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THE SELECTION OF ITEMS FOR AN ATTITUDE SCALE.

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INFLUENCE OF THE PROCESS OF DISCRIMINATION
IN THE SELECTION OF ITEMS FOR AN ATTITUDE SCALE

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INFLUENCE OF THE PROCESS OF DISCRIMINATION
IN THE SELECTION OF ITEMS FOR AN ATTITUDE SCALE

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CHAPTER I

INTRODUCTION

Purpose of the Study

The general purpose of the study was to describe trends in the selection of items for the construction of an attitude scale to be presented to the general public. The major hypotheses were designed to investigate the effects of a subject's attitude toward an issue in the selection of statements to be used in the assessment of attitudes of the general public toward that same issue. The issue chosen for the present study was capital punishment.

A modification of procedures of attitude assessment devised by Sherif, Sherif and Nebergall (1965), Sherif and Hovland (1953), and Thurstone (1928) was used in the present study to assess attitudes of subjects toward the issue of capital punishment. Sherif, Sherif and Nebergall (1965) have defined attitude scales in terms of latitudes of acceptance, noncommitment and rejection and most acceptable and most objectionable positions. An extension of their procedures

was used in the present study to investigate fineness of discrimination between items that are placed within latitudes of acceptance, noncommitment and rejection. Of major interest was the influence of discrimination on the selection of statements from the latitudes of acceptance, noncommitment and rejection for the purpose of constructing an attitude scale to be presented to the general public. The question of fineness of discrimination between statements becomes important when one considers the possibility of biasing factors in the construction of attitude scales. Statements may be subject to differential wording or placement along an attitude scale as a result of discriminability of the person constructing the scale. The focus of the present study was on differential selection of statements from latitudes of acceptance or rejection due to the influence of discrimination between statements.

A second purpose of the present study was to learn if subjects select a greater proportion of acceptable or objectionable statements to be included in a scale to measure attitudes of the general public. Studies (Hovland & Sherif, 1952; Sherif & Hovland, 1953; Whittaker, 1963; La Fave & Sherif, 1968) have demonstrated that judges' attitudes do influence categorization of statements about controversial issues.

A third major area of interest in the present study was

related to findings by Hart (1967) concerning subjects who adopt a moderate position on an issue. Hart (1967) found differences in the size of latitudes of rejection of soft and hard moderates, and the present study is partially concerned with verification of these findings.

Need for the Study

A major factor in the development of effective means of attitude assessment is the elimination or reduction of bias on the part of the person constructing the scale. Thurstone (1929, 1931) and others (Hinckley, 1932; Ferguson, 1935; Pintner & Forlano, 1937) considered this factor and assumed that the scale values of statements derived by the method of equal-appearing intervals were independent of the attitudes of judges who rated the statements. Subsequent research (Hovland & Sherif, 1952; Sherif & Hovland, 1953; Kelley, Hovland, Schwartz & Abelson, 1955) suggested that judges' attitudes do influence the derivation of scale values. Such bias limits the extent to which any attitude scale is truly representative of the entire range of possible statements about the issue in question. Recognition of these biasing factors force the expansion of attitude scales to include statements representative of the sample of people whose attitudes are being measured, rather than being representative of the person who is measuring the attitude. An analysis of variables which might influence the selection and wording of statements for

attitude scales should provide information leading to a reduction of bias as a function of the attitude of the person constructing the scale. If statements presented to subjects are not representative of the range of attitudes in the subject population, then the scale may be limited in its effectiveness.

More specifically, bias may result from the tendency for judges to make finer discriminations between acceptable statements than between objectionable statements. Studies (Hovland & Sherif, 1952; Sherif & Hovland, 1953) have shown the tendency for high involved subjects to accept a small number of statements and reject a large number of statements. This tendency was ". . . described as a raised threshold of acceptance and a lowered threshold of rejection on the part of highly ego-involved individuals" (Sherif & Hovland, 1961, p. 105). These authors interpreted the findings as an indication that the subject is more discriminating about statements he accepts than about statements he rejects. The present study was designed to learn if discrimination would result in a greater range of scale values of statements selected from the latitude of rejection than from the latitude of acceptance. Such a study is necessary to learn if bias may be introduced into an attitude scale as a result of differential discrimination between acceptable and objectionable statements.

Theoretical Background

Evidence from studies of perception and judgment support the idea that categorization is one of the fundamental processes of perception and cognition (Bruner, 1957). Judgment or categorization of stimuli results in placement along a range or continuum of similar stimuli. When a single stimulus is " . . . judged against the background or functionally related stimuli, this background for judgment can be called the individual's reference scale for the special item in question" (Sherif & Sherif, 1956, p. 50). Placement of attitudinally related items into categories presupposes the formation of a reference scale for a particular class of stimuli. Reference scales are formed as a consequence of repeated encounters with given stimuli, and once such scales are formed, future judgment of similar stimuli is relative to these scales (Sherif & Hovland, 1961).

Reference scales contain outstanding reference points (anchorages) which influence judgment (Sherif & Sherif, 1956). Psychophysical experiments with physical stimuli (weights, lights, tones) have demonstrated shifts in judgment toward or away from anchor points. Of particular relevance to judgmental shifts are assimilation and contrast effects which occur as a function of distance between object or judgment and anchor. An assimilation effect is " . . . a shift in placement of a stimulus toward an anchor value . . .", a contrast effect is a shift " . . . in placement of a stimulus

away from an anchor value . . ." (Sherif & Hovland, 1961, p. 40).

From information derived from psychophysical and perceptual studies of assimilation and contrast effects comes evidence that psychological reference scales, or psychosocial scales are formed in the same way as psychophysical scales (Sherif & Sherif, 1956; Sherif & Hovland, 1961; Sherif, Sherif & Nebergall, 1965; Sherif & Sherif, 1969). Once psychological reference scales are established, they serve a function similar to physical scales, i.e., provide a basis for comparison of relevant stimulus items. In categorizing social stimuli, however, the individual's attitudes and ego become involved in the judgment of stimuli. "When the individual has a definite attitude about a class of objects, he brings to any specific situation involving it a set of categories already established . . ." (Sherif, Sherif & Nebergall, 1965, p. 9).

In attempting to define an attitude, Allport (1935) discussed the variety of definitions of attitude, and pointed out common points of agreement between the various definitions. Attitudes involve a specific orientation toward stimulus objects, and vary in intensity (Young, 1931; Bernard, 1930). Allport (1935) summarized by saying that " . . . the essential feature of attitude is a preparation or readiness for response" (p. 8). Additional criteria of attitudes offered by Sherif

and Sherif (1956, 1969) and Sherif, Sherif and Nebergall (1965) emphasize the learned nature of attitudes, and the motivational and emotional characteristics. The bipolar nature of attitudes has been emphasized by many writers (Bogardus, 1931; Thurstone, 1931; Sherif, Sherif & Nebergall, 1965), and may be summed up in Allport's (1935) statement:

An attitude characteristically provokes behavior that is . . . favorable or unfavorable, affirmative or negative toward the object . . . with which it is related. This double polarity in the direction of attitudes is often regarded as their most distinctive feature (p. 8).

Scott (1968) discusses properties of attitudes such as salience, overttness, flexibility and consciousness. Salience and overttness refer to the amount of expression of an attitude, flexibility to the " . . . ease with which an attitude may be modified . . ." (p. 207). Consciousness refers to the ready availability of the attitude to the "conscious mind" of the individual. Sherif, Sherif and Nebergall (1965) emphasize that attitudes must be inferred from consistencies in individual behavior toward specific stimuli. This characteristic of attitudes has led to the development of numerous techniques to measure attitudes. Before proceeding to a discussion of attempts to measure attitudes, a summary definition of the term attitude is offered from Sherif and Sherif (1969):

An attitude is the individual's set of categories for evaluating a domain of social stimuli (objects, persons, values, groups, ideas, etc.) which he has established as he learns about this domain (in interaction with other persons, as a general rule) and which relate him to subsets within the domain

with varying degrees of positive or negative effect (motivation-emotion) (pp. 336-337).

The first major attempts to measure attitudes occurred during the 1920s. Bogardus (1924-1925) devised a Social Distance Scale to evaluate attitudes toward various national or ethnic groups. A second major attempt in attitude measurement came from Thurstone (1928, 1929) and Thurstone and Chave (1929). These authors devised a single scale for attitudes which consisted of a number of statements ranging from extremely favorable to extremely unfavorable toward a specific issue. Each statement was assigned a scale value which was derived by the method of equal-appearing intervals. Thurstone employed psychophysical techniques in the construction of attitude scales in order to obtain an objective, quantifiable measure of an individual's attitude (Thurstone, 1931). Such a technique would serve to eliminate bias based on judges' attitudes, a factor which Thurstone and Chave (1929) considered in the following quote:

If the scale is to be regarded as valid, the scale values of the statements should not be affected by the opinions of the people who help to construct it (p. 92).

The method of equal appearing intervals utilized in the construction of the scale assured that it would be " . . . more than a description of the people who construct the scale" (Thurstone & Chave, 1929, p. 92).

Hinckley (1932) tested this assumption by using con-

trasting groups of pro-Negro and anti-Negro white judges and Negro judges to categorize 114 statements about the social position of the Negro. The judges derived scale values on the issue by the method of equal-appearing intervals. Since the scale values for the three groups were highly correlated (r ranged from .93 to .98) Hinckley concluded that the scale was independent of the attitudes of the judges and the equal-appearing intervals procedure was effective in eliminating bias from construction of the scale. Some subsequent research (Ferguson, 1935; Pintner & Forlano, 1937) supported this conclusion.

Hovland & Sherif (1952) contested this assumption by duplicating the Hinckley study. They used the same 114 statements on the social position of the Negro, as well as contrasting subject groups of pro-Negro and anti-Negro white judges and Negro judges. However, these authors questioned Thurstone's procedure of discarding judges who placed more than 30 percent of the statements in a single category. Hovland and Sherif (1952) concluded that the greater the involvement of the judge (subject) the greater the number of statements placed in a single category and the fewer categories used. When subjects were given a choice as to the number of categories needed, the more involved subjects used fewer categories (Sherif & Hovland, 1953). Such findings led Hovland and Sherif (1952) to suggest the possibility of measuring attitudes by means of an indirect approach which relied " . . . entirely

on the way (the subject) distributes his judgments" (p.831). In addition, this indirect method of measuring attitudes would allow the subject to establish his "own categories", or use as many or as few categories as needed.

. . . the extension or constriction of the scale he establishes, the number of categories he uses, . . . the direction of concentration of items may all provide useful indices for analysis of the way the individual 'perceives' the issue (Hovland & Sherif, 1952, p. 831).

Subsequent research with the "own categories" procedure (Sherif & Hovland, 1953; La Fave & Sherif, 1968; C. W. Sherif, 1961, 1963; Vaughan, 1961) led Sherif, Sherif and Nebergall (1965) to define attitude scales (judgmental categories) in terms of latitudes or acceptance, noncommitment and rejection:

Latitude of acceptance is the position on an issue (or toward an object) that is most acceptable, plus other acceptable positions.

Latitude of rejection is the most objectionable position on the same issue plus other objectionable positions.

Latitude of noncommitment (consists of) . . . those positions not categorized as either acceptable or objectionable in some degree (p. 24).

Sherif and Hovland (1961) maintain that the judgmental processes involved in reactions to social stimuli can be explained in terms of assimilation-contrast effects. Judgment of stimuli on a given psychosocial scale is relative to the individual's degree of ego-involvement in an issue. Individuals with a great deal of ego-involvement with a given social issue demonstrate a raised threshold of acceptance and lowered threshold of rejection, which results in a constriction

of the range of assimilation and expansion of the range of rejection (contrast effect) (Sherif & Hovland, 1961; Sherif, Sherif & Nebergall, 1965). Stimuli falling into the latitude of rejection are judged as more discrepant, and are subject to derogation or unfavorable reaction from the individual.

Less commitment to a stand on a given issue results in a greater range of assimilation or expansion of the latitude of acceptance to include neutral statements on the issue (assimilation effect). Studies of attitudes on political and other controversial issues show that the more extreme the stand, the greater the rejection of opposing or even neutral stands on the same issue (Whittaker, 1963; La Fave & Sherif, 1968; Sherif, Sherif & Nebergall, 1965).

Research on categorization of statements about controversial issues demonstrated that persons holding extreme stands tend to distribute judgment bimodally about the extremes of the scale (Hovland & Sherif, 1952; Sherif & Hovland, 1953; Hovland, Harvey & Sherif, 1957; La Fave & Sherif, 1968; Sherif & Hovland, 1961). Differences between own stand and opposite stand are emphasized, and intermediate items are displaced toward the ends of the scale. Therefore, strong commitment on a controversial issue tends to result in a large latitude of rejection relative to the latitudes of acceptance and noncommitment (Sherif & Hovland, 1961; Sherif, Sherif & Nebergall, 1965; Sherif & Sherif, 1969).

In contrast to persons holding extreme stands on an issue, those with moderate stands tended to exhibit greater variability and equality of distribution of statements along an attitude scale (Vaughan, 1961). Regardless of extremity of stand however, " . . . the strongly worded, unequivocal statements of extreme positions . . ." (Sherif, Sherif & Nebergall, 1965, p. 139) were accurately and consistently placed in extreme categories by both moderate and extreme judges, thus reflecting the ability of persons to consistently categorize clear-cut statements on an issue. Therefore, in placing verbal items along a scale of a social issue, individuals are capable of discriminating among statements representing different positions of different social groups. Individuals can order these statements along a continuum of favorableness-unfavorableness, particularly if the statements are not ambiguous. If the individual has a strong involvement in the issue, this influences his placement of the item or statement along a continuum. Using his own stand as an anchor in the judgment of social stimuli, the highly involved individual tends to place items on the acceptable side or on the objectionable side of the scale, leaving very few items in the middle range. Conversely, individuals who are moderately involved in the issue tend to distribute items more evenly along the scale, placing a greater number of items in the middle range or in the latitude of noncommitment (Sherif & Hovland, 1961; Vaughan, 1961; Sherif, Sherif & Nebergall, 1965; Sherif & Sherif, 1969). However, Diab (1965) and Hart (1967) report

evidence that highly involved moderates tend to reject a greater number of statements than they accept, which suggests that persons highly committed to a moderate or middle of the road position may react in the same way as persons committed to extreme positions. These findings were further investigated in the present study. Sherif, Sherif and Nebergall (1965) report that the size of the latitude of rejection or number of statements rejected is the best single indicator of degree of involvement in an issue. " . . . the number of positions rejected proved to be the most discriminating index of relative ego involvement or commitment" (p. 156). The present study investigated the tendency of persons adopting moderate positions on a scale to place greater or fewer numbers of statements into the latitude of rejection in relation to the degree of "moderateness" displayed. Hart (1967) made a distinction between two types of subjects who chose a moderate position as their most acceptable position. He defined moderate as: " . . . not one of the two most extreme categories on each end of the scale, or the middle or 'neutral' position . . ." (pp. 15-16).

Hart's (1967) distinction was between hard moderates and soft moderates. Hard moderates were defined as:

Subjects that chose a category (in relation to their most acceptable position) toward the extreme end of the scale representing their side of the issue as the category within their latitude of acceptance that is next in acceptableness to their most acceptable position . . . (p. 22).

Soft moderates were defined as:

Subjects that chose a category (in relation to their most acceptable category) toward the extreme end of the scale representing the side of the issue opposite their own stand . . . (p. 22).

For purposes of the present study, a different procedure was devised for distinguishing between hard and soft moderates.

The attitude scale on the issue of capital punishment devised by Peterson (1931) was chosen as the instrument for attitude assessment for the present study. Each statement in the scale has a scale value derived by the method of equal-appearing intervals. Peterson and Thurstone (1933) utilized the capital punishment scale to assess attitude change in students after exposure to a motion picture " . . . judged as having affective value on the issue in question . . ." (p. xv).

Hart's (1967) distinction between hard and soft moderates was based on the relationship between the subject's most acceptable position, next most acceptable position and latitude of rejection. Hard moderates were those subjects whose latitude of acceptance extended in the direction opposite the latitude of rejection. Soft moderates were those subjects whose latitude of acceptance extended in the direction toward the latitude of rejection.

A similar distinction was made in the present study. Moderates were those subjects who did not choose as most acceptable the two statements at either extreme of the Peterson capital punishment scale, i.e., who did not choose as most acceptable the

statements with scale values of 0.0, 0.1, or 10.4, 11.0 (See Appendix A). In addition, subjects were not classified as moderate if they chose as most acceptable the middle of the road statement, "It doesn't make any difference to me whether we have capital punishment or not" (scale value 5.5).

In the present study, the distinction between hard and soft moderates was based on the relationship between the subject's most acceptable position, and the mean Peterson scale value for the latitude of acceptance, and the latitude of rejection. Hard moderates in the present study, were those subjects whose mean Peterson scale value (in relation to their most acceptable position) for the latitude of acceptance extended toward the end of the scale representing their side of the issue, i.e., the latitude of acceptance extended in the direction opposite the latitude of rejection. In the present study, soft moderates were those subjects whose mean Peterson scale value (in relation to their most acceptable position) for the latitude of acceptance extended toward the extreme end of the scale representing the side of the issue opposite their own stand, i.e., whose latitude of acceptance extended in the direction toward the latitude of rejection.

Since the distinction between hard and soft moderates in the present study was similar to the distinction made by Hart (1967), both procedures should identify the same subsets of subjects. In both cases, the soft moderates should accept statements which lie in the direction of the latitude of re-

jection, and hard moderates should accept statements which lie in the direction opposite the latitude of rejection.

In spite of criticisms by Sherif and Hovland of the Thurstone approach to attitude scaling, there is evidence to support the stability of Thurstone's scales over considerable periods of time. Hinckley (1963) reports his follow-up study of attitudes toward social position of the Negro. In this study, he found a correlation of .94 between scale values derived by contrasting groups of pro-Negro and anti-Negro subjects. Hinckley found a comparable correlation of .98 in his study in 1932 in which he used pro and anti-Negro white subjects to derive scale values for the attitude scale on the social position of the Negro.

Sherif, Sherif and Nebergall (1965) agree that the technique of attitude scaling devised by Thurstone (1928) does permit " . . . the ordering of at least certain items in a given universe of discourse . . . as a baseline for comparison . . .", and that the " . . . methods developed for scaling attitudinal items will continue to be useful for this purpose" (p. 245).

York (1966) utilized Thurstone's method of equal-appearing intervals to derive scale values for the issue of capital punishment to determine the stability of Thurstone scale values over several years. He found a correlation of .98 between the scale values obtained in 1930 by Peterson (1931) and the scale values obtained in 1966.

Osgood, Suci and Tannenbaum (1957), in evaluating the usefulness of the Semantic Differential as a measure of attitudes, report significant correlations between the evaluative dimension of the Semantic Differential and Thurstone's scales of attitudes toward the Church, the Negro and Capital Punishment. As a measuring instrument, the evaluative dimension of the Semantic Differential consists of a number of bipolar adjective scales ranging in value from -3 (unfavorable adjectives, e.g., bad, unfair, etc.) through 0 (neutral) to +3 (favorable adjectives, e.g., good, fair, etc.). The attitude score of a concept such as Negro is obtained by a summation of all evaluative ratings (Osgood, Suci & Tannenbaum, 1957). The three concepts, Church, the Negro and Capital Punishment were rated on several evaluative scales. Correlations between the evaluative dimension of the Semantic Differential and Thurstone scale scores were .74, .82 and .81 respectively (Osgood, Suci & Tannenbaum, 1957, p. 194). Such findings further demonstrate the stability of the Thurstone scales over several years.

Of additional significance to the present study was the observation by Sherif and Hovland (1961; Hovland & Sherif, 1952) that constriction of the latitude of acceptance reflects a tendency for highly involved subjects to make finer discriminations between statements placed in the latitude of acceptance than between statements placed in the latitude of rejection:

. . . individuals who are highly ego-involved in an issue are often quite discriminating in placing items in a category corresponding to their own stand on the

issue, but lump together all statements differing from their own stand at the end of the scale they reject (Sherif & Hovland, 1961, p. 105).

Thus, with increased involvement in an issue, the individual becomes more discriminating in his acceptance of statements and more indiscriminate in his rejection of statements.

Rokeach (1954, 1960) makes a similar observation in his research on open and closed cognitive systems, contending that persons with more open systems display ". . . relatively little discrepancy in the degree of differentiation between belief and disbelief systems" (Rokeach, 1960, p. 55). On the other hand, persons with closed cognitive systems tend to perceive the world in terms of black or white with a " . . . great discrepancy in the degree of differentiation between belief and disbelief systems" (Rokeach, 1960, p. 56). Persons with open systems are capable of greater differentiation within their disbelief systems. Thus, the more dogmatic or more ego-involved individual is less discriminating between stimuli that are placed within his latitude of rejection or disbelief system. Greater dogmatism results in dedifferentiation of disbelief systems, i.e., other disbelief systems are perceived as similar, a phenomenon reflected in statements such as: "Communism and socialism are the same, Democrats and Republicans are both run by Wall Street . . ." (Rokeach, 1954, p. 199). Further, there will be less knowledge of objects or statements which are rejected as compared to knowledge of objects, statements or events which are accepted as part of the

belief system. "The greater the dogmatism the greater the discrepancy between degree of knowledge of . . . events . . . stemming from the belief system and any one of the disbelief subsystems" (Rokeach, 1954, p. 198). This lack of knowledge apparently results from a tendency to avoid " . . . contact with stimuli . . . which threaten the validity of the belief system . . ." which comes with increased dogmatism (Rokeach, 1954, p. 200).

Another line of evidence pertaining to discrimination of stimuli comes from studies of perceptual learning by Gibson and Gibson (1955). These authors reported that " . . . a stimulus starts out by being indistinguishable from a whole class of items in the stimulus universe tested, and ends by being distinguishable from all of them" (p. 38). In several experiments reported, subjects learned to make finer discriminations between stimuli as a result of increased exposure to the given stimulus universe. Gibson and Gibson (1955) give as an example of the tendency for discrimination to become finer with practice, the comparison between the wine connoisseur and the man whose wine repertoire is limited:

One man, let us say, can identify sherry, champagne, white wine, and red wine. He has four percepts in response to the total possible range of stimulation. Another man can identify a dozen types of sherry, each with many varieties, and numerous blends, and so on for the others. He has four thousand percepts in response to the range of stimulation (p. 35).

It was a basic assumption of the present study that similar effects in terms of discrimination occur in the categorization

of verbal items onto psychosocial or attitude scales. A study by Ager and Dawes (1965) considered the effect of judges' attitudes on discrimination. The measure of discrimination consisted of the number of errors (failure to agree with a consensus ordering) in paired comparison judgments of attitude statements. Ager and Dawes (1965) found that errors increased as a function of the distance of the statements from the subject's own position on the issue. Proscience raters demonstrated a greater proportion of errors when discriminating between antiscience statements than between proscience statements and vice versa.

White and Harvey (1965) report that authoritarian, dogmatic or concrete subjects used more extreme and more widely dispersed categories in judgment of statements about the church, a finding which reflects " . . . a simple cognitive structure comprised of fewer differentiations and poor integrations" (p. 338).

Sherif, Sherif and Nebergall (1965) contend that highly ego-involved subjects " . . . bunch large numbers of items into categories objectionable to them" (p. 239), i.e., into the latitude of rejection, which reflects a tendency to discriminate more finely between items placed within the latitude of acceptance than between items placed within the latitude of rejection.

The present study utilized an extension of the "own categories" procedure (Sherif & Hovland, 1953; Sherif & Sherif,

1964) and items from the scale of attitude toward capital punishment devised by Peterson (1931) to investigate hypotheses concerning the influence of discrimination in the selection of items for attitude scales.

Hypotheses

- 1(a) When given the opportunity to select items or statements from a larger number for the construction of an attitude scale to measure the general populace, subjects select a greater proportion of statements from their latitude of acceptance than from their latitude of rejection. Thus, the mean proportion of statements drawn from the latitude of acceptance is greater than the mean proportion of statements drawn from the latitude of rejection.
- 1(b) Subjects select a greater number of statements from the latitude of acceptance than from the latitude of rejection. Thus, the mean number of statements chosen from the latitude of acceptance is greater than the mean number of statements chosen from the latitude of rejection.
2. Subjects will not select their most objectionable statement for the construction of an attitude scale.
3. The range of Thurstone scale values of statements selected from the latitude of acceptance is smaller than the range of Thurstone scale values selected from the latitude of rejection, thus reflecting a tendency toward finer discrimination between statements within the latitude of acceptance than between statements within the latitude of re-

jection.

4. Subjects classified as hard moderates place a greater number of statements in their latitude of rejection than soft moderates. Thus, the mean number of statements in the latitude of rejection will be greater for hard moderates than for soft moderates.

CHAPTER II

METHOD

Pre-test

A pre-test of two of the hypotheses was conducted prior to the 1968 Presidential election. The statements used to assess attitudes toward the Presidential candidates were those used in previous studies by Sherif (1960) (Sherif, Sherif & Nebergall, 1965, p. 28). A sample of 137 subjects participated in the pre-test and results from this study tentatively supported hypotheses 1 and 3.

In order to test these hypotheses more adequately, a pre-test was employed using Peterson's (1931) scale of attitudes toward capital punishment. The advantage of the capital punishment scale over the statements about Presidential candidates used in the previous study is that scale values exist for the Peterson scale and there are a larger number of items. A pre-test with 15 subjects was conducted and the results from this study tentatively supported hypotheses 1(a), 2 and 3. The sample was not of sufficient size to permit adequate test of hypotheses 1(b) and 4.

Subjects

Subjects were 150 female undergraduate students obtained from introductory and advanced psychology courses at a liberal arts college during November, 1969. Subjects were asked to provide the following information: age, college major and classification. Subject participation was on a voluntary basis.

Subjects ranged in age from 18 to 25, however, 98 percent of the subject population fell within the ages of 19 to 21. Student classification of the subjects ranged from sophomore to senior with 86 percent of the subject population coming from the sophomore and junior classes. Of the 150 subjects who participated in the present study, 148 were white and 2 were Negro. The majority of the student body are from middle class Protestant families. Due to the school's proximity to Washington, D. C. and various military installations, many of the students come from families in which the father is an employee of a Government agency or a military officer.

Materials

The issue chosen for the present study was capital punishment. The attitude scale on the issue of capital punishment devised by Peterson (1931) (Peterson & Thurstone, 1933) was chosen. The scale contained 24 statements ranging from favorable to unfavorable on the issue of capital punishment (see Appendix A). Using the method of equal appearing intervals, Peterson (1931) derived scale values for each statement. These

scale values ranged from 0.0 to 11 (Peterson & Thurstone, 1933, pp. 22-23).

Statements were presented to subjects on cards (4 cm. x 10½ cm.). On the back of each card was an identification number which corresponded to the number randomly assigned to that statement by Peterson (1931; Peterson & Thurstone, 1933).

Procedure

The own categories procedure of attitude assessment outlined by Sherif, Sherif and Nebergall (1965) was modified to determine subjects' latitudes of acceptance, rejection and non-commitment. Each subject was provided with two sets of 24 cards enclosed in a standard, white envelope (No. 10). Subjects were presented the statements with the following printed instructions which were read aloud:

Here are 24 cards containing statements about capital punishment.

Step I: Read each statement carefully. Place the statements with which you agree in a stack to your left. Place the statements with which you do not agree on your right. Place all remaining statements in a third stack, in the middle.

Step II: Place ONE CHECK MARK (✓) by each statement that is ACCEPTABLE to you. Place ONE X MARK (X) by each statement that is OBJECTIONABLE to you.

Step III: Find the ONE statement that is MOST ACCEPTABLE to you and place TWO CHECK MARKS (✓✓) on that card. Find the ONE statement that is MOST OBJECTIONABLE to you and place TWO X MARKS (XX) on that card.

Place all 24 cards together and enclose them in the envelope provided.

Subjects were then read the following paragraph before proceeding to Step IV:

I am interested in public opinion about capital punishment and have presented you with a number of statements from various sources. I feel that there may be some statements here which are unnecessary, or are not representative of the issue. Therefore, I would like for you to choose eleven statements which you feel are most representative of American public opinion concerning capital punishment. I have provided you with a second group of 24 cards containing the same 24 statements.

Step IV: Read the second group of statements. Select from these 24 statements the ELEVEN statements which best represent the attitudes of the AMERICAN PUBLIC on the issue of capital punishment. Consider that public opinion will range from strongly favorable toward capital punishment to strongly opposed to it.

Step V: Arrange these eleven statements on a continuum from pro (for) to anti (against) capital punishment.

Step VI: NUMBER these eleven statements from one (pro) to eleven (anti).

Step VII: Place all 24 cards together, enclose them with the rubber band provided, and put them in the envelope with the first group of cards.

CHAPTER III

RESULTS

Hypothesis 1(a) predicted that a greater proportion of statements would be selected from the latitude of acceptance than from the latitude of rejection. A t-test for dependent means (Walker & Lev, 1953) was used to test the null hypothesis of no difference between proportion of statements drawn from the latitude of acceptance and proportion of statements drawn from the latitude of rejection. The mean difference between these proportions (mean difference = .2006) was significant in the predicted direction ($t = 6.6681$; $df = 149$; $p < .0005$). The null hypothesis was rejected in favor of the alternate hypothesis that subjects select a greater proportion of statements from the latitude of acceptance than from the latitude of rejection. Table 1 presents a summary of the mean proportion and number of statements selected from the latitudes of acceptance, rejection and noncommitment.

Table 1

Mean Proportion and Number of Statements Selected
from the Latitudes of Acceptance,
Rejection and Noncommitment

	Mean Response		
	<u>Latitude of Acceptance</u>	<u>Latitude of Rejection</u>	<u>Latitude of Noncommitment</u>
Proportion N = 150	.6063	.4056	.3679
Number N = 150	3.59	4.55	2.86

Subjects also selected a greater proportion of statements from the latitude of acceptance than from the latitude of noncommitment. The mean difference between proportion (mean difference = .2384) of statements drawn from the latitude of acceptance and proportion drawn from the latitude of noncommitment was significant ($t = 8.147$; $df = 149$; $p < .0005$). Thus, subjects selected a greater proportion of statements from the latitude of acceptance than from the latitude of rejection and noncommitment. Table 2 presents a summary of the mean differences between proportion of statements drawn from the latitude of acceptance and the latitudes of rejection and noncommitment.

Table 2

Mean Difference between Proportion of Statements
Selected from the Latitude of Acceptance
and the Latitudes of Rejection and
Noncommitment

	<u>Mean Difference</u>	<u>t</u>	<u>p</u>
LA - LR N = 150	.2006	6.668	.0005
LA - LNC N = 150	.2384	8.147	.0005

Hypothesis 1(b) predicted that in selecting items to be used to assess attitudes of the general public, subjects would select a greater number of statements from the latitude of acceptance than from the latitude of rejection. A two-tailed t-test for dependent means (Walker & Lev, 1953) was used to test the null hypothesis of no difference between mean number of statements selected from the latitude of acceptance and mean number of statements selected from the latitude of rejection. The mean difference (mean difference = -.9666) was significant ($t = 3.5566$; $df = 149$; $p < .001$) but not in the predicted direction. Subjects selected a greater number of statement from the latitude of rejection than from the latitude of acceptance. Thus, hypothesis 1(b) was not supported. Table 1 presents a summary of the mean number of statements selected from the latitudes of acceptance, rejection and noncommitment. Inspection of

Table 1 reveals that subjects selected the greatest number of statements from the latitude of rejection (mean = 4.55; SD = 2.43). A greater number of statements was selected from the latitude of acceptance (mean = 3.59; SD = 1.60) than from the latitude of noncommitment (mean = 2.86; SD = 2.41) ($t = 2.6995$; $df = 149$; $p < .01$).

Hypothesis 2 predicted that subjects would not choose the most objectionable statement for the eleven item scale. A sign test (Siegel, 1956) was used to test the null hypothesis of an equal probability of subjects selecting their most objectionable position as not selecting their most objectionable position or statement. Of 150 subjects, 39 did choose the most objectionable statement for the eleven item scale and 111 did not choose the most objectionable statement. Thus, the null hypothesis was rejected ($z = 5.80$; $p < .00003$) in favor of the alternate hypothesis that subjects would not choose the most objectionable position.

Of additional interest in regard to the second hypothesis was the extent to which subjects did select their most acceptable statement for the eleven item scale. A sign test (Siegel, 1956) was used to test the null hypothesis of an equal probability of subjects selecting the most acceptable statement as not selecting the most acceptable statement. Of 150 subjects, 33 did not choose their most

acceptable statement for the eleven item scale and 117 did choose the most acceptable statement. This finding was also significant ($z = -6.78$; $p < .00003$), thus indicating that subjects tend to select their most acceptable statement and do not select their most objectionable statement.

Hypothesis 3 predicted that the mean range of Peterson (1931) scale values of statements selected from the latitude of acceptance would be smaller than the mean range of statements selected from the latitude of rejection. In order to test this hypothesis, the range was determined in the following manner:

Range for the latitude of acceptance (R_{1a}). The range of statements in the latitude of acceptance was determined by subtracting the smallest scale value from the largest scale value in the latitude of acceptance (e.g., $3.4 - 0.0 = 3.4$).

Range for the latitude of rejection (R_{1r}). The range of statements in the latitude of rejection was determined by subtracting the smallest scale value from the largest scale value in the latitude of rejection (e.g., $11.0 - 6.2 = 4.8$).

The same procedure was followed in determining the range for the eleven item scale. Of those statements chosen from the latitude of acceptance (R_a), the smallest scale value was subtracted from the largest scale value (e.g., $2.7 - 0.0 = 2.7$).

Of those items selected from the latitude of rejection (R_R), the smallest scale value was subtracted from the largest scale value (e.g., $11.0 - 7.9 = 3.1$).

In order to test the hypothesis that the range of items selected from the latitude of rejection was greater than the range of items selected from the latitude of acceptance, a final step was performed. The range of statements chosen from the latitude of acceptance (R_A) was subtracted from the range of statements falling within the latitude of acceptance (R_{1A}) (e.g., $3.4 - 2.7 = 0.7$; or $R_{1A} - R_A$).

The range of statements chosen from the latitude of rejection (R_R) was subtracted from the range of statements falling within the latitude of rejection (R_{1R}) (e.g., $4.8 - 3.1 = 1.7$; or $R_{1R} - R_R$).

A t-test for dependent means was used to test the null hypothesis that ($R_{1R} - R_R = R_{1A} - R_A$); or that there is no difference between the mean range of statements chosen from the latitude of rejection and the mean range of statements chosen from the latitude of acceptance. The null hypothesis was rejected ($t = 7.8172$; $df = 149$; $p < .0005$) in favor of the alternate hypothesis that the mean range of statements chosen from the latitude of rejection was greater than the mean range of statements chosen from the latitude of acceptance.

Table 3 presents a summary of the mean ranges of scale values within the latitudes of acceptance (R_{1a}), rejection (R_{1r}) and noncommitment (R_{1nc}). Table 3 also presents the mean ranges of scale values of items selected from the latitudes of acceptance (R_a), rejection (R_r) and noncommitment (R_{nc}). Also included in Table 3 is the result of subtracting the ranges of items selected from the ranges of statements within the latitudes of acceptance, rejection or noncommitment.

Table 3

Mean Ranges for the Latitudes of Acceptance, Rejection and Noncommitment and Ranges for Items Selected from the Latitudes of Acceptance, Rejection and Noncommitment

	Mean Response		
	<u>Latitude of Acceptance</u>	<u>Latitude of Rejection</u>	<u>Latitude of Noncommitment</u>
Range (R_{1a}, R_{1r}, R_{1nc}) N = 150	4.12	8.84	6.02
Range (R_a, R_r, R_{nc}) N = 150	3.10	5.30	3.47
($R_{1a} - R_a$), ($R_{1r} - R_r$), ($R_{1nc} - R_{nc}$) N = 150	1.02	3.54	2.55

It can be seen from Table 3 that the mean range within the latitude of rejection (mean = 8.84) exceeds the mean range within the latitude of acceptance (mean = 4.12) and

within the latitude of noncommitment (mean = 6.02). Also from Table 3, the mean range of statements selected from the latitude of rejection (mean = 5.30) exceeds the mean range of statements selected from the latitude of acceptance (mean = 3.10) and from the latitude of noncommitment (mean = 3.47). The mean difference between the range of scale values of statements selected from the latitude of rejection and the latitude of acceptance $(R_{lr}-R_r) - (R_{la}-R_a)$ was significant (mean difference = 2.52), thus supporting the third hypothesis that the range of statements selected from the latitude of rejection is greater than the range of statements selected from the latitude of acceptance.

Of additional interest was the difference between the mean range of statements selected from the latitudes of acceptance and noncommitment (mean difference = 1.53). The mean range of statements selected from the latitude of noncommitment was greater than the mean range of statements selected from the latitude of acceptance ($t = 6.3625$; $df = 150$; $p < .0005$). Thus hypothesis 3 predicting a constricted scale value range between statements within and chosen from the latitude of acceptance was supported. The scale value ranges of statements selected from the latitudes of rejection and noncommitment were significantly greater than the range of statements selected from the latitude of acceptance.

Hypothesis 4 predicted that hard moderates would place

a greater number of statements in the latitude of rejection than soft moderates. In line with Hart's (1967) distinction between moderates and extremely committed subjects, moderates were those subjects who did not choose as most acceptable the two statements at either extreme of the 24 item Thurstone scale, i.e., who did not choose as most acceptable the statements with scale values of 0.0, 0.1 or 10.4, 11.0 or the middle of the road statement, "It doesn't make any difference to me whether we have capital punishment or not" (scale value 5.5).

Hard moderates were those subjects whose mean Peterson (1931) scale value (in relation to their most acceptable position) for the latitude of acceptance extended toward the extreme end of the scale representing their side of the issue. In other words, the latitude of acceptance extended away from the latitude of rejection and most objectionable statement.

Soft moderates were those subjects whose mean Peterson (1931) scale value (in relation to their most acceptable position) for the latitude of acceptance extended toward the extreme end of the scale representing the side of the issue opposite their own stand, i.e., the latitude of acceptance extended toward the most objectionable position.

Of 150 subjects, 52 were clearly defined as hard moderates and 30 were clearly defined as soft moderates. Of the remaining 68 subjects, 27 were classified as not moderate

because they chose as most acceptable one of the four extreme statements or the middle of the road statement. There was some difficulty in classifying the remaining 41 subjects because of the latitude of rejection. These 41 subjects had a latitude of rejection in which the most objectionable statement and the mean of the latitude of rejection were at opposite ends of the 24 item scale, e.g., MO = 11.0; Mean LR = 1.86. In other words, these subjects rejected statements at both ends of the scale, and did so in such a way that the number of statements rejected was greater at the end of the scale opposite to their most objectionable statement. For this reason, there was some question as to which value was most important, the mean of the latitude of rejection or the most objectionable statement. However, in keeping with the original distinction between hard and soft moderates, these 41 subjects were classified on the basis of the most objectionable position rather than on the basis of the mean of the latitude of rejection. However, analysis of data derived from these subjects was separate from the analysis of the 82 clearly defined hard and soft moderates.

A t-test for independent means (Walker & Lev, 1953) was used to test the null hypothesis of no difference between hard moderates and soft moderates in mean number of statements allotted to the latitude of rejection. Hard moderates placed a greater number of statements (mean = 11.23) in the latitude of rejection than did soft moderates (mean = 9.27).

The difference between hard and soft moderates in mean number of statements placed in the latitude of rejection was significant in the predicted direction (mean difference = 1.96; $t = 2.3657$; $df = 80$; $p < .025$).

Hart (1967) reported that soft moderates placed a greater number of statements in the latitude of noncommitment than hard moderates. His findings were confirmed in the present study. Soft moderates placed a greater number of statements (mean = 8.77) in the latitude of noncommitment than hard moderates (mean = 6.38). The difference between soft and hard moderates in mean number of statements placed in the latitude of noncommitment was significant (mean difference = 2.39; $t = 2.3206$; $df = 80$; $p < .025$).

However, when the clearly defined hard and soft moderates were combined with the questionable hard and soft moderates, the difference between hard and soft moderates in number of statements allotted to the latitude of rejection was not significant (mean_{hm} - mean_{sm} = .56) ($t = .8144$; $df = 121$; $p > .10$). The two groups of hard moderates placed a greater number of statements in the latitude of rejection (mean = 11.52) than the two groups of soft moderates (mean = 10.96), but the difference between the means was not significant. Table 4 presents a summary of the mean number of statements placed in the latitudes of acceptance, rejection and noncommitment by hard and soft moderates, questionable

hard and soft moderates, and extreme subjects. Table 4 also presents a summary of the mean number of statements placed in the latitudes of acceptance, rejection and noncommitment by the total group of subjects (N = 150). The mean number of statements allotted to the latitude of rejection (mean = 10.99) was greater for all subjects than the mean number of statements allotted to the latitude of noncommitment (mean = 6.86) and the latitude of acceptance (mean = 6.15).

Table 4

Mean Number of Statements Placed in the Latitudes of
Acceptance, Rejection and Noncommitment by
Hard Moderates, Soft Moderates, Extreme
Subjects and Questionable Hard
and Soft Moderates

	Mean Response		
	<u>Latitude of Acceptance</u>	<u>Latitude of Rejection</u>	<u>Latitude of Noncommitment</u>
Hard Moderates N = 52	6.38	11.23	6.38
Soft Moderates N = 30	5.97	9.27	8.77
Extreme Subjects N = 27	6.78	9.74	7.48
Hard Moderates (?) N = 13	5.46	12.69	5.85
Soft Moderates (?) N = 28	5.64	12.79	5.57
All Subjects N = 150	6.15	10.99	6.86

CHAPTER IV

DISCUSSION

The results of the present study indicate that an individual's acceptance or rejection of a statement is a significant source of bias in the selection of statements for the construction of an attitude scale to be presented to the general public. In addition, the data from this study suggest that individuals make finer discriminations between acceptable statements than between objectionable statements, thus supporting conclusions from earlier studies regarding the influence of judges' attitudes on the construction of attitude scales (Hovland & Sherif, 1952; Sherif & Hovland, 1953). In addition, the data from the present study support findings reported by Hart (1967) in regard to the size of the latitudes of rejection and noncommitment of persons taking a moderate stand on an issue.

The first hypothesis predicted that when given the opportunity to select statements for an attitude scale to be presented to the general public, subjects would select a greater proportion of statements from the latitude of acceptance than from the latitude of rejection. This hypoth-

esis was confirmed. Subjects selected a significantly greater proportion of statements from the latitude of acceptance than from their latitudes of rejection or noncommitment. These findings suggest that an attitude scale may be disproportionately weighted with the acceptable statements of the individual constructing the scale. This interpretation was supported by hypothesis 2 which predicted that subjects would not select their most objectionable statement. Seventy-four percent of the subjects did not select their most objectionable statement for the eleven item scale to assess attitudes of the general public on the issue of capital punishment. On the other hand, 78 percent of the subjects did select their most acceptable statement. These findings suggest that in constructing an attitude scale, the individual will not extend the limits of the scale to include his own most objectionable statement, but will include his most acceptable statement.

Hypothesis 1(b) predicted that subjects would select a greater number of statements from their latitude of acceptance than from their latitude of rejection. This prediction was not supported by the data. On the average, subjects allotted eleven statements to their latitude of rejection and selected 5 from the latitude of rejection; subjects allotted six statements to the latitude of acceptance and selected four statements from the latitude of acceptance. Therefore, subjects selected a greater proportion of statements from the

latitude of acceptance but a greater number of statements from the latitude of rejection. Therefore, hypothesis 1(b) was not supported by the data. However, these findings are consistent with the contention by Sherif and Hovland (1961) that a large latitude of rejection and small latitude of acceptance reflect a raised threshold of acceptance or increased discrimination in regard to acceptable statements. Thus, the tendency for subjects to select a greater number of statements from the latitude of rejection than from the latitude of acceptance suggests that subjects are more discriminating about items selected from the latitude of acceptance than from the latitude of rejection.

Hypothesis 3 predicted that finer discrimination in regard to acceptable statements would be reflected in a greater range of Peterson (1931) scale values of statements selected from the latitude of rejection than from the latitude of acceptance. The data from the present study confirmed this hypothesis and revealed that the mean range of scale values within the latitude of rejection was greater than within the latitude of acceptance, and further, that the mean range of scale values of statements selected from the latitude of rejection was significantly greater than the mean range of scale values selected from the latitude of acceptance. In addition, the mean range of scale values of statements selected from the latitude of noncommitment was significantly greater than the mean range of scale values of statements selected from

the latitude of acceptance. These findings lend support to the interpretation offered by Sherif and Hovland (1961) to explain the tendency for the size of the latitude of rejection to increase with increased involvement in an issue. It is the contention of these authors that persons are more discriminating about statements they accept than about statements they reject. Such discrimination is reflected in a constriction of the latitude of acceptance and expansion of the latitude of rejection. The finding in the present study that the range of scale values of statements selected from the latitudes of rejection and noncommitment was greater than the range of scale values of statements selected from the latitude of acceptance lends support to the interpretation by Sherif and Hovland (1961). Thus the constriction of the range of scale values in the latitude of acceptance implies that the subject is more discriminating about acceptable items than about items that are objectionable or neutral.

Hypothesis 4 predicted that subjects classified as hard moderates would allot a greater number of statements to the latitude of rejection than soft moderates. This prediction was based on a study by Hart (1967) which indicated that hard moderates display a greater latitude of rejection and smaller latitude of noncommitment than soft moderates. Hart's (1967) results were confirmed in the present study. Subjects who were clearly defined as hard moderates placed significantly more statements in their latitude of rejection than soft

moderates, while the mean number of statements placed in the latitude of noncommitment was significantly greater for soft moderates than for hard moderates, thus reflecting a tendency for soft moderates to be less involved than hard moderates. Hart (1967) also reported that his subjects accepted a greater number of statements than they rejected. His findings regarding the mean number of statements in the latitude of acceptance relative to the latitude of rejection were not confirmed in the present study. Data from the present study revealed that subjects placed a greater number of statements in the latitude of rejection than in the latitudes of acceptance or noncommitment. The discrepancy between results of the present study in regard to the size of the latitude of acceptance and results of Hart's (1967) could be due to the composition of the samples involved in both studies, or could be due to differences in the issues chosen for the studies. Further research might clarify the discrepancy.

The results of the present study can be extended to the problem of experimenter bias in research. The findings that subjects select a greater proportion of acceptable statements and make finer discriminations between acceptable statements indicate that a similar bias could occur in the selection of data. The experimenter might select data that would validate his hypothesis or overlook or fail to report data that would invalidate his hypothesis. Such bias could also determine the type of research done, in that if an experimenter should be

particularly hostile or antagonistic toward a specific theoretical approach, he might overlook or reject significant aspects of that theory or research which might be relevant to his own position.

Sherif (1963) has stressed the need for an inter-disciplinary approach in the social sciences to avoid the pitfalls of ethnocentrism. Other psychologists (Orne, 1962; Rosenthal, Persinger, Vikan-Kline & Fode, 1963; Rosenthal, 1964; Rosenthal, Kohn, Greenfield & Carota, 1966) have considered the problem of experimenter bias in influencing the results of psychological research and have stressed the need for controls of such bias.

This is not to say that research in social science is hopelessly biased in terms of the "limited perspective" of the experimenter. If generalizations from the present study are permitted, the results would indicate that there is a tendency for a subject (or possibly an experimenter) to include information or evidence that is objectionable or contradictory to an hypothesis, as demonstrated by the tendency for subjects to include a greater number of statements from the latitude of rejection than from the latitudes of noncommitment and acceptance. However, there is also a definite tendency to exclude information that is extremely objectionable, as evidenced by the tendency for subjects to exclude their most objectionable position (or the most objectionable information).

In addition, if one can generalize from the present data, the tendency for subjects to make finer discriminations among acceptable statements indicates that a great deal may be gained from the tendency of the researcher to make fine discriminations in his data. He may notice things and generate ideas and information which might go undetected by a person unfamiliar with the research topic. However, because of a tendency to make less fine discriminations about objectionable information, the experimenter might overlook or reject information which might invalidate his hypothesis.

In regard to the findings on hard and soft moderate subjects, this information would be of relevance to social scientists involved in the problem of attitude or opinion change. The tendency for soft moderates to reject fewer statements indicates less involvement in the issue, and therefore greater susceptibility to attitude change in the face of propaganda. However, hard moderates, by their rejection of a greater number of statements, indicate greater commitment to their position and less susceptibility to communications advocating opinion or attitude change. Further research is needed to determine the most effective means of bringing about attitude change in moderate subjects.

CHAPTER V

SUMMARY

The purpose of the present study was to describe trends in the selection of items for the construction of an attitude scale to be presented to the general public. Of major interest was the influence of the process of discrimination in the selection of these items or statements. The issue chosen was capital punishment and procedures of attitude assessment devised by Thurstone (1928), Sherif and Hovland (1952), and Sherif, Sherif and Nebergall (1965) were modified to assess attitudes of subjects toward the issue of capital punishment.

The subjects were 150 undergraduate students at a small liberal arts college. Subjects were to indicate their acceptable and objectionable positions in a 24 item Thurstone scale on the issue of capital punishment (Peterson, 1931) and then to select from these statements the eleven statements which would best assess attitudes of the American public on the issue of capital punishment.

The data from the present study supported the major hypothesis and indicated that subjects select a greater pro-

portion of statements from the latitude of acceptance than from the latitude of rejection ($p < .0005$) and from the latitude of noncommitment ($p < .0005$). The results of the present study also indicate that in selecting statements for an attitude scale, subjects will not select their most objectionable statement and will select their most acceptable statement. Of 150 subjects, 111 did not choose their most objectionable statement and 117 did choose their most acceptable statement for the eleven item scale.

The data for the present study supported the third hypothesis which predicted a constricted range of scale values of acceptable statements as a measure of discrimination. The mean scale value range of statements selected from the latitude of rejection was significantly greater than the mean scale value range of statements selected from the latitude of acceptance ($p < .0005$). The mean scale value range of statements selected from the latitude of noncommitment was also significantly greater than the mean scale value range of the latitude of acceptance ($p < .0005$).

Of additional interest in the present study was the verification of findings by Hart (1967) regarding moderate subjects. In the present study, moderates were classified on the basis of the mean scale value of the latitude of acceptance in relation to the most acceptable and most objectionable statements. Subjects were classified as soft

moderates if the mean scale value for the latitude of acceptance (in relation to the most acceptable position) extended toward the extreme end of the scale representing the side of the issue opposite their own stand. Subjects were classified as hard moderates if the mean scale value for the latitude of acceptance (in relation to the most acceptable position) extended away from the most objectionable position. Results indicated that hard moderates place a greater number of statements in the latitude of rejection than soft moderates ($p < .025$), and that soft moderates place a greater number of statements in the latitude of noncommitment than hard moderates ($p < .025$).

In summary, data from the present study support conclusions from earlier studies regarding the influence of judges' attitudes on the construction of attitude scales (Hovland & Sherif, 1952; Sherif & Hovland, 1953) and indicate that individuals are more discriminating about items that are acceptable than about items that are objectionable. The data also support findings reported by Hart (1967) in regard to the number of statements placed in the latitudes of rejection and noncommitment by persons taking soft and hard moderate stands on an issue.

REFERENCES

- Ager, J. W., & Dawes, R. M. The effect of judges' attitudes on judgment. Journal of Personality and Social Psychology, 1965, 1, 533-538.
- Allport, G. W. Attitudes. In C. Murchison (Ed.), Handbook of social psychology. Worcester, Mass.: Clark University Press, 1935.
- Bernard, L. L. Attitudes, social. In E. Seligman & A. Johnson (Eds.), Encyclopedia of the social sciences. New York: Macmillan, 1930, Pp. 305-306.
- Bogardus, E. S. Measuring social distances. Journal of Applied Sociology, 1924-1925, 9, 299-308.
- Bogardus, E. S. Fundamentals of social psychology. New York: Century, 1931.
- Bruner, J. On perceptual readiness. Psychological Review, 1957, 64, 123-152.
- Diab, L. N. Studies in social attitudes: I. Variations in latitudes of acceptance and rejection as a function of varying positions on a controversial issue. Journal of Social Psychology, 1965, 67, 283-295.
- Ferguson, L. W. The influence of individual attitudes on construction of an attitude scale. Journal of Social Psychology, 1935, 6, 115-117.
- Gibson, J. J., & Gibson, E. J. Perceptual learning; differentiation or enrichment? Psychological Review, 1955, 62, 32-41.
- Hart, J. P. Evaluative patterning of intralatitude categories in attitude assessment. Unpublished Master's Thesis, University of Oklahoma, 1967.
- Hinckley, E. E. The influence of individual opinion on construction of an attitude scale. Journal of Social Psychology, 1932, 3, 283-296.

- Hinckley, E. D. A follow-up study on the influence of individual opinion on the construction of an attitude scale. Journal of Abnormal and Social Psychology, 1963, 67, 290-292.
- Hovland, C. I., Harvey, O. J., & Sherif, M. Assimilation and contrast effects in reactions to communication and attitude change. Journal of Abnormal and Social Psychology, 1957, 55, 244-252.
- Hovland, C. I., & Sherif, M. Judgmental phenomena and scales of attitude measurement: Item displacement in Thurstone scales. Journal of Abnormal and Social Psychology, 1952, 47, 822-832.
- Kelley, H. H., Hovland, C. I., Schwartz, M., & Abelson, R. P., The influence of judges' attitudes in three methods of scaling. Journal of Social Psychology, 1955, 42, 147-158.
- La Fave, L., & Sherif, M. Reference scales and placement of items with the own categories technique. Journal of Social Psychology, 1968, 76, 75-82.
- Orne, M. T. On the social psychology of the psychological experiment with particular reference to demand characteristics and their implications. American Psychologist, 1962, 17, 776-783.
- Osgood, C. E., Suci, G. J., & Tannenbaum, P. H. The measurement of meaning. Urbana: University of Illinois Press, 1957.
- Peterson, R. C. Scale for the measurement of attitude toward capital punishment. Chicago: University Chicago Press, 1931. Cited in Peterson, R. C., & Thurstone, L. L. Motion pictures and the social attitudes of children. New York: Macmillan, 1933, 22-23.
- Peterson, R. C. & Thurstone, L. L. Motion pictures and the social attitudes of children, New York: Macmillan, 1933.
- Pintner, R. & Forlano, G. The influence of attitude upon scaling of attitude items. Journal of Social Psychology, 1937, 8, 39-45.
- Rokeach, M. The nature and meaning of dogmatism. Psychological Review, 1954, 61, 194-205.
- Rokeach, M. The open and closed mind. New York: Basic Books, 1960.

- Rosenthal, R. The effect of the experimenter on the results of psychological research. In B. A. Maher (Ed.), Progress in experimental personality research. New York: Academic Press, 1964, Pp. 79-114.
- Rosenthal, R., Persinger, G. W., Vikan-Kline, Linda L., and Fode, K. L. The effect of experimenter outcome-bias and subject set on awareness in verbal conditioning experiments. Journal of Verbal Learning and Verbal Behavior, 1963, 2, 275-283.
- Rosenthal, R., Kohn, P., Greenfield, Patricia M., & Carota, N. Data desirability, experimenter expectancy, and the results of psychological research. Journal of Personality and Social Psychology, 1966, 3, 20-27.
- Scott, W. A. Attitude measurement. In G. Lindzey & E. Aronson (Eds.), The handbook of social psychology. Vol. 2, (2nd ed.) Reading, Mass.: Addison-Wesley, 1968, Pp. 204-273.
- Sherif, C. W. Established reference scales and series effects in social judgment. (Doctoral Dissertation, University of Texas) Ann Arbor, Mich.: University Microfilms 1961.
- Sherif, C. W. Social categorization as a function of latitude of acceptance and series range. Journal of Abnormal and Social Psychology, 1963, 67, 148-156.
- Sherif, C. W., Sherif, M. & Nebergall, R. E. Attitude and attitude change. Philadelphia: Saunders, 1965.
- Sherif, M. & Hovland, C. I. Judgmental phenomena and scales of attitude measurement: placement of items with individual choice of number of categories. Journal of Abnormal and Social Psychology, 1953, 48, 135-141.
- Sherif, M. & Hovland, C. I. Social judgment. New Haven: Yale University Press, 1961.
- Sherif, M. & Sherif, C. W. An outline of social psychology. (Rev. ed.) New York: Harper and Row, 1956.
- Sherif, M. & Sherif, C. W. The own categories procedure in attitude research. In M. Fishbein (Ed.), Readings in attitude theory and measurement. New York: Wiley, 1967, Pp. 190-198.
- Sherif, M. & Sherif, C. W. Social psychology. (3rd ed.) New York: Harper and Row, 1969.
- Siegal, S. Nonparametric statistics for the behavioral sciences. New York: McGraw-Hill, 1956.

- Thurstone, L. L. Attitudes can be measured. American Journal of Sociology, 1928, 33, 529-554.
- Thurstone, L. L. Theory of attitude measurement. Psychological Review, 1929, 36, 222-241.
- Thurstone, L. L. The measurement of social attitudes. Journal of Abnormal and Social Psychology, 1931, 26, 249-269.
- Thurstone, L. L. & Chave, E. J. The measurement of attitude. Chicago: University of Chicago Press, 1929.
- Vaughan, K. R. A disguised instrument for the assessment of intergroup attitudes. Unpublished Master's Thesis, Kingsville, Texas, Texas College of Arts and Industries, 1961.
- Walker, H. M. & Lev, J. Statistical inference. New York: Holt, Rinehart and Winston, 1953.
- Whittaker, J. O. Report on research prepared especially for use in this volume. 1963. In C. W. Sherif, M. Sherif and R. E. Nebergall, Attitude and attitude change. Philadelphia: Saunders, 1965.
- White, B. J. & Harvey, O. J. Effects of personality and own stand on judgment and production of statements about a central issue. Journal of Experimental Social Psychology, 1965, 1, 334-347.
- York, C. M. Stability of Thurstone scale values after 35 years. Perceptual and Motor Skills, 1966, 23, 628.
- Young, K. Social attitudes. New York: Holt, 1931.

APPENDIX A

**Twenty-four Statements Used in Present Study
to Assess Attitudes Toward Capital Punishment**

Peterson (1931) scale for assessing attitudes toward capital punishment (Peterson & Thurstone, 1933, pp. 22-23).

Scale Stmt.

Value No.

Statement

- | | | |
|------|------|---|
| 7.2 | 1. | Capital punishment may be wrong but it is the best preventative to crime. |
| 0.0 | 2. | Capital punishment is absolutely never justified. |
| 6.2 | 3. | I think capital punishment is necessary but I wish it were not. |
| 10.4 | 4. | Any person, man or woman, young or old, who commits murder, should pay with his own life. |
| 2.4 | 5. | Capital punishment cannot be regarded as a sane method of dealing with crime. |
| 6.2 | 6. | Capital punishment is wrong but it is necessary in our imperfect civilization. |
| 11.0 | 7. | Every criminal should be executed. |
| 2.7 | 8. | Capital punishment has never been effective in preventing crime. |
| 5.4 | 9. | I don't believe in capital punishment but I'm not sure it isn't necessary. |
| 8.5 | 10. | We must have capital punishment for some crimes. |
| 3.9 | *11. | I think physical punishment would be more effective than capital punishment. |
| 0.0 | 12. | I do not believe in capital punishment under any circumstances. |
| 3.0 | 13. | Capital punishment is not necessary in modern civilization. |
| 1.5 | 14 | We can't call ourselves civilized as long as we have capital punishment. |
| 3.4 | 15. | Life imprisonment is more effective than capital punishment. |
| 0.9 | 16. | Execution of criminals is a disgrace to civilized society. |
| 9.6 | 17. | Capital punishment is just and necessary. |
| 5.8 | 18. | I do not believe in capital punishment but it is not practically advisable to abolish it. |
| 0.6 | 19. | Capital punishment is the most hideous practice of our time. |
| 9.4 | 20. | Capital punishment gives the criminal what he deserves. |
| 2.0 | 21. | The state cannot teach the sacredness of human life by destroying it. |

Scale Value	Stmt. No.	Statement
5.5	22.	It doesn't make any difference to me whether we have capital punishment or not.
7.9	23.	Capital punishment is justified only for pre-meditated murder.
9.1	24.	Capital punishment should be used more often than it is.

* Statement number 11 was worded by Peterson as follows:
I think the return of the whipping post would be more effective than capital punishment.

APPENDIX B

**Responses of Subjects, Latitudes of
Acceptance, Rejection and Noncommitment
and Eleven Statements**

APPENDIX B

Latitude of Acceptance

Columns 1,2,3:	Subject identification
Columns 5,6:	Most acceptable statement
Columns 8 -:	Statements designated as also acceptable

*Reference should be made to Appendix A
to convert statement number to scale
value or to identify a statement.

S MA Latitude of Acceptance

001 09 01 17 03 21 06 18 10
002 21 09 15 05 14
003 03 10 15 17 20 24
004 03 23 01 10 20
005 02 05 16 14 18 15 19 21
006 21 14 23 15 09 05 16
007 03 18 09 16 23 10 06 11
008 09 03 10 18 23 06
009 09 18 21 08 10 03
010 18 21 06 05 23 09 03
011 09 23 20 10 15 14 03 18
012 21 02 03 06 10 23
013 11 15 13 16 02 19 12 08 07 18 21
014 12 05 14 16 08 02 13 19 21 15
015 21 08 16 05 09 13 15 14
016 12 05 13 19 02 21 16 14
017 10 01 03 15 24 06
018 15 13 21
019 16 02 14 21 15 05 13 12 08 19
020 12 05 21 16 02 13 14 19
021 03 06 09 18
022 15 10 17 21
023 15 03 08 10
024 12 08 05 15 13 16 21 18 02
025 12 21 16 13 08 02 05

S MA Latitude of Acceptance

026 23 03 06 10 15 17 20
027 15 02 05 12 21 16 13
028 03 10 01 04 21
029 09 03 18 01 10 21
030 03 10 17
031 18 06 03 23 10 15 09
032 21 15 16 02 12
033 03 06 10 18
034 09 03 01 10 18 06
035 09 18 15 05 08 03 11 10 06
036 21 02 16 12 13
037 03 06 23 10 18 09
038 09 21 06 05 23 10 03 18
039 08 05 16 14 21 13 12 02
040 12 02 13 15
041 10 03 17
042 15 20 03 11 23 10
043 09 10 03 18 15
044 03 18 17 06 24 10
045 15 21 05 12 08 11 14 13
046 21 05 08 16 13
047 21 13 12 02 16 15 08
048 03 10 24
049 21 05 08 16 14 15 12 02
050 05 02 16 13 12 08

S MA Latitude of Acceptance

051 12 15 08 02 13 14 05 16 21
052 08 02 12
053 05 13 02 21 16
054 14 21 16 23 03 18 20 09
055 03 15 01 06 10 23 24 17 20 04
056 10 01 03 06 17 23
057 06 03 10 15 20 23 24 17 01
058 09 10 15 18 23
059 15 08 06 03 01 10 13 18 23
060 21 02 05 08 12 13 14 16 19
061 10 20 24 17 03
062 03 20 17 10 24
063 03 06 14 17 23 10
064 06 10 01 03 24 23 17
065 12 02 14 05 15 19 21 13 16 08
066 21 13 12
067 15 21 01
068 12 08 02 21
069 01 09 18
070 03 06 08 09 10 18 21 23
071 15 11 21
072 10 20 24 17 04 03 01 06
073 03 10 23 24 17
074 13 05 11 15
075 18 23 17 15 10 09 03 22

S MA Latitude of Acceptance

076 15 08 09 21 18 12 11
077 11 03 08 10 17 23 24
078 03 10 20 23 24 17
079 15 13 18 22 23 08
080 10 09 18 03
081 09 15 13 10 05 06 08 18 14 03 21
082 15 16 13 05 19 21 14
083 06 20 10 03 15
084 05 13 14 16 19 21 02 12 15
085 18 15 23 11 10 03 06
086 15 13 12 02
087 06 03 18 10 23 01
088 08 15 13 09 21
089 03 10 23 09 06
090 09 08 18 23
091 06 01 03 09 10 17 18 23 24
092 15 21 23 18 11 09 06 01
093 15 10 18 09 11
094 12 16 14 05 15 09
095 12 16 14 21 19 13 05 08 15 09
096 10 17 03 23 24 20
097 13 08 21 05 14 19 16 12 02 15
098 15 13 09 03 08 23
099 21 05 13 08 16 14 12 02 19
100 09 03 06 18 21

S MA Latitude of Acceptance

101 09 15 21 13
102 15 13 08 05 21 14 16
103 21 15 13 08 14
104 21 18 09 15 05
105 12 13 21 16
106 12 15 13 08 05 21 14 16 02
107 15 09 13 08 05 21
108 12 15 13 08 21 14 02
109 10 17 24 06
110 09 10 23 18 08 05 21
111 02 21 14 16 19 12
112 03 23 06 01 18
113 02 16 21 14 08 05 15 13
114 09 23 18 03
115 05 16 21 15
116 02 12
117 12 15 05 02 13 19 21 16 14
118 09 18 01 20 03 23 17 06 10
119 03 23 09 06 12 14 15
120 21 02 19 05 13 15 16 08 12 14
121 03 10 01 23 18
122 22 10 03 06
123 03 01 16 10 04 17 24 20 07
124 18 09 05 21 08
125 18 09 05 08 21

S MA Latitude of Acceptance

126 02 13 15 21 16 12 19
127 12 09 08 21
128 10 03 18 22 08 06 09
129 15 10 22 08 18
130 15 21 14
131 08 15 14 21 05 13
132 08 23 18 22 15 09 13 21
133 10 03 01 24 17
134 09 01 06 18
135 21 13 05 15
136 03 10 23 06
137 03 20 21 24 01
138 24 17 10 23 03
139 03 10 06 18
140 24 03 10 17 20 06
141 02 12 21 05 16 08 14 13 19
142 10 01
143 17 04 24
144 12 02 05 21 08 15 13
145 12 02 05 21 13 08
146 12 08 13
147 14 21 15 09 11 05 16
148 15 21 19
149 08 15 13 02 19 21 14 05 16
150 12 02 21 05 13

APPENDIX B

Latitude of Rejection

Columns 1,2,3:	Subject identification
Columns 5,6:	Most objectionable statement
Columns 8 -:	Statements designated as also objectionable

S MO Latitude of Rejection

001 07 04 20 11 02 22 24 08 12 19 05
002 20 17 22 10 03 06 08 04 24 07 23
003 19 02 04 05 07 12 13 14 16 21 23
004 07 02 16 13 14 21 19 11 15 12 04 24 05 08
005 20 23 10 11 01 04 24 07 17
006 04 06 01 03 17 20 07 24
007 07 05 13 08 19 02 15 24
008 07 13 12 11 04 02 24
009 20 12 22 24 11 17 15 01 02 19 07 04
010 07 17 04 20 08 01 24 22
011 04 19 05 02 13 17 12 07 24 11 06 22 01
012 07 04 09 13 16 17 20 22
013 20 17 24 10 06 03 23 04 05 01
014 04 22 24 17 01 06 07 20 10 23 03 18
015 07 17 04 12 03 19 06 01 10 24
016 07 01 04 17 03 09 06 23 10 24 20 18
017 07 05 16 17 14 11 20 04 13 19 12 02 23
018 04 01 02 03 06 07 08 09 10 11 12 14 16 17 18 20 22 23 24
019 07 20 01 11 23 24 17 04 10
020 17 10 20 07 24 01 06 04
021 07 20 02 05 19 11 22 14 16 04
022 11 02 04 05 07 09 12 13 19 23 24
023 04 13 16 11 05 09 01 12 02 20 24 17 18 22 14 07
024 07 20 22 04 11 01 24 17 06 03
025 07 14 18 03 01 23 24 04 20 10 17 22 06 15

S MO Latitude of Rejection

026 07 02 04 05 11 12 13 14 16 19 21 22 24
027 07 24 17 19 04 22 20 11 08 23 10 01
028 24 02 08 23 22 18 14 13 09 06 11 05 12 16
029 04 17 24 12 19 02 22 07 16 05 13 08 06 14
030 16 05 08 23 02 12 15 07 04
031 07 14 24 16 05 11 20 19 13 12 02 01 04
032 07 18 11 19 10 04 20 24
033 07 19 11 08 12 20 24 16 02 22 04 13 14 01 09
034 07 13 02 05 12 22 14 04 19
035 07 04 01 24 20 13 16 19 02 17
036 07 09 18 06 22 01 03 04 23 10 20 05 24 11 17 14 19
037 02 19 12 07 04
038 04 17 20 08 16 14 11 13 07 24 15 12
039 07 06 09 10 17 24 22 18 11 03 04 01 20
040 17 07 04 06 11 23 24 19 18 09 01 22 03 10 20
041 07 15 05 21 12 19 02 11 24 08 13
042 07 05 14 16 13 08 06 18 02 12 17 19 24 22 01
043 07 24 08 19 01 02 22 04 20 17
044 02 19 05 14 08 13 04 15 11 16 07 12
045 07 04 24 20 10 03 01 23 17 19
046 07 15 10 04 17 22 11 24 20 19
047 07 09 04 03 22 24 11 20 01 10 17 06 18 23
048 07 13 09 05 16 08 06 18 17 22 15 19 14 12 02 04 01 20 11
049 07 18 04 20 10 23 06 17 11 24 19 01
050 07 06 20 11 24 04 17 10 03 01 22 19 18 09 23

S MO Latitude of Rejection

051 07 24 04 06 11 01 20 09 22 03 18 23 10 17
052 01 15 18 23 09 03 20 24 04 11 10 17 07
053 20 24 17 06 01 03 07 04 15 22
054 07 22 17 04 06 15 11 12 19 24 02 13 10 01 05 08
055 21 14 16 12 19 02 05 08 13 09 22 11 07 18
056 02 04 07 08 12 21 13 19 22 09
057 02 05 08 11 12 13 14 16 18 19 04 07
058 07 02 05 08 11 14 16 17 19 20 24 04 01
059 07 02 04 11 14 16 20 21 24
060 07 03 06 09 10 11 17 22 23 24
061 07 23 21 19 16 14 13 12 11 08 05 04 22 02
062 07 04 23 22 21 19 18 16 15 14 13 12 11 09 08 06 05 01 02
063 12 02 07 13 16 19 21 24
064 07 05 04 15 19 13 22 18 16 14 12 11 09 08 02
065 04 06 11 17 24 10 23 20 01 07
066 07 23 22 19 18 17 10 08 20 01 04 06 24
067 07 23 04 08 11 17 20 24
068 07 06 20 23 24 15 17 04 10 11 03 22 01 09 18
069 04 21 11 03 05 06 10 12 13 14 15 16 19 20 22 23 24 02 08
17 07
070 07 01 02 05 11 12 13 14 15 20 24 04
071 07 24 22 20 17 04 06 01
072 02 12 13 14 16 07 08 11 18 19 21 23
073 07 02 04 05 09 11 12 14 15 22 21 19 16 13
074 07 01 02 04 06 17 20 23 24 22 18
075 07 04 24 11 01 02 12 13 14 16 21 05

S MO Latitude of Rejection

076 07 22 01 03 05 06 04 20 17
077 15 21 22 16 18 19 14 13 12 09 07 06 05 04 02 01 20
078 07 02 05 06 08 09 11 12 13 14 16 18 19 21 22 01 04
079 04 01 24 17 16 03 14 20 06 07 10 05
080 07 19 15 24 14 23 22 20 16 11 02 08 12 05 04
081 07 16 19 20 22 24 23 01 11 02 12 17 04
082 07 17 10 24 06 03 18 20 22 01 08 09 04
083 07 08 11 12 13 14 21 22 23 24 01 04 02
084 07 20 04 11 17 24 03 10 23 22 09 06 18
085 07 02 04 05 12 14 16 19 22 24 13 20 17
086 07 04 24 20 22 17 11 06 10 23 01 03
087 07 20 19 17 16 14 12 11 02 04 22 13 24
088 04 01 03 06 18 10 16 17 20 23 24 07 11 22
089 04 01 02 05 07 08 11 12 13 14 16 18 20 21 22 24 19
090 07 01 02 04 12 17 19 20 22 24
091 07 02 04 05 08 11 12 13 14 15 16 19 20 21 22
092 20 07 12 13 24 17 04 05 19
093 07 05 14 16 02 08 12 22 24 04 20 17
094 07 17 20 24 23 01 22 11
095 07 17 04 20 24 06 01 03 10
096 07 18 11 15 08 06 13 09 21 05 02 12 14 16 19 22 04
097 07 17 04 10 20 24 01 23 06 03 22 18 09 11
098 07 14 19 16 24 04
099 07 04 20 17 10 23 24 18 03 22 11
100 07 04 17 20 24 19 12 02

S MO Latitude of Rejection

101 20 10 23 01 03 06 18
102 07 04 17 20 24 10 23 01 06 03 18 22 09 11 19 12 02
103 07 04 17 24 20 06 01 03
104 07 10 04 12 06 03
105 07 24 17 20 04
106 07 24 17 20 04 01 23 10 11 03
107 07 11 01 17 24 20 04
108 07 17 20 04
109 07 15 11 04 08 13 05 21 16 14 12 19 02
110 07 17 24 20 04
111 07 17 24 04
112 15 17 20 04 24 07 21 16 12 19 08 05
113 07 06 18 03 11 10 23 01 20 17 24 04
114 07 02 19 12 14 16 08 21 01 11 20 17 24 04
115 07 20 04
116 07 18 04 01 03 17 10 24 20 23 06
117 07 23 24 10 20 04 01 18 22 03 09 06 11
118 14 07 11 24 15 04 05 08 13 02 12 16 19
119 07 08 01 04 24
120 17 07 20 24 04 01 10 23 18 22 06 09 03 11
121 07 02 16 12 19 04
122 07 02 19 12 05 16 01 11 04 20
123 02 12 16 19 14 21 08 05 13 15 11 22 09 18 23
124 07 04 17
125 07 17 04 24 20 01 10

S MO Latitude of Rejection

126 07 04 17 20 24 10 23 01
127 07 20 23 04
128 07 17 20 23 24 04 01 11 13 15 21 05 16 14 12 19 02
129 07 02 19 12 16 14 01 20 24 17 04
130 07 24 20 17 04
131 07 17 24 20 04 23 10 01 06 18 22 03 11 19 02 12 16
132 07 19 03 11 10 24 17 20 04
133 07 11 15 08 05 14 16 19 12 02
134 07 17 05 11 24
135 07 06 24 17 20 04
136 07 02 12 19 16 14 11 04
137 07 02 12 19 11 22 04
138 02 12 14
139 07 24 22 11 15
140 21 16 14 13 04 07 12 08 19 15 11 05 02
141 07 03 09 18 01 23 10 06 20 24 22 04 17
142 07 04 24 17 11 08 05 16 19
143 07 14 12 19
144 07 17 20 04 24 01 10
145 07 04 17 24 20 10 06 01
146 20 04 17 24 10 01 07
147 17 01 24 04 06
148 07 17 04 24 20 10 01 23 06 22 03 18 11 09
149 07 11 18 22 09 03 01 06 23 10 17 24 20 04
150 07 11 22 18 23 01 06 10 24 04 17

APPENDIX B

Latitude of Noncommitment

Columns 1,2,3:	Subject identification
Columns 5 -:	Statements not designated as acceptable or objectionable

S Latitude of Noncommitment

001 15 14 13 16 23
002 13 16 11 02 01 12 18 19
003 01 06 08 09 11 18 22
004 18 06 22 09 17
005 08 03 22 06 13 12 09
006 13 11 08 02 12 22 18 10 19
007 12 17 04 01 22 14 21 20
008 01 05 08 14 15 16 17 19 20 21 22
009 23 13 06 14 16 05
010 02 19 12 16 13 11 10 15 14
011 16 21 08
012 01 05 08 11 12 14 15 18 19 24
013 14 09 22
014 09 11
015 02 20 11 18 22 23
016 22 11 15 08
017 22 21 08 09 18
018 05 19
019 06 22 09 03 18
020 11 08 15 23 22 18 09 03
021 12 21 15 13 08 23 10 24 17 01
022 01 03 06 08 14 16 18 20 22
023 06 19 21 23
024 10 14 09 23 19
025 09 19 11

S Latitude of Noncommitment

026 01 08 09 18
027 06 03 14 18 09
028 15 17 07 20 19
029 23 20 15 11
030 20 14 13 24 21 22 06 18 11 19 01 09
031 21 22 08 17
032 17 01 09 03 14 08 06 22 05 13 23
033 23 17 21 05 15
034 21 08 11 20 17 24 23 16 15
035 14 12 21 22 23
036 08 15
037 14 16 05 22 08 13 11 15 21 01 20 24 17
038 22 02 01 19
039 15 23 19
040 21 14 16 05 08
041 09 14 22 16 18 06 01 23 20 04
042 04 09 21
043 23 14 12 21 11 16 06 05 13
044 22 09 01 21 23 20
045 22 09 02 16 06 18
046 03 23 01 09 18 14 06 02 12
047 14 05 19
048 21 23
049 13 22 09 03
050 15 14 21

S Latitude of Noncommitment

051 19

052 05 21 19 14 06 22 13 16

053 19 14 12 11 09 18 10 23 08

054

055

056 11 15 20 18 05 14 16 24

057 09 22 21

058 22 21 13 06 03 12

059 22 19 17 12 09 05

060 01 04 15 18 20

061 18 01 15 09 06

062

063 01 04 05 08 09 11 18 20 22 15

064 20 21

065 03 09 22 18

066 15 14 11 09 05 03 02 16

067 03 22 06 10 16 14 13 18 19 09 05 02 12

068 16 19 05 14 13

069

070 22 19 17 16

071 02 03 05 08 09 10 12 13 14 16 18 19 23

072 22 09 05 15

073 20 18 08 06 01

074 03 08 09 10 12 14 16 19 21

075 06 08 19 20

S Latitude of Noncommitment

076 24 19 14 10 02 23 13 16

077

078 15

079 12 02 21 19 11 09

080 01 13 06 21 17

081

082 11 12 02 23

083 05 16 17 19 09 18

084 08 01

085 01 08 21 09

086 18 19 21 16 14 08 05 09

087 09 15 05 08 21

088 19 12 14 05 02

089 17 15

090 03 05 06 10 11 13 14 15 16 21

091

092 02 03 08 10 14 16 22

093 23 21 19 06 03 01 13

094 04 10 06 03 18 13 08 21 19 02

095 02 18 22 23 11

096 01

097

098 21 12 02 05 11 18 22 01 06 10 17 20

099 15 09 01 06

100 01 05 13 10 15 08 16 11 22 14 23

S Latitude of Noncommitment

101 08 11 04 16 14 07 17 02 12 05 19 22 24
102
103 05 10 12 16 09 22 23 11 19 02 18
104 08 13 11 17 02 16 14 20 01 23 19 22 24
105 23 15 11 19 10 14 09 22 08 06 05 18 02 03 01
106 09 18 19 22 06
107 02 06 12 16 19 03 14 10 18 22 23
108 16 19 22 03 10 18 01 24 06 11 05 09 23
109 01 09 20 23 18 22 03
110 03 06 11 22 19 16 02 12 14 15 01 13
111 01 05 10 15 06 11 03 20 09 18 13 08 22 23
112 09 14 11 22 10 13 02
113 09 12 22 19
114 06 10 13 05 15 22
115 24 19 10 12 22 14 17 11 23 13 18 08 01 09 02 06 03
116 05 09 16 19 14 21 08 15 11 13 22
117 08 17
118 22 21
119 02 10 13 17 05 22 20 11 21 16 19 18
120
121 14 08 21 11 05 15 13 09 22 06 24 17 20
122 09 23 24 08 18 13 14 21 15 17
123
124 14 02 16 19 12 11 13 15 22 24 06 20 23 01 03 10
125 03 16 22 06 23 14 13 19 02 15 11 12

S Latitude of Noncommitment

126 14 09 11 05 18 03 08 06 22

127 02 14 19 16 13 11 15 22 18 03 01 06 10 24 17 05

128

129 21 05 13 11 09 23 03 06

130 02 12 19 16 13 11 08 09 05 03 23 06 22 10 01 18

131 09

132 01 05 16 06 14 02 12

133 21 13 09 22 18 06 23 20 04

134 20 10 13 23 15 03 08 22 14 04 02 19 12 16 21

135 14 02 16 19 12 08 09 11 22 18 03 10 23 01

136 05 13 18 21 22 08 09 15 01 24 17 20

137 16 13 14 18 05 09 08 06 23 10 17 15

138 19 16 21 05 08 13 15 11 09 22 18 06 01 20 04 07

139 13 21 08 16 05 19 14 12 02 09 01 20 23 17 04

140 23 18 01 09 22

141 11 15

142 02 14 21 15 12 09 13 22 18 03 23 06 20

143 21 08 05 15 13 11 09 22 18 06 03 01 23 10 20 02 16

144 19 09 16 11 14 18 22 03 23 06

145 19 15 16 11 14 09 03 22 18 23

146 19 14 05 02 15 16 21 11 09 18 22 03 23 06

147 07 02 08 03 20 22 13 23 10 12 19 18

148 13 16 14 05 08 02 12

149

150 09 15 08 19 14 16 03 20

APPENDIX B

**Eleven Statements
Selected as Representative of American Public Opinion**

Columns 1,2,3:	Subject identification
Columns 5 -:	Statements selected to assess attitudes of the general public

S Eleven Statements

001 17 07 20 04 10 23 22 09 14 12 02
002 17 04 07 24 10 01 23 15 19 12 02
003 20 04 10 03 15 22 05 21 12 16 19
004 20 24 01 10 22 13 14 15 11 12 19
005 07 20 17 22 03 09 23 18 15 13 02
006 07 06 24 22 15 11 16 14 05 19 21
007 07 20 04 23 01 06 15 11 08 12 19
008 17 03 06 10 23 22 13 12 05 19 02
009 17 24 10 03 09 22 18 23 12 05 02
010 01 10 17 06 18 16 23 15 14 21 05
011 17 10 03 23 22 01 15 06 09 02 12
012 17 04 20 24 23 10 03 01 06 18 21
013 04 24 17 07 05 20 14 08 12 15 11
014 07 24 10 06 03 22 14 05 15 02 12
015 17 20 04 06 23 08 19 11 15 13 21
016 04 24 20 10 03 18 06 05 15 16 02
017 24 17 23 10 06 22 09 15 21 13 02
018 01 03 06 09 10 18 22 23 02 15 14
019 20 04 01 23 17 16 14 21 15 13 08
020 24 20 01 09 18 03 14 16 21 15 08
021 04 17 10 01 03 22 15 14 21 19 12
022 24 20 17 22 15 11 19 21 14 12 02
023 17 04 01 06 09 15 02 12 08 13 22
024 20 24 01 06 18 23 15 22 21 05 12
025 07 17 10 23 18 03 22 09 15 08 12

S Eleven Statements

026 07 04 06 23 22 15 16 21 14 19 12
027 20 17 10 01 18 22 23 15 16 14 19
028 07 17 04 03 10 24 21 12 22 23 18
029 04 17 20 10 03 22 01 09 18 21 12
030 03 10 01 20 08 14 06 18 11 09 15
031 17 10 23 18 06 12 14 21 08 05 16
032 17 20 23 10 01 06 09 08 15 21 12
033 24 17 10 23 09 22 13 14 05 21 19
034 17 07 20 15 11 22 09 21 12 05 02
035 07 17 04 20 10 18 13 19 16 12 02
036 20 10 23 04 03 01 22 06 18 09 21
037 20 10 06 23 03 18 09 08 15 21 14
038 07 04 20 10 03 23 13 05 08 12 15
039 17 20 06 01 18 10 03 09 15 08 16
040 17 10 03 01 20 22 09 15 19 16 02
041 17 10 03 06 22 15 16 14 21 12 02
042 17 20 15 03 23 22 09 21 14 12 02
043 20 22 03 18 09 15 05 08 21 02 12
044 04 07 20 24 06 22 11 08 13 05 14
045 04 24 20 10 01 22 15 11 21 16 19
046 17 20 10 01 18 16 13 03 23 02 21
047 04 24 10 23 01 11 15 08 14 21 02
048 19 16 02 21 15 11 10 01 17 20 07
049 07 17 10 23 01 03 18 09 12 21 19
050 24 10 01 23 22 09 18 08 05 12 02

S Eleven Statements

051 12 02 13 22 18 06 23 17 10 04 24
052 17 24 10 01 03 22 09 08 23 12 02
053 07 20 23 10 22 11 15 21 08 05 12
054 17 20 10 01 03 22 06 16 12 21 19
055 23 10 01 03 22 09 18 15 08 13 14
056 07 17 20 10 01 03 18 19 13 12 02
057 17 07 04 06 01 10 15 22 14 02 12
058 07 20 10 23 03 22 18 09 15 13 19
059 06 17 03 07 01 10 19 13 02 08 15
060 02 05 12 13 21 22 06 18 01 04 17
061 10 23 03 09 01 06 18 22 13 05 02
062 17 10 23 03 22 18 06 01 09 15 08
063 01 18 10 23 09 15 13 14 16 21 05
064 01 04 05 24 17 06 21 16 13 19 02
065 17 04 24 10 11 22 15 05 14 02 12
066 20 23 01 18 10 03 15 12 21 14 08
067 01 10 04 17 20 22 21 14 02 12 19
068 17 04 10 11 03 22 01 09 18 14 12
069 17 20 01 06 22 11 15 14 21 19 02
070 17 20 03 18 22 10 23 08 14 21 12
071 17 01 10 23 03 22 09 15 08 14 12
072 20 17 24 10 06 23 08 13 15 21 02
073 20 23 03 01 10 16 15 21 19 06 18
074 20 24 18 01 22 03 09 10 13 15 16
075 07 04 10 23 01 22 16 08 13 19 02

S Eleven Statements

076 20 17 24 10 23 22 18 01 08 13 12
077 17 07 20 04 11 02 05 12 16 19 21
078 20 24 03 23 10 22 08 15 18 12 02
079 07 04 17 23 10 15 22 18 09 12 02
080 17 01 10 18 03 09 23 21 13 12 02
081 17 20 10 01 22 18 03 15 21 14 12
082 20 10 01 06 22 11 12 15 16 21 19
083 20 04 07 01 22 06 15 13 12 19 02
084 07 04 10 03 06 22 18 15 05 12 19
085 20 24 17 10 18 22 15 21 14 08 02
086 04 20 10 17 22 06 08 15 21 12 16
087 07 20 10 06 23 22 09 18 15 14 12
088 04 02 16 18 15 22 03 18 08 14 21
089 20 24 10 23 06 09 22 03 15 14 12
090 04 10 01 06 13 16 05 21 14 08 02
091 17 24 10 23 22 01 06 18 15 12 02
092 17 04 20 10 22 11 05 21 12 19 02
093 17 04 01 08 22 15 11 21 16 12 05
094 20 04 10 01 06 03 09 15 05 12 02
095 23 10 06 09 08 15 13 14 16 12 02
096 17 10 23 18 22 13 21 08 14 16 02
097 04 20 24 06 01 09 13 15 08 21 12
098 17 24 20 23 10 06 01 03 18 09 22
099 17 23 10 03 01 06 09 18 22 15 21
100 01 06 22 18 09 03 15 13 05 08 21

S Eleven Statements

101 20 10 01 23 03 06 18 09 15 13 21
102 06 18 03 09 22 15 08 05 14 21 16
103 20 10 23 03 09 18 13 15 21 14 12
104 07 04 06 03 10 18 09 15 05 21 12
105 17 20 10 01 23 18 06 22 03 09 15
106 17 10 23 06 03 15 13 05 08 21 14
107 20 10 01 03 18 09 05 13 15 08 21
108 18 09 13 08 15 21 05 14 19 12 02
109 17 10 23 01 18 06 22 03 09 15 08
110 17 20 24 23 10 01 07 18 09 13 08
111 04 20 10 03 22 09 18 06 01 14 02
112 23 06 01 03 18 08 15 05 21 16 12
113 24 10 23 01 06 18 03 09 22 13 08
114 20 10 23 03 18 09 15 08 05 13 19
115 07 20 04 03 18 09 15 13 21 05 16
116 04 17 24 20 23 06 01 10 03 18 09
117 23 03 06 09 22 15 13 05 21 14 16
118 23 01 06 03 18 22 09 15 13 08 21
119 17 23 01 06 03 09 15 21 14 16 12
120 20 24 10 23 01 03 18 22 15 13 08
121 20 10 01 23 03 18 09 14 15 16 21
122 24 23 10 06 01 09 18 03 22 11 15
123 04 10 01 23 03 15 13 05 08 21 14
124 17 20 23 24 10 03 01 06 09 22 18
125 20 23 10 18 06 22 03 09 08 05 14

S Eleven Statements

126 04 20 01 03 06 22 09 15 13 05 12
127 04 20 10 06 01 03 23 18 22 09 15
128 20 10 01 03 09 18 15 08 21 14 12
129 24 10 23 03 01 06 22 18 09 15 08
130 20 23 10 03 06 18 22 09 15 21 05
131 10 23 01 06 18 09 03 15 13 05 08
132 23 10 03 06 18 22 09 13 15 08 05
133 04 20 10 23 01 06 03 18 22 09 15
134 10 23 06 01 03 18 09 13 15 08 14
135 20 10 23 06 03 18 09 15 13 11 08
136 10 23 06 01 03 18 08 05 14 16 19
137 24 06 01 03 18 09 15 13 05 21 14
138 24 17 20 10 23 03 11 15 14 02 12
139 04 20 10 01 06 03 18 08 21 14 12
140 20 24 17 03 23 22 11 15 12 02 19
141 07 04 17 20 23 22 05 08 21 12 02
142 01 10 24 06 23 03 20 18 09 15 21
143 17 10 20 23 06 03 15 08 21 16 02
144 04 10 23 03 18 22 09 15 08 21 14
145 17 10 23 06 18 09 13 21 14 16 12
146 23 10 01 06 03 18 09 13 08 15 05
147 04 07 06 12 08 05 15 11 14 16 21
148 17 01 23 03 18 09 15 19 05 21 02
149 17 10 03 22 09 18 15 14 21 02 12
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