if any, occurred in the subject's frame of reference as he responded to the words, "The Christian Church is an institution..." in the context of the instructions to Stimulus C as compared with Stimulus B?

The two stimulus statements (B and C) were presented under similar conditions. The procedure employed will be discussed fully in Chapter III. Responses of about fifty to one hundred words were obtained from each of the thirty subjects to each of the two stimuli. This material was analyzed by three raters in order to bring out such factors as the strength of the arguments put forward and extent to which the instructions were obeyed and disobeyed. The raters were following exactly the same set of instructions when grading the data from Stimulus B and Stimulus C. Also, they were using an identical rating scale. Therefore, the numerical ratings made of the data from each of the two stimuli should be comparable. For example, let us suppose that we were rating some responses in order to evaluate the strength of each of the arguments put forward. If the responses of individual A
to the two stimuli each received a rating of "5" (on a seven point scale) then it should be possible to say that he was equally convincing when attacking the church as when supporting it. Or, if the average rating of the religious group were "6" when supporting the church and "4.5" when attacking it, it should be possible to determine whether or not this difference is statistically significant.

In order to discover if any such obtained scores are significant in a meaningful sense, we must make recourse to ratings earned by the control group. Were the two groups perfectly equated in all respects, including knowledge about the Christian Church and interest in it, then a direct comparison of the average scores of the two groups could be made. However, while they were closely equated in terms of age and education, the religious group was superior in knowledge of the topic and was more interested in the church. A direct comparison of scores would leave this variable uncontrolled. However, by making inter-group comparisons using only relative figures this difficulty could be circumvented. Therefore "disparity scores" were calculated for each group on each of the two principal judgements. The rating received by an individual on Stimulus C was subtracted from his rating on Stimulus B. The assumption underlying this procedure
was that if subject matter (e.g. religion) were being studied objectively, the knowledge gained should be helpful in assessing all sides of this controversial question.

The hypotheses set up were as follows:

Hypothesis I

(a) That the religious group will be more effective in their arguments supporting the church than in their arguments attacking it.

(b) That the discrepancy, if any, in the religious group's ability to support the two statements, and in the direction indicated (Hypothesis Ia), will be greater than the discrepancy, if any, in the ability of the neutral group to support the two statements.

Hypothesis II

(a) The religious group will adhere more closely to the instructions when supporting the church than when attacking it.

(b) The discrepancy, if any, in the extent to which the religious group adhere to the instructions common to the two stimulus statements, and in the direction indicated (Hypothesis IIa), will be greater than the discrepancy, if any, in the extent to which the neutral group adheres to the instructions common to both stimuli.
(c) The neutral group will follow the instructions more closely when attacking the church, than will the religious group.

Hypothesis III

More religious subjects than neutral subjects will show a change in their functional definition of what is included in the phrase, "The Christian Church is an institution..." as they respond to each of the two stimuli.

Hypothesis IV

(a) The reaction as measured by the G.S.R. will, for the religious subjects, be greater as they attack the church than when they support it.

(b) This discrepancy will be greater for the religious group than for any similar discrepancy for the neutral group.

Materials

The Galvanometer

A Sargent-Heyrovsky polarograph, model XII (22) was employed. A D.C. voltage is balanced across a bridge by means of a compensator. Any change in the resistance of a subject is registered as an increase or
decrease in current. The circuit diagram is reproduced in Appendix I.

The Electrodes

The electrodes were of platinized brass, 1\(\frac{1}{2}\) inches in diameter, and curved to fit the palm. Pressure against the palm was kept constant by means of springs. Cellulose pads, dampened in physiological salt solution, were inserted between the palms and the electrodes.

Recording

The polarograph employed was designed to photographically record the movements of a light, which in turn ascended and descended a scale in accordance with the direction of the disturbance across the bridge. The photographic paper was fixed to a revolving drum, so that changes in the subject's resistance caused a deflection on the vertical axis, while time was the variable on the horizontal axis.

Timing

It was important that each subject should
spend exactly the same amount of time on each of the corresponding tasks of the two parts of the experiment. This was accomplished by noting the distance travelled by the revolving photographic drum which was so calibrated that accurate timing was facilitated. The distance covered by the drum was easily converted into seconds, since the drum moved at a constant rate.

Recording of the Verbal Material

The verbal responses to Stimuli B and C were put on a wire recorder. These were later transcribed on paper. All exclamations and pauses were reproduced in the written draft, so that as little as possible of the "feeling tone" of the material would be lost.

Situation of the Experiment

The testing took place in a large physics laboratory, during evenings and Saturday afternoons when there were no distractions. The subject sat slouched over a table, his hands in the electrode box. The stimulus statements, with instructions, were placed directly in the subject's line of vision. On the subject's right, and out of his line of vision, were the examiner and the remaining equipment.
The Subjects

The Religious Group

Male university students, who felt that they could meet the following criteria, were asked to volunteer.

1. That they considered themselves to be devout and practising Christians.

2. That they attended church at least once per week.

3. That they were at present, or planned to become, active members of some church group as opposed to being merely church attenders.

The Thurstone-Chave scale of attitudes toward the church was administered to all volunteers after they had acted as subjects.\textsuperscript{x} The data obtained from any who scored higher than "3" on this eleven point scale was discarded. The Thurstone scale was very valuable in detecting those whose religious philosophies did not include a high regard for the existing organized Christian Church.

All of the religious subjects were in the

\textsuperscript{x}This was done after they had acted as subjects because it was felt that the material in the scale might have an influence on the subjects' responses if given before.
Faculty of Arts at the University of British Columbia. Eight were obtained as volunteers from Second and Third Year philosophy and psychology courses. Five more were obtained from three Campus religious clubs. Two others were acquaintances of the examiner. Fourteen of the fifteen were Protestants. The mean number of years they had spent at university was 3.6. The range was from Second Year (two students) to one year of Post-Graduate work (two students).

The Neutral Group

Male students, who felt that at least two of the following four statements expressed their attitude toward the church, were asked to volunteer as subjects. These statements were taken from the neutral area of the Thurstone-Chave scale.

1. I believe in what the church teaches but with mental reservations.

2. Sometimes I feel that the church and religion are necessary, and sometimes I doubt it.

3. The churches may be doing good and useful work, but they do not interest me.
4. I like the ceremonies of my church, but do not miss them much when I stay away.

After each volunteer had acted as subject, the whole Thurstone scale was administered. Only the data from those who scored within the limits of "4" to "7" on this scale were retained.

Ten of the fifteen neutral subjects were obtained from volunteers from Second and Third Year courses in philosophy and psychology. The remaining five were obtained from a university residence. Three of these were acquaintances of the examiner. All but one were, or had been, in the Faculty of Arts. The mean number of years spent at university was 3.7. The range was from Second Year Arts (one subject) to one year of Post-Graduate work (two subjects).

General

The purpose of the experiment, and the way it was to be carried out, were unknown to all thirty subjects. They were told only that the examiner was testing a theory about attitudes and that the exact nature of the experiment would be revealed to each as soon as he had acted as subject. No subject was sophisticated in the field of psychological experimentation.
CHAPTER III

THE PROCEDURE AND THE CONTROLS EMPLOYED

The Procedure

The thirty subjects came individually to the laboratory. They were introduced to the physical situation and again reassured that a full explanation would be forthcoming later. The general procedure to be followed was then described to each subject as follows:

1. He was told that he was going to be asked to talk very briefly on three subjects without preparation. Reassurances were given that the examiner fully understood the difficulties in so doing and did not expect much in the way of unity or coherence.

2. He was told that the first of the three tasks was only an example to acquaint him with the experimental procedure. He was told to "give it a try" and not to worry if he found it difficult.

3. It was emphasized that the procedure and instructions for
all three tasks were exactly parallel; that, when he understood the example, he would have no difficulty with the procedure of tasks two and three.

The subject was then seated at the table and his hands placed in the electrode box. He was asked to talk about his courses while the examiner was balancing the current across the bridge. The examiner's instructions at this time were as follows:

Now tell me a little about your courses. You can enumerate them if you wish, or you can just talk about one or two of them. It doesn't matter if you repeat yourself - just as long as you are talking.

No timing was attempted at this stage of the experiment. Neither the wire recorder nor the photographic recorder were in operation.

When the bridge was balanced, a printed card, Stimulus A, was placed in front of the subject. He was asked to read this while, at the same time, the examiner read it aloud. The instructions making up Stimulus A were as follows:

Conceding nothing to any opposing point
of view which might exist, verbally support the following statement:—

ATHLETICS AT U.B.C. SHOULD BE DISCOURAGED IN FAVOR OF MORE EMPHASIS ON THE HUMANITIES.

Do not use humor. Please begin.

Additional instructions to those on the card were then given. (These were only given for the example, Stimulus A.)

You see that this means that you have to be dogmatic. You must present a case for this one point of view only. Do not concede anything, or give away anything, to a different point of view.

If the subject asked at this point if he were to present only material with which he agreed, the answer was, "No, just use any argument which supports this statement."

After a minute or two, depending upon the subject's performance, he was told to relax. "Relax now, please. Just get as limp as you can. Imagine that you are having a nap on a nice quiet beach under a hot sun. Just relax...etc."

After a short time, the apparatus was removed.

During this whole period, the examiner was
watching for any idiosyncracies which might affect the experiment proper, e.g., excessive muscular movement, or inability to relax. When such were noted, additional practice was given.

Following the above practice session, the whole experimental procedure was reviewed, with emphasis on the fact that the procedure in the "trial run", although not so formal, was parallel to what was to come.

The procedure for the experiment proper may be stated more briefly.

1. The subject was asked to talk about his courses. He could repeat what he had said previously if he desired. The wire and photographic recorders were turned on and the examiner balanced the current across the bridge.

2. Thirty-four seconds later either Stimulus B or Stimulus C, alternately given first, were presented (see pp. 5 and 6 for the wording of these two statements). One minute and forty seconds were allowed for subject's response.

*For the first three subjects, these times do not hold. However, the time involved for each of the two corresponding tasks of the two parts of the experiment, per subject, were the same.*
3. A period of one minute's relaxation followed.

4. The subject's hands were dried, and for the rest period of at least five minutes conversation was restricted to neutral topics.

5. The remaining stimulus statement was presented under conditions exactly similar to the above.

6. The Thurstone-Chave scale was administered.

7. The rationale of the experiment was explained to subject. Stress was placed on the need for his cooperation in not passing this information along to anyone.

Controls

G.S.R.

The difficulties encountered in using the G.S.R., particularly when a continuous record is made, are many and complex. Two forces are in operation and directly affecting current flow. These are, firstly, the change in the electrical resistance of the body, almost entirely in the skin; and, secondly, but to a much lesser extent, the E.M.F. produced in the body by certain mental changes. It is possible that the changes in skin resistance may be
either reduced or accentuated by the E.M.F. produced in the body. The type of electrode used (p. 11) and the fact that the two points of contact (both palms) were the same, tend to reduce polarization effects at the electrodes (2, 5 and 7).

The springs in the electrode structure, the back rest for the hand, and the position of the subject (who was literally slouched over the table), tended to minimize the effects of, and tendency to, muscular movements on the part of the subject. The short total time, about three minutes per task, was also a factor here. On two occasions, extreme movements did produce a distortion in the graphs obtained. (See Appendix II, A, subject 12; and Appendix II, B, subject 2.)

 Reactivity is known to be partly a function of the initial resistance level. Since comparisons are not being made between individuals, we had only to worry about each subject's initial resistance being the same from one stimulus to the next. Since the stimuli were introduced only about fifteen minutes apart, and since the preparatory task (discussion of courses) was the same, one would not expect much deviation. This was borne out by the fact that very little manipulation was required to "balance" the current for the second stimulus. The
apparatus used did not give the resistance level in ohms so no objective data is available here. Any slight deviations in initial resistance which did occur should cancel out in the treatment of group data.

Much has been written on the G.S.R. phenomena and it has been used in many ways with varying degrees of success. A word of explanation is therefore necessary as to the logic in using it here. The writer's main source of authority was Cattell (2). The following two quotations from his book fit so well into the theoretical framework of this experiment that they will be reproduced here.

The magnitude of the deflection was once thought to be proportional to the amount of emotion, but there is considerable evidence that it corresponds rather to conation and the conative element in emotion... The greatest deflections occur with pain, fear, tension, will acts, excitement, impulses and effort. Deflections are proportional to the intensity of the experience, whether it be pure conation or emotionally toned conation. (2, p. 264)

and

The hypothesis which seems to the present writer most apt to the facts, is that the deflection is proportional to the act of suppression which the ego finds it necessary to exercise upon the impulses
aroused. The psychogalvanometer can therefore be used as a measure of the strength of impulses, of will acts, and of the conflict between them. (2, p. 265)

This latter quotation describes exactly what is being attempted in this study.

A continuous measure of the palmar resistance was recorded. The obtained data were therefore in the form of graphs. The relative areas under each of these curves were ascertained and intergroup and intra-group comparisons were carried out using these relative figures. The rationale for this procedure will be discussed in the next chapter.

Verbal Material

As has been mentioned, care was taken to preserve as much of the feeling tone as possible when transcribing the responses on paper. In addition, notes were made on the subject's general behavior. These notes were valuable in one instance where a subject's response would have been beyond analysis were it not for an additional comment made later which clarified his frame of reference.

In the treatment of the verbal material
many controls were applied. These will be outlined in Chapter IV, "The Data and their Treatment", and will not be repeated here.

General

Stimulus B and Stimulus C were alternately given first, so that any temporal variable might cancel out in the treatment of results. Subjects from both groups came to the experiment in a more or less random order so that any changes in the examiner's behavior, resulting from increasing practice, should have influenced each group similarly. The examiner used the same verbal instructions and explanations throughout. Several trial runs were made before the experimenting proper began.
CHAPTER IV
THE DATA AND THEIR TREATMENT

The G.S.R. Data

Since this material was analyzed in terms of area under the curve, a discussion of the nature of the curve is in order. In most cases the initial G.S.R., which occurred when a stimulus was presented, was undoubtedly due to a feeling of apprehension. However, as Darrow (4, 6 and 7) and Cattell (2) point out, the rate of decline varies with the subject's psychological state. If the subject is experiencing difficulty or conflict, the rate of decline is slowed. Should a state of tension more often follow the presentation of one stimulus than another, this should be revealed by the rate of the decline which, together with the amplitude of the initial reaction, determines the area under the curve. Some distortion in the results could occur because the rate of the decline varies also with the magnitude of the initial G.S.R., which in turn is partly determined by the subject's initial resistance level. As has been pointed out, this latter
factor was seemingly fairly well controlled. Since only intra-subject, rather than inter-subject, computations were made, and since the order of the stimuli was varied, any distortion, arising from uncontrolled factors affecting the rate of decline, should cancel out in the treatment of group data.

The area under the curve was obtained by ruling out a grid with squares of .17 inches on transparent material. This was laid on the graph and the number of squares, totally or partially, beneath the base and the outline of the curve were counted. "Stimulus B areas" were subtracted from "Stimulus C areas." In terms of our hypothesis, we would expect that the larger number of differences for the religious group would result in positive numbers.

The G.S.R. Results

The final results obtained for the religious and neutral groups by the method described above are shown in Tables I and II (pp. 27 and 28). Our hypothesis that the religious group would show a greater reaction to stimulus C than to Stimulus B is refuted. The considerable variability in the obtained G.S.R. curves, together with the small size of the groups, do not warrant
<table>
<thead>
<tr>
<th>Subject</th>
<th>Area C - Area B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>+17</td>
</tr>
<tr>
<td>2</td>
<td>-4</td>
</tr>
<tr>
<td>3</td>
<td>-32</td>
</tr>
<tr>
<td>4</td>
<td>+92</td>
</tr>
<tr>
<td>5</td>
<td>-9</td>
</tr>
<tr>
<td>6</td>
<td>+52</td>
</tr>
<tr>
<td>7</td>
<td>-15</td>
</tr>
<tr>
<td>8</td>
<td>-2</td>
</tr>
<tr>
<td>9</td>
<td>-44</td>
</tr>
<tr>
<td>10</td>
<td>-11</td>
</tr>
<tr>
<td>11</td>
<td>+53</td>
</tr>
<tr>
<td>12</td>
<td>-21</td>
</tr>
<tr>
<td>13</td>
<td>-25</td>
</tr>
<tr>
<td>14</td>
<td>+8</td>
</tr>
<tr>
<td>15</td>
<td>-60</td>
</tr>
</tbody>
</table>

Total Plus Results = 5
Total Minus Results = 10
TABLE II

COMPARISON OF THE G.S.R.s OF FIFTEEN NEUTRAL SUBJECTS TO STIMULUS B AND STIMULUS C.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Area C - Area B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>- 23</td>
</tr>
<tr>
<td>2</td>
<td>- 4</td>
</tr>
<tr>
<td>3</td>
<td>+ 47</td>
</tr>
<tr>
<td>4</td>
<td>+ 12</td>
</tr>
<tr>
<td>5</td>
<td>+127</td>
</tr>
<tr>
<td>6</td>
<td>+ 30</td>
</tr>
<tr>
<td>7</td>
<td>+ 86</td>
</tr>
<tr>
<td>8</td>
<td>+ 54</td>
</tr>
<tr>
<td>9</td>
<td>+ 7</td>
</tr>
<tr>
<td>10</td>
<td>- 13</td>
</tr>
<tr>
<td>11</td>
<td>- 47</td>
</tr>
<tr>
<td>12</td>
<td>+ 29</td>
</tr>
<tr>
<td>13</td>
<td>+ 18</td>
</tr>
<tr>
<td>14</td>
<td>- 8</td>
</tr>
<tr>
<td>15</td>
<td>- 13</td>
</tr>
</tbody>
</table>

Total Plus Results = 9
Total Minus Results = 6
the use of more refined statistical techniques.

A check was made to determine if the temporal order of the stimuli had an effect on the G.S.R.'s as measured. That this was not a significant factor is indicated by the fact that an equal number (fifteen) of the total of thirty cases had a greater reaction to the second stimuli, and vice versa.

Treatment of the Verbal Material

From the thirty subjects used, twenty pages of typewritten material, single spaced, were obtained. The manner of breaking this down in order to derive results, which would directly follow the hypothesis, involved the use of three types of ratings, each to be rated by three judges. These three types of assessments were termed "Judgements I, II and III," in the instructions for the raters. Each rating had two parts, since assessments had to be made on the materials supporting and also attacking the church. The same seven-point rating scale and the same instructions were used for both parts. The writer was the only one of the three raters who had knowledge of whether he were grading the material of a neutral or a religious subject. Each did the ratings twice, with about one month between assessments; only the writer knew that re-rates would be
required. The writer graded the responses to Stimulus C before grading those to Stimulus B. With the other two raters, the procedure was reversed. As for the re-rates, the procedure was changed so that the writer first assessed the data from Stimulus B; the other raters the data from Stimulus C.

The reader is referred at this point to Appendix III, Instructions for Raters. From this material, he will see the means used to standardize the rating procedures and, in general, to increase the reliability and validity of the assessments.

The ratings made regarding the effectiveness, or strength, of the arguments presented, fell into a roughly normal distribution when the data from all the thirty subjects were employed. Here, therefore, Pearsonian coefficients were calculated in order to assess the extent of agreement between the raters, and also the reliability of the ratings as determined by the test-retest procedure (Table III, p. 32). This method was applicable also where the data under consideration was the extent to which concessions were made as the thirty subjects attacked the church (Table IV, p. 33). However, when the subjects were supporting the church, they tended to make very few concessions, with the result that the ratings were bunched
largely between points "5" to "7" on the seven-point scale. With such a limited scatter and so great a negative skewness, some means other than a Pearsonian r had to be employed. The simple procedure of expressing the extent of agreement in terms of the number of perfect agreements between raters, the number of one scale unit disagreements, and two scale units disagreements, has been employed. While somewhat unwieldy, it reveals the actual situation more clearly than any other method. The results are shown in Table V (p. 34).

Regarding Judgement III, the raters were asked to determine the working definition (according to three categories) which the subject was using as he responded to the phrase, "The Christian Church is an institution..." A further category was added for those responses which might be considered unrateable. About 25% of the responses were placed in this grouping. Table VI (p. 32) shows the extent of the agreements between raters. Since these were so low, it was obvious that the data so obtained could not be further employed. The reliability of these assessments was therefore not determined.

When the ratings were collected, mean scores were determined for the two parts of each of
TABLE III

COEFFICIENTS OF AGREEMENT AMONG THE RATERS AS TO THE EFFECTIVENESS OF THE THIRTY ARGUMENTS PRESENTED.

<table>
<thead>
<tr>
<th>Rater</th>
<th>Stimulus B</th>
<th></th>
<th></th>
<th>Rater</th>
<th>Stimulus C</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>II</td>
<td>III</td>
<td>I</td>
<td>.90*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>( .81^* )</td>
<td></td>
<td></td>
<td>II</td>
<td>( .74 ), ( .76^* )</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>( .74 ), ( .76^* )</td>
<td></td>
<td></td>
<td>II</td>
<td>( .92 ), ( .95^* )</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>( .69 ), ( .72 ), ( .78^* )</td>
<td></td>
<td></td>
<td>III</td>
<td>( .78 ), ( .83 ), ( .91^* )</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^\*\) Rate - Rerate r
TABLE IV

COEFFICIENTS OF AGREEMENT AMONG THE Raters
AS TO THE EXTENT TO WHICH INSTRUCTIONS
WERE OBeyed WHEN THIRTY SUBJECTS
RESPONDED TO STIMULUS C.

<table>
<thead>
<tr>
<th>Rater</th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>.75*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>.69</td>
<td>.79*</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>.61</td>
<td>.63</td>
<td>.75*</td>
</tr>
</tbody>
</table>

* Rate - Rerate r
TABLE V

THE NUMBER OF TIMES AND THE EXTENT TO WHICH
THE THREE RATERS DIFFERED IN THEIR
ASSESSMENTS OF THE DATA PERTAINING
TO JUDGEMENT II, STIMULUS B.

( N = 30; Total Scale Units = 7 )

<table>
<thead>
<tr>
<th>No Difference</th>
<th>Differed by 1 Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rater</td>
<td>I</td>
</tr>
<tr>
<td>I</td>
<td>18*</td>
</tr>
<tr>
<td>II</td>
<td>20</td>
</tr>
<tr>
<td>III</td>
<td>12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Differed by 2 Units</th>
<th>Differed by more than 2 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rater</td>
<td>I</td>
</tr>
<tr>
<td>I</td>
<td>2*</td>
</tr>
<tr>
<td>II</td>
<td>2</td>
</tr>
<tr>
<td>III</td>
<td>5</td>
</tr>
</tbody>
</table>

* Rate - Rerate Differences
**TABLE VI**

**EXTENT OF AGREEMENT AMONG THREE RATERS AS TO THE CATEGORY INTO WHICH EACH OF THE RESPONSES OF THIRTY SUBJECTS WERE PLACED.**

<table>
<thead>
<tr>
<th>Stimulus B</th>
<th>Stimulus C</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Raters agree</td>
<td>3 Raters agree</td>
</tr>
<tr>
<td>2 Raters agree</td>
<td>2 Raters agree</td>
</tr>
<tr>
<td>No agreement</td>
<td>No agreement</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>
Judgements I and II. There was little difference in the mean scores of the three raters on all four of these assessments. Rater III consistently graded about .50 scale units lower than Raters I and II, between whom the agreement in terms of mean scores was almost perfect. In order to obtain the most accurate scores, the means of the ratings for each subject were determined. From these figures, four mean scores for each group were calculated. It was from these scores that our investigations of the differences in the performances of the two groups were made (Chapter V).
Hypothesis I

From Table VII (p. 38), we can see that the religious subjects were more effective in their arguments for the church than against it. There is less than 1 chance in 100 that this could be due to chance. Part (a) of Hypothesis I is therefore supported.

The disparity shown in the religious group's ability to support the two stimulus statements was greater than the disparity shown by the neutral group. In order to test the statistical significance of the difference in these two disparity scores, the following procedure was carried out. For each group, each individual's score on Stimulus C was subtracted from his score on Stimulus B. This gave us a distribution of differences for each of the experimental and control groups. A test was then made by the usual statistical procedures to determine whether there was a significant difference between the means of the two
<table>
<thead>
<tr>
<th></th>
<th>Stimulus B</th>
<th>Stimulus C</th>
<th>Difference (Disparity Score)</th>
<th>Level of Confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Rating of the Religious Group</td>
<td>4.9 ((\sigma M = .17))</td>
<td>3.5 ((\sigma M = .42))</td>
<td>1.4</td>
<td>99.3 chances in 100</td>
</tr>
<tr>
<td>Mean Rating of the Neutral Group</td>
<td>4.1 ((\sigma M = .29))</td>
<td>3.2 ((\sigma M = .33))</td>
<td>0.9</td>
<td>98 chances in 100</td>
</tr>
<tr>
<td>Difference</td>
<td>0.8</td>
<td>0.3</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Level of Confidence</td>
<td>99 chances in 100</td>
<td>71 chances in 100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
distributions. The chances of a true difference existing proved to be 91 in 100. We may only say, therefore, that there seems to be a tendency for the religious group to show a greater disparity than the neutral group in terms of the ability of each to respond to the two stimuli, but that this difference between the groups may be due to chance factors.

One of the most important figures in the calculations is one which has not yet been mentioned. The chances are 98 in 100 that a true difference exists in the neutral group's ability to support and attack the church. Such a finding must have an influence on the interpretation of the results as a whole.

Hypothesis II

From Table VIII (p. 40), we may check the results of the testing of the three parts of Hypothesis II: the ability of the two groups to follow instructions when attacking the church and when supporting it.

Table VIII reveals a situation which is almost parallel to that found in the testing of Hypothesis I. There is a highly statistically significant difference in the ability of the religious subjects to follow instructions when supporting, as opposed to attacking, the church. Since
**TABLE VIII**

RELIGIOUS AND NEUTRAL GROUP MEAN SCORES REGARDING THE EXTENT TO WHICH INSTRUCTIONS WERE FOLLOWED

<table>
<thead>
<tr>
<th></th>
<th>Stimulus B</th>
<th>Stimulus C</th>
<th>Difference (Disparity Score)</th>
<th>Level of Confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Rating of the</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious Group</td>
<td>6.3</td>
<td>4.6</td>
<td>1.7</td>
<td>99.7 chances in 100</td>
</tr>
<tr>
<td>(σ M = .23)</td>
<td>(σ M = .52)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean Rating of the</td>
<td>5.7</td>
<td>4.7</td>
<td>1.0</td>
<td>97 chances in 100</td>
</tr>
<tr>
<td>Neutral Group</td>
<td>(σ M = .27)</td>
<td>(σ M = .45)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>0.6</td>
<td>-0.1</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>Level of Confidence</td>
<td>96 chances in 100</td>
<td>50 chances in 100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
the direction of the disparity is as predicted, part (a) of Hypothesis II is supported.

Although part (b) of Hypothesis II is supported, the results were not statistically significant. The disparity score (B rating - C rating) is 0.7 units greater for the religious group than for the neutral group. The chances are 81 in 100 that this difference would not occur by chance.

Part (c) of Hypothesis II is not supported. There is no difference in the degree to which the two groups followed instructions when attacking the church.

Again, the neutral group showed a high disparity score, this time at the 5% level of confidence. Though not as great as the disparity score of the religious group, it will again be a significant factor in the discussion of results.
CHAPTER VI

DISCUSSION OF THE RESULTS

The G.S.R. results have already been discussed briefly (p. 26). No refined statistical methods were employed in their treatment since the groups were small and the inter-individual and intra-individual differences were very large. Although attempts were made to reduce to a minimum the operation of extraneous variables which might affect the palmar reflex, we have no way of knowing whether these controls were adequate. Reliable trends might be discovered using these methods with a much larger group. However, the writer now feels that the G.S.R. might better be employed when subjects are not so actively involved as they were in this experiment. This is true especially where the whole experimental situation is tension producing, as was this one, to many of the individuals in both groups.

Both groups obtained significantly higher ratings when supporting the church, rather than when
attacking it. They presented arguments which were more convincing, and were less prone to restructure the situation by disobeying the instructions. These two trends are present to a greater extent in the religious group than in the control group, but this difference in groups is not statistically significant. The meaning of our results is not clear since we can only make hypotheses as to why the control group should find one stimulus so much more difficult than the other. If it is just that the one point of view is intrinsically more difficult to support than its contrary, then we may simply investigate the differences between the two groups. There are, however, two reasons for thinking that this is not the true answer. Firstly, the fact that all three raters gave relatively low ratings to material attacking the church implies that in their minds this material was not as adequate as it might have been. That is, if in actuality the church is more easily supported than attacked, the raters themselves could not avoid taking this factor into account in their grading, since they would be similarly affected themselves. Secondly, any such reason does not adequately explain why the control group should disobey the instructions to a greater extent when attacking the church than when supporting it.

A second hypothesis may be put forward to
account for the discrepancy in the ability of the control group to handle the two stimuli in accordance with the instructions. They might not have been "truly" neutral (free from bias in any direction) in their attitude toward the church, although scoring in the central (neutral) area of the Thurstone-Chave scale. From a subjective analysis, two of the three raters* came to the conclusion that cultural conditioning - ours is a Christian culture - was strongly reflected in the majority of the responses. As an extreme example, one "neutral" subject, upon completing his attack upon the church, promptly inquired into the experimenter's views on the place of the Christian Church in our society. He admitted having been concerned about this when attacking the church but said that he was not concerned when supporting it. It is interesting to note that the graph of his galvanic skin reflex showed a continued upward trend during the period of relaxation following his attack upon the church!

Our hypothesis that any disparity in the ability of the religious group to convincingly handle the two stimuli would be greater than any similar disparity on the part of the control group was not conclusively

*The third rater offered no opinion.
supported. There seems to be a tendency in this direction but on a statistical basis the chances are 9 in 100 that the difference found could be due to chance factors. Similarly we have no conclusive results supporting the hypothesis that any disparity in the ability of the religious group to follow the instructions, while responding to each of the two stimuli, would be greater than any similar disparity on the part of the control group. Again there is a tendency for this to be so, but the chances are 19 in 100 that the apparent difference between the two groups could be due to chance.
CHAPTER VII

SUMMARY AND CONCLUSIONS

A religious group and a second group, who considered themselves neutral in their feelings toward the Christian Church, were asked to (1) support, and (2) attack the Christian Church while conceding nothing to any opposing point of view. The findings were briefly as follows:

(1) The religious group were more effective in supporting the Christian Church than were the neutral group. They were also better able to follow the examiner's instructions while doing so.

(2) The two groups were approximately equal in their ability to attack the church and to follow instructions while doing so.

(3) Both groups were much more effective when supporting the church than when attacking it.

(4) Instructions were disobeyed to a greater extent by both groups when they were attacking the church.
than when they were supporting it.

(5) The religious group showed more disparity than did the neutral group as regards the above points (3) and (4). These differences between groups were not statistically significant.

(6) The G.S.R. results revealed no significant trends in terms of either inter-group or intra-group measures.

(7) Because of the many "unscoreable" responses and because of the considerable disagreement among the raters, we were unable to judge whether or not either group showed any tendency to change their working definition of "The Christian Church is an institution..." as they attempted to respond to each of the two stimuli.

In general, the experimental results do not demonstrate, in any convincing manner, either the presence or absence of any distorting factor in the phenomenal fields of the individuals who had identified strongly with the Christian Church. The results serve mainly to raise further questions, and to point out where unforeseen variables may have affected the experimental design. We have offered some speculation to the effect that perhaps
the control group was not functioning as an unbiased objective group. If this is true, we were not justified in using their performances as a standard in an experiment designed to demonstrate the effects of ego-involved attitudes.
As far as we have been able to discover, the study described is the first of its type. Difficulties were encountered, perhaps some aspects were inadequately controlled. Although the results were inconclusive they do serve to raise new questions and to indicate different ways of experimenting with problems of this type.

We collected two types of raw data - the G.S.R. graphs, and the wire recordings of the verbal responses. We now feel that the experimental design, while adequate for collecting the latter, was probably inadequate for the former. The subjects were perhaps under too much mental stress, from the active role they were taking in this experiment, for valid results to be expected from the G.S.R. Also, when subjects are so actively involved there is a greater tendency for them to make physical movements which will affect the palmar reflex. We do feel, however, that very profitable studies
could be made through the collection and treatment of verbal data in a similar manner to that described. While our experimental group was made up of subjects who had identified themselves with the institution of the Christian Church, any subjects could be employed so long as they identified themselves with a group or a philosophy. Any such experimenters might be advised to employ, in the place of a "neutral" group, a control group made up of people who are strongly opposed to the group or philosophy under question. This at least would eliminate the problem of establishing adequate criteria for finding subjects who were interested in the particular topic but who were not biased in any one direction.

We were able to show that the extent to which instructions were disobeyed varied directly with the difficulty encountered in responding to the stimulus statements. The nature of our results were such, however, that we could not demonstrate clearly that the reason for the difficulties encountered were, or were not, due to ego-threat or to some unknown factors. Further studies on similar lines should throw more light on this problem and indicate the dynamics of the relationship between disobedience of instructions and difficulty in supporting an argument.
A second means by which a subject might restructure the experimental situation (i.e. changing his functioning definition of the topic in question) was described and an attempt made to investigate whether or not this means was employed. We were not successful, and would suggest that if any similar attempts are made the subjects should be asked to write out their arguments at their leisure. Such a procedure should be of great advantage when the time comes for the analysis of the material in terms of the frame of reference employed on each of the tasks. The material obtained, when subjects must produce without sufficient opportunity for the organization of thought processes, is unsuitable for such analysis.

We feel that this whole field is worthy of study. This would seem to be a time when much effort should be applied to gaining a better understanding of all those factors which have a bearing on the inter-relationships of groups of people. In our opinion, many of the problems involved, including the "distorting effects" of ego-involvements, may be successfully studied in the psychologists' laboratories.
REFERENCES


APPENDIX I

CIRCUIT DIAGRAM OF THE SARGENT-HEYROVSKY
POLAROGRAPH, MODEL XI
4.5 v

400 Ω

170 Ω

100 Ω

D.C. WIRING

CURRENT SENSITIVITY

1,000 500 200 100

7,500 Ω 40,000 Ω

25 Ω 25 Ω

downscales upscale

E.M.F. CONSTANT

E.M.F. INCREASE

G

G

2

3

1

OFF

2

1

3

D.C. WIRING
APPENDIX II

A

GRAPHS OBTAINED FROM THE G.S.R.s OF FIFTEEN RELIGIOUS SUBJECTS IN RESPONSE TO STIMULUS B AND STIMULUS C
GRAPHS OBTAINED FROM THE G.S.R.'S OF 15 RELIGIOUS SUBJECTS IN RESPONSE TO STIMULUS 'B' AND STIMULUS 'C'
APPENDIX II

B

GRAPHS OBTAINED FROM THE G.S.R.s
OF FIFTEEN NEUTRAL SUBJECTS IN
RESPONSE TO STIMULUS B
AND STIMULUS C
GRAPHS OBTAINED FROM THE G.S.R.'S OF THE 15 "NEUTRAL" SUBJECTS IN RESPONSE TO STIMULUS 'B' AND STIMULUS 'C'
APPENDIX III

THE INSTRUCTIONS TO THE THREE RATERS
INSTRUCTIONS FOR RATERS

ORIENTATION

Raters are asked to read the following instructions and then to read through the material to be rated. This is for the purpose of orientation, and no rating should be attempted during this preliminary work.

GENERAL INSTRUCTIONS

Ratings will be made on the blank forms provided. For each subject, three types of judgements will be made on each of his responses to the two stimuli. That is, responses to both stimuli will be rated for the same factors on similar rating scales.

Following the preliminary readings, raters are asked to grade all thirty of the responses to Stimulus B under the three headings to be described (Judgements I, II and III). Raters may rate all three categories on the one reading, rather than going through all the material on Stimulus B three times.

When these three judgements are completed, then all thirty responses to Stimulus C may be graded similarly.

Raters should thoroughly familiarize themselves with the instructions which were given to the subjects tested. The instructions which made up Stimulus B are as follows:

Conceding nothing to any opposing point of view which might exist, verbally support the following statement: -

THE CHRISTIAN CHURCH IS AN INSTITUTION WHICH MERITS THE ACTIVE SUPPORT OF EVERYONE.

Do not use humor. Please begin.

The instructions which made up Stimulus C were as follows:

Conceding nothing to any opposing point of view which might exist, verbally support the following statement: -
THE CHRISTIAN CHURCH IS AN INSTITUTION WHICH MERITS THE ACTIVE SUPPORT OF NO ONE.

Do not use humor. Please begin.

Additional instructions were given before either Stimulus B or Stimulus C were presented. Each subject practised responding to a stimulus which was worded exactly parallel to those above but which was on a different topic. At this time, the following additional instruction was given:

You see that this means you have to be dogmatic. You must present a case for this one point of view only, and you must concede nothing to any different point of view.

If a subject asked if he had to present only material with which he agreed, the answer was:

No, just use any argument which supports this statement.

JUDGEMENT I.

The judgements here are to be based on your opinion as to the strength (worth) of each of the complete arguments presented. (Please remember however that all of the responses to Stimulus B are to be judged before any of those to Stimulus C.) In making these judgements you should have the following criteria in mind:

1. The scope covered by the argument. That is, is the Christian Church and what you feel it stands for, "praised" (Stimulus B) or "condemned" (Stimulus C), in toto, or does the argument take only some Christian Church groups and (or) some functions of the Church?

2. How much do concessions to an opposing point of view detract from the argument?

3. How much pertinent material was the subject able to produce in the one and one-half minutes allowed?

4. How pertinent are the points put forward?
Raters should keep in mind that the subjects produced the material without preparation, so responses of a high quality are not to be expected.

The following is the verbal description of the types of responses earning each of the ratings from "1" to "7" as provided on the rating scales. The same criteria apply to the rating responses to both Stimulus B and Stimulus C under Judgement I.

**RATING:**

1. A rating of "1" would mean that there is no material supporting the topic, and that the material which is produced is actually in favor of the opposing (contrary) point of view.

2. No material supporting the topic, but neither are there any concessions to the opposing view.  

   OR

   The number and scope of the concessions far outweighs the material in support of the topic.


   OR

   Some acceptable arguments but many concessions which detract from its worth.

4. An unconvincing argument but one which is fairly acceptable. No concessions.

   OR

   Several acceptable points in favor of the topic but unconvincing because of concessions which somewhat detract from the strength of the argument.

5. A fairly convincing argument, a few acceptable points, or several fairly acceptable points. No concessions.

   OR
A very good supporting argument; many acceptable points and some (or one) points which you feel are of primary importance. Some concessions are made however which detract somewhat from the strength of the argument.

6. A convincing argument. Some of the points brought up are of primary importance. No concessions.

OR

A thorough, impassioned argument, sticks to important issues. One or two concessions which detract little from the argument.


JUDGEMENT II

Here we wish to know the extent to which concessions were made. In other words, how well does the individual conform to the instructions which read - "Conceding nothing to any opposing point of view which might exist ..." This is the same factor which played an important part under Judgement I, but in this case it is the only factor under consideration.

A seven-point scale is again employed. The type of response earning each rating is as follows:

RATING:

1. Sweeping concessions to the opposing point of view. The whole argument is completely in opposition to the topic which he is supposed to support.

2. Many minor and/or several broad general concessions, several of which are elaborated upon.

3. Several concessions of a minor nature but few broad, negative generalizations. One or more of these concessions is elaborated upon briefly; that is, the points conceded receive slightly more than passing comment.
4. Several minor concessions and/or one major concession, but these are brief and not elaborated upon and after making them the subjects proceed in their attempts to support the stimulus statement.

5. A few brief concessions of a very minor nature, not elaborated upon.

OR

One major concession, brief and not elaborated upon, and which is so presented as to detract little from the argument as a whole.

6. One brief, minor qualification or concession.

7. Concedes nothing whatsoever.

Judgements responses to both Stimulus B and Stimulus C are made on the basis of the rating scale above.

JUDGEMENT III

This judgement concerns frame of reference which the individual is using as he responds to the words "The Christian Church is an institution" in the context of the instructions. What is the definition which the subject is using for this phrase? The Christian Church is made up of many different orthodoxies with a somewhat common basic philosophy and a common founder, but which vary from each other in some respects. The raters are asked to determine into which of the following categories the subject's response seems to fall.

Category

1. The subject's response refers, very largely, to the philosophy upon which the Christian Church, as a whole, is based. That is, the subject refers to the teachings of Christ either directly or indirectly and concerns himself with the principles expounded by the church in general.

2. The discussion centers very largely about the work done by one or more
church groups and/or their means of doing this work. The basic philosophy of the church is very largely ignored. The subject is primarily concerned with the more concrete functions or effects of the church (e.g. "promoting young people's clubs" or "some groups cause an unreasonable amount of emotionality.")

3. Both the philosophy of the Christian Church (Category 1) and specific church functions (Category 2) receive more than a brief passing comment.

4. Subject's response fits into none of the above three Categories.