

A STUDY OF ATTITUDES OF JUNIOR HIGH SCHOOL STUDENTS
AND OF ADULT MEN AND WOMEN OF A SMALL
CITY TOWARD SOCIALLY
UNDESIRABLE
CONDUCT

A THESIS
SUBMITTED TO THE DEPARTMENT OF
PSYCHOLOGY AND THE GRADUATE COUNCIL OF THE KANSAS
STATE TEACHERS COLLEGE OF EMPORIA IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF SCIENCE

By
PRESLEY E. COWAN
March, 1935

RELIGIOUS LIBRARY
K. S. T. C.
EMPORIA KANSAS

Approved for the Major Department

[Handwritten Signature]

Approved for the Graduate Council

[Handwritten Signature]

LIST OF TABLES

Table	Page
I. Total Number of Times Each of the Twenty-Five Statements was Preferred Over Every Other Statement, The Rank, and the Percentage of Preference by the Rotary Club Consisting of Eighteen Members	31
II. Total Number of Times Each of the Twenty-Five Statements was Preferred Over Every Other Statement, The Rank, and the Percentage of Preference by the Lions Club Consisting of Seventeen Members	34
III. Total Number of Times Each of The Twenty-Five Statements was Preferred Over Every Other Statement, The Rank, and the Percentage of Preference by the Adults Selected at Random	35
IV. Total Number of Times Each of the Twenty-Five Statements was Preferred Over Every Other Statement, The Rank, and the Percentage of Preference by the Combined Adult Groups Consisting of 100 Persons	36
V. Total Number of Times Each of the Twenty-Five Statements was Preferred Over Every Other Statement, The Rank, and the Percentage of Preference by the 122 Junior High Students	37
VI. Per Cent of Preference Comparisons Between the Various Groups Consisting of the 18 Members of the Rotary Club, the 17 Members of the Lions Club, the 65 Other Adults, the 100 Adults in the Combined Adult Group Which Is a Combination of the Three Preceding Groups, and the 122 Junior High Students	40
VII. A Comparison of the Ranking Given Each of the 25 Statements by the Various Groups Consisting of the 18 Members of the Rotary Club, the 17 Members of the Lions Club, the 65 Other Adults, the 100 Adults in the Combined Adult Group Which Is a Combination of the Three Preceding Groups, and the 122 Junior High Students	41
VIII. Comparisons of All Possible Coefficients of Correlation Between Total Preference Scores of Each of the Following: Rotary Club, Lions Club, Sixty-Five Adults Selected at Random, the Combined Adult Groups, and the Junior High Students	52

LIST OF FIGURES

Figure	Page
I. A Scale showing the percentage of preference by the Rotary Club of the 25 statements	43
II. A Scale showing the percentage of preference by the Lions Club of the 25 statements	44
III. A Scale showing the percentage of preference by the Sixty-Five Adults Selected at Random of the 25 statements	45
IV. A Scale showing the percentage of preference by the Combined Adult Groups of the 25 statements	46
V. A Scale showing the percentage of preference by the Junior High Students of the 25 statements	47
VI. A Scale showing a comparison of the percentage of preference between the 100 Combined Adult scores and those of the 122 Junior High Students	49
VII. A Graph showing a comparison between the Combined Adult Groups and the Junior High Students in per cents of preference	50

INTRODUCTION

Purpose: The purpose of this study is to determine the degree of seriousness with which junior high school students and adult citizens hold certain forms of socially undesirable conduct, and to compare the two groups with respect to each type of conduct. Stated more specifically, the purpose or aim of this investigation is to throw some light upon the following questions: Do the children of junior high have the same attitude toward honesty as the adults in the same community, or should one expect a difference, and if so, where does the difference lie? What is the extent of such difference? Can attitudes such as those toward honesty be measured or compared? If so, how would a person go about it? Is it possible to construct a scale which will show the relative seriousness with which various types of socially undesirable forms of conduct are held?

It is frequently stated that the younger generation is deficient, that it is "going to the dogs," or that its whole make-up has changed; that young people of today lack the proper perspective toward social problems. It may be that the adults have changed their attitudes as they have grown older. Thus one of the aims of this study is to compare the attitudes of junior high school students with those of adults of the same community regarding certain forms of socially undesirable conduct. The other major aim is to construct a scale of values for these forms of behavior.

Historical Introduction: The need for accurate measurement in the field of personality is just as necessary as it is recog-

nized to be in the field of intelligence. Within the last fifteen or twenty years progress has been made in devising tests. One important difference between intelligence tests and personality tests is that the trend has been toward a general intelligence test, while measurement in personality has been along specific lines. Furthermore, tests designed to measure intelligence have been much more successful than were the earlier tests which were designed to measure specific functions such as memory, attention, reasoning, and the like. This is probably accounted for by what now seems to be a fact, namely, that intelligence is unitary in character or at least that the abilities of which it is composed are more highly correlated. This, however, is not the case with personality. The various factors of which it is composed are not highly correlated. For example, honesty is not necessarily associated with a pleasing disposition. Morality is not always associated with emotional stability. As a matter of fact, personality, which may be defined as the sum-total of behavior tendencies, is highly complex.

A person may rank very high in certain phases of his personality and at the same time rank very low or mediocre in others. A concept of general personality is virtually meaningless; consequently testing in the field of personality has been directed more especially along specific lines. For example, we now have a number of tests designed to measure the following aspects of personality, namely, attitudes, emotional stability, temperament, nervous instability, beliefs, moral judgments, conduct, and the like.

In order to accomplish these ends several testing techniques have been designed such as (1) The Questionnaire Method, (2) The Ranking Method, (3) The Case Method, (4) The Rating Method, (5) The Method of Equal Appearing Intervals, and (6) The Method of Paired Comparison. Since the present study is devoted to the subject of attitudes, a brief description of the tests in this field will follow, but before going directly into the discussion of attitude measurement some qualification or definition of the term "attitude" is indicative.

Symonds¹ has mentioned several common meanings of the term: (1) Great organic drives, purposes, motives; (2) Muscular adjustment; (3) Generalized conduct; (4) Neural set or readiness to adjust; (5) Emotional responses; (6) Feelings; and (7) Verbal accepting or rejecting responses. In (4) Symonds agrees with Thomas and Zaniecki², Park and Burgess³, Faris⁴, Bogardus⁵, House⁶, and

-
1. P. M. Symonds. The Nature of Conduct. Macmillan, 1928. pp. 216-239; and "What is Attitude?" Psychol. Bull., 1927, vol. 24, pp. 200-201.
 2. W. I. Thomas and F. Zaniecki. The Polish Peasant in America. Boston: Badger, 1918, vol. I, Methodological Note, pp. 1-86, and Introduction to vol. III, pp. 5-88.
 3. R. E. Park and E. W. Burgess. Introduction to the Science of Sociology. Chicago: Univ. of Chi. Press, 1924. Ch. VIII, "Social Forces," especially pp. 438-443.
 4. E. Faris. "Attitudes and Behavior." Amer. J. of Sociol., 1928, vol. 34, pp. 271-281; and "The Concept of Social Attitudes." J. of Ap. Sociol., 1925, vol. 9, pp. 404-409.
 5. E. S. Bogardus. Fundamentals of Social Psychology. Century Co., 1924, Ch. V.
 6. F. N. House. "Wishes and Attitudes as Social Forces." Amer. J. of Sociol., vol. 31, pp. 512-525.

Lundberg⁷ that attitude is a neural set of readiness to adjust. Perhaps this is the most prevalent use of the term, although Bernard⁸ refers to it as the preparatory movement or partial adjustment idea; Bain⁹ refers to attitude as the relatively stable overt status-getting response; and Markey¹⁰ criticizes all the above-named definitions with his conclusion that attitudes are behavior integrations associated with signs and symbols of probable behavior. After wading through this maize of definitions the writer is inclined to accept a more simplified, yet similar, definition of the term which has been suggested by Bain¹¹ in a later article where he defines attitudes as socially conditioned patterns of motivation. He claims that a conditioned action pattern is as much a drive, and is as dynamic a motivation as a raw instinct.¹²

There are two possible approaches to the study of attitudes. One is subjective, whereby a person is asked how he feels about the topic in question; while the other is objective, e.g., his

-
7. G. A. Lundberg. Social Research: A Study in the Methods of Gathering Data. N. Y.: Longmans, 1929, Ch. IX, "Measurement of Attitudes."
 8. L. L. Bernard. Introduction to Social Psychology. N. Y.: Holt, 1926. pp. 246-261.
 9. Read Bain. "An Attitude on Attitude Research." Amer. J. of Sociol., 1928, vol. 33, pp. 949-957.
 10. J. F. Markey. Trends in American Sociology. N. Y.: Harper, 1929. pp. 126-135.
 11. Read Bain. "Theory of Measurement of Attitudes and Opinions." Psychol. Bull., 1930, vol. 27, p. 360.
 12. Ibid.

behavior is observed. Based upon the former we may assume that he feels the way he says he does, and that he will act the way he feels; while the latter may lead us to believe he feels the way he acts; but just how true our assumptions are can only be determined by employing both approaches and deriving correlations between the two groups of data. Some attempts have been made to determine the degree of correlation between verbal responses and actual behavior by Zimmerman¹³, Hartshorne and May¹⁴, and Terman¹⁵. There is quite a range in such correlations, depending upon whether they are on tabooed subjects or not. Some of the correlations between verbal attitudes and actual behavior are in the .90's, while others are much lower. Most authors agree that there can be no great dependence upon a close relationship between verbal attitudes and actual behavior. It must be determined quantitatively for any particular study.

Since most of the investigations deal with the measurement of verbal attitudes, and since studies of actual behavior have a tendency to stray at greater tangents from the subject at hand, e.g., the measurement of attitudes, the present discussion will deal more directly with a general analysis of ways of measuring

-
13. C. C. Zimmerman. "Types of Farmer's Attitudes." Soc. Forces, 1927, vol. 5, pp. 591-596.
14. H. Hartshorne and M. A. May. Studies in Service and Self-Control. N. Y.: Macmillan, 1929; and Studies in Deceit. N. Y.: Macmillan, 1928.
15. L. M. Terman. Genetic Studies of Genius. Palo Alto: Stanford Univ. Press, 1925. vol. I, "Tests of Character and Personality Traits," Ch. XVII, pp. 485-517, and "Trait Rating," Ch. XVIII, pp. 518-555.

attitudes verbally expressed. It is necessary to limit further the subject by excluding studies concerning traits which do not have a definite object of reference, such as introversion, ascendance, aggressiveness, etc.

In addition to the present discussion similar and more complete accounts of methods of measuring attitudes have been made by Bain¹⁶, Clark¹⁷, Droba¹⁸, Folsom¹⁹, Katz and Allport²⁰, Lundberg²¹, Murphy²², Rice²³, and Thurstone²⁴. The methods of attitude measurement are numerous and confusing, and if one attempted to list and explain all of them, it would be an endless process. They will, therefore, be discussed in a more general way under the following headings which were previously mentioned: (1) The Questionnaire Method, (2) The Ranking Method, (3) The Case Method,

-
16. Read Bain. "Theory and Measurement of Attitudes and Opinions." Op. Cit. pp. 357-379.
17. W. W. Clark. "The Measurement of Social Attitudes." J. of Ap. Sociol., 1924, vol. 8, pp. 345-354.
18. D. D. Droba. "Methods Used for Measuring Public Opinion." Amer. J. Sociol., 1931, vol. 37, pp. 410-423; and "Methods For Measuring Attitudes." Psychol. Bull., 1932, vol. 29, pp. 309-323.
19. J. K. Folsom. Social Psychology. N. Y.: Harper & Bros. 1931.
20. D. Katz and F. H. Allport. Students' Attitudes. Syracuse, N. Y.: Craftsman Press, 1931.
21. G. A. Lundberg, Ibid.
22. Murphy, Gardner, and L. B. Murphy. Experimental Social Psychology. New York: Harpers & Bros., 1931.
23. S. A. Rice. Quantitative Methods in Politics. N. Y.: Knopf, 1928. Also, Statistics in Social Studies. Philadelphia: Univ. Penn. Press, 1930.
24. L. L. Thurstone. "The Measurement of Social Attitudes." J. Abn. & Soc. Psychol., 1931, vol. 26, pp. 249-269.

(4) The Rating Method, (5) The Method of Equal Appearing Intervals, and (6) The Method of Paired Comparison.

(1) The Questionnaire Method. Perhaps the method that has received the greatest use as well as the most abuse is the Questionnaire Method. Criticisms have been hurled at it by many writers in the scientific journals, yet as time goes on it is being refined and still remains one of the most important instruments of research, especially in measuring attitudes. The fundamental procedure is a series of questions or statements selected by a few judges to represent the opinions. The statements are not scaled. They are sometimes divided into two groups to represent the favorable and unfavorable opinions. The three investigations which follow will serve to illustrate the methods.

Harper²⁵ made an attempt to measure Conservatism-Liberalism-Radicalism of American educators about various beliefs and public issues. Forty-one judges composing doctors of philosophy, or highly selected educators nearing that degree were secured to render judgments on 71 statements regarding the conservatism and radicalism of the statements. Where the judges expected a larger per cent of the conservatives than the radicals to agree with the statements they marked them with a "C." If a larger per cent of radicals were thought to agree with the statements, they were marked with an "R." It so happened that twenty-five statements out of the seventy-one were marked by an "R," and the remainder

25. M. H. Harper. "Social Beliefs and Attitudes of American Educators." Teachers College Contribution, No. 294., Columbia University, N. Y. C.

by a "C." There was an average agreement of over 98 per cent among the judges.

The questionnaire was then submitted to 3,000 educators. The following statements will serve to illustrate the type of statements used: (1) World conditions seem now to insure enduring peace among the nations, and (2) The power of huge fortunes in this country endangers democracy. The time required for answering the questionnaire was 30 minutes. The instructions were to mark the statements with a plus sign, if the subject agrees with it more fully than he disagrees. If he disagrees with the statement more fully than he agrees, he is asked to mark the statement with a minus sign. The raw scores were transmuted into scaled scores of 675 representative educators.

The reliability of the questionnaire was determined by deriving correlations between scores on halves of the questionnaire. Such correlations ranged from .75 to .81 for three different groups. Correlation between the scores obtained from the same group with a three-week's interval was .90. Twenty-nine judges were asked to render judgments upon the consistency of the markings of thirty groups of the statements selected at random from the original list. Where the first statement in a group was marked with a plus sign, the judge was instructed to mark the other statements in the group with a sign consistent with the first mark. The inconsistency score was the number of inconsistencies avoidable through guessing.

Zeleny²⁶ measured social opinions of students. Her state-

26. L.D. Zeleny. "A Measure of Social Opinions of Students." J. of Ap. Sociol., 1926-27, vol. 9, p. 56. ff.

ments were phrased both in "forward" and "reverse" manner. The statements which were finally used in testing were those that were consistently answered in both forward and reverse order. The statements were referred to seven faculty members for criticism, and then 34 were retained in two forms, making a total of 68 statements such as: "True patriots are always loyal to their political parties" (forward), "True patriots are sometimes disloyal to their political parties" (reverse), and "There should be a minimum wage law" (forward), "Minimum wage laws are unwise" (reverse).

The instructions were that each statement was to be marked either true or false by underlining one of the phrases. Where the subject was unable to express opinion, he was instructed to draw no line. The individual score was the total number right. The reliability of the questionnaire was .89.

Watson²⁷ has constructed a test designed to measure the attitudes of Occident toward Orient or opinions of Americans about China, Japan, and other Eastern nations. Statements representing the opinions were first formulated by Watson and Mr. Keeney. Then about twelve Americans and Orientals were asked to pass judgments on them. The resulting 300 items were criticized by 20 competent judges. One hundred best items were selected on the basis of frequency of choice by judges. Two sample statements are: "Japan's attitude in her relation with the United States in the last five years has been finer than our attitude toward

27. Goodwin B. Watson. "Orient and Occident: An Opinion Study." Relig. Educ., 1929, vol. 24, p. 322 ff.

her," and "We should be willing to let American investments in China be lost rather than be drawn into armed conflict in China."

The questionnaire was divided into two parts. The first part required 15 minutes, the second 30 minutes. The subject was asked to check one of the five answers: (1) absolutely true, (2) probably true, (3) doubtful, (4) probably false, (5) absolutely false. Scores were expressed in terms of percentages of the five answers, and profiles of opinion were plotted for each of the various American groups.

(2) The Ranking Method. In general there are two main branches of the ranking method, e.g., (1) the subject is asked to arrange in order of merit a number of items--for example nationalities--representing the objects or issues toward or against which the attitude is directed. The arrangement is based on the degree of opinion or attitude with reference to the object. (2) In the second type items to be arranged in order do not represent the object or issue toward or against which the attitude is directed, but represent the expressions of the attitude itself. For instance, statements representing different degrees of "wetness" and "dryness" on the prohibition question are prepared for arrangement on a scale running from the extremely wet statements through the neutral to the extremely dry statements. The arrangement of statements in the order of merit is likewise based on the degree of opinion or attitude with respect to the object.

The first type of ranking method was used by Bogardus²⁸ in

28. E. S. Bogardus. "Social Distance and Its Origins." J. of Ap. Sociol., 1924-5, vol. 9, pp. 216 ff.

his study of the origins of social distance. Subjects were asked to classify a list of racial and language groups in three columns. The races toward which there was a friendly feeling were placed in the first column; in the second the races toward which a feeling of neutrality was experienced; and in the third the races whose mention aroused feelings of antipathy and dislike. Each person was then asked to re-arrange the three columns so that in column "1" were to be put first those races toward which the greatest degree of friendliness was felt and the others in order. Column "2" was to be started off with the races toward which the nearest perfect degree of neutrality was experienced, etc. In column "3" were to be put first those races toward which the greatest antipathy was experienced and the others in order of decreasing antipathy. The races studied included Englishmen, Canadians, Germans, Russians, Czechoslovaks, and the like.

Allport and Hartman²⁹ used the second method to measure the attitude of conservatism, liberalism, radicalism, and reactionism toward seven issues: The League of Nations, qualifications of President Coolidge, distribution of wealth, the legislative control of the Supreme Court, prohibition, Ku Klux Klan, and graft in politics. Statements about the seven issues were selected from the written descriptions of opinion of 60 students. Each statement was then ranked by six judges according to the degree of attitude expressed in it and from these results seven

29. F. H. Allport and D. A. Hartman. "The Measurement and Motivation of Atypical Opinion in a Certain Political Group." Am. Pol. Sci. Rev., 1925, vol. 29, pp. 735 ff.

tests were constructed. Samples of statements used are: "We should join the League of Nations with full responsibility to prevent aggression, but should first obtain sanction for this step by a popular referendum vote," and "A two-thirds decision on the part of the Supreme Court should be necessary in order to declare a law passed by Congress unconstitutional." In administering the tests, the subjects were instructed to check one statement (in the blank space in front of the statement) which most nearly coincides with his or her view. For scoring purposes, each statement was assigned a number in order, and an individual score was the number of the statement checked.

The ranking method is sometimes referred to as (1) The Method of Absolute Ranking which is used in place of the term "Questionnaire," or as (2) The Method of Relative Ranking in which the decision of the subject about an indicator is relative to another indicator.

In The Method of Absolute Ranking the subject has to decide the degree of attitude in the case of each statement or question in the scale, without reference to other statements or questions. For example, Watson³⁰ used a number of impersonal statements expressing attitudes toward a specific race. The subject ranks his agreement with each statement in five steps. For instance, the statement "Jews will try to get the best of a bargain even if they have to cheat to do so" is followed by the choices: All, Most, Many, Few, No. The ranking is made separately for every

30. Goodwin B. Watson. Experimentation and Measurement in Religious Education. N. Y.: Assoc. Press, 1927.

statement without any reference whatsoever to another statement. For this reason the method is called "absolute." Koos³¹ reviewed experiments reported in seven educational periodicals during 1925-26, and found that 143 out of the 438 investigations reported (24.6 per cent) used the method which has here been referred to as "absolute ranking."

The first men to apply the method of absolute ranking to the measurement of attitudes seems to have been Moore³² and Symonds³³ both of whom had the subject rank each indicator separately in two categories: either Yes or No.

The advantage of this method is that it takes a relatively short time to construct a test. The disadvantages are that only a narrow range in degree of attitudes is measured, and that it does not offer adequate units of measurement.

In The Method of Relative Ranking the subject may be asked to arrange in order of merit occupations or nationalities so that each occupation is relative to another occupation and each nationality to another nationality. The same procedure can also be applied to statements expressing attitudes toward certain topics. The method of relative ranking was used two or three decades ago for various purposes such as the study of affective values, beliefs, men of science, and shades of gray. Bogard-

31. Leonard Koos. The Questionnaire in Education. N. Y.: Macmillan Co., 1928.

32. Henry T. Moore. "Innate Factors in Radicalism and Conservatism." J. of Abn. and Soc. Psychol., 1925-26, vol. 20.

33. P. M. Symonds. "A Social Attitude Questionnaire." J. of Educ. Psychol., 1925, vol. 16, pp. 316-322.

us³⁴ may be said to have been the first to apply it to attitude measurement when devising his "social distance" test.

(3) The Case Method. The Case Method is an essay type of description of an attitude consisting of at least a paragraph. Bogardus³⁵ asked a number of Americans to describe their attitudes toward the Filipinos. However, both oral and written descriptions may be used. If oral indicators are employed the method is referred to as informal case method or interview, but when written indicators are used the method is considered formal. The informal case method was used by Albig³⁶, Calkins³⁷, Lapiere³⁸, Lundberg³⁹, Rice⁴⁰, and Bogardus⁴¹; while the formal method is illustrated by Coe⁴², Lasker⁴³, Stouffer⁴⁴, Thomas⁴⁵, Vaughn⁴⁶, Bogard-

-
34. E. S. Boardus. "The Measuring of Social Distance." J. of Ap. Sociol., 1925, vol. 9, pp. 299-308.
35. Op. cit. "American Attitudes Toward Filipinos." Sociol. and Soc. Res., 1929, vol. 14, pp. 59-69.
36. William Albig. "Opinions Concerning Unskilled Mexican Immigrants." Sociol. & Soc. Res., 1930, vol. 15, pp. 62-72.
37. Dorothy M. Calkins. "Social Situations and Religious Attitudes." Sociol. & Soc. Res., 1930, vol. 14, pp. 249-255.
38. R. T. Lapiere. "Race Prejudice: France and England." Soc. Forces, 1927, vol. 7, pp. 101-111.
39. G. A. Lundberg. "The Newspaper and Public Opinion." Soc. Forces, 1926, vol. 4, pp. 709-715.
40. S. A. Rice. "Undergraduate Attitudes Toward Marriage and Children." Ment. Hyg., 1929, vol. 13, pp. 788-793.
41. E. S. Bogardus. "Filipino Immigrant Attitudes." Sociol. & Soc. Res., 1930, vol. 14, pp. 469-479.
42. G. A. Coe. "What Teachers of Secondary Education Think of Military Training in High Schools." School & Soc., 1927, vol. 26, pp. 174-178.
43. Bruno Lasker. Race Attitudes in Children. N.Y.: Holt Co., 1929.
44. Samuel A. Stoffer. "Experimental Comparison of a Statistical and a Case History Technique of Attitude Research." Amer. Sociol. Soc. Publ., 1931, vol. 25, pp. 154-156.

us⁴⁷, and Young⁴⁸. In either method the subject may be asked to describe his own attitude or the attitudes of his acquaintances. The latter has seldom been used due to its inexactness.

Historically the case method is the oldest of all.⁴⁹ Case studies for various purposes were made long before the questionnaire studies. The application of the case method to the study of attitude measurement is, however, of rather recent origin.

One drawback of the case method is that it is of little value to quantitative analysis. It involves the description of the depth rather than the breadth of an attitude. It is better fitted to the study of the attitudes of a single individual or at most those of a relatively small group.

(4) The Rating Method. In the Rating Method the subject may be asked to rate himself, or he may be asked to rate his friends or acquaintances. One of the disadvantages of the self-rating scale is that the raters tend to overestimate their desirable attitudes and to underestimate the undesirable ones. Rat-

-
45. W. I. Thomas and F. Znaniecki. The Polish Peasant in Europe and America. Chicago: Univ. Chi. Press, 1918.
46. W. F. Vaughn. "An Experimental Study of Political Prejudice." J. Abn. & Soc. Psychol., 1930, vol. 25, pp. 268-274.
47. E. S. Bogardus, "Analyzing Changes in Public Opinion." J. Ap. Sociol., 1925, vol. 9, pp. 372-381. "Mutations of Social Distance." J. Ap. Sociol., 1926, vol. 11, pp. 77-84. Immigration and Race Attitudes. N.Y.: D.C. Heath & Co., 1938.
48. P. V. Young. "Occupational Attitudes and Values of Russian Lumber Workers." Sociol. & Soc. Res., 1928, vol. 12, pp. 543-553.
49. D. D. Droba. "Methods for Measuring Attitudes." Psychol. Bull., 1932, vol. 29, p. 310.

ing by others requires more time, but is probably more reliable than self-rating. In both forms of the rating method, however, degree of attitudes or opinions are represented along a line, with steps indicated by descriptive words or phrases, or statements. The subject simply checks the phrase or statement which he thinks most nearly represents his or his friend's attitude.

The self-rating scale was used by Rice⁵⁰. His scale consisted of eight steps and four descriptive words: "Radicalism," "Liberalism," "Conservatism," and "Reactionism." The scale was intended to measure attitudes toward existing social conditions. The subject was instructed to rate himself according to the four above terms, and was given an opportunity to not only indicate the proper term, but also to show the degree to which he leaned in that direction by marking an "X" above the left of the word showing a high degree, and above the middle showing moderate or slight tendency in the direction. Results were expressed in terms of frequencies of judgments for each of the eight steps on the scale.

A particular modification of the rating method is sometimes referred to as the "Graphic Rating Scale." The use of the graphic rating scale for measuring attitudes is relatively recent. The scale is made up by a line along which the steps representing the various degrees of attitudes are indicated by words, numbers, or phrases. The subject is usually instructed to check the place on the line that best represents his or his friend's attitude such

50. S. A. Rice. "Differential Changes of Political Preferences under Campaign Stimulation." J. of Abn. & Soc. Psychol., 1926-7, vol. 31, pp. 297 ff.

11

as the study conducted by Thurstone and Chave⁵¹ in measuring attitudes toward the church. Their graphic rating scale consisted of a horizontal line across the title page. At one end of the line was printed the phrase "Strongly favorable to the Church," at the middle of the line was printed the word "Neutral," and at the other end of the line there was printed the phrase "Strongly against the church." The subject was instructed to indicate by a cross where he estimated his own attitude to be. A correlation was calculated between the scores on the constructed statement scale and the tenth of the line in which the self-rating check occurred and was found to be .67.

Some of the advantages of the graphic rating scale are that it can be quickly filled out and can be easily scored. The numbering of the various steps may be altered at will. Several types of attitudes may be studied on several self-rating scales in a comparatively brief period of time.

(5) The Method of Equal Appearing Intervals. The Method of Equal Appearing Intervals is similar to that of Relative Ranking in administration, differing only in construction of the scale and to some extent in scoring and practical application. Statements representing attitudes are sorted into a number of piles, ranging from seven to eleven in most cases, according to the degree of attitude expressed by the statements. If in the pile farthest to the right are put the statements representing the most extreme attitude against the object in question, in the pile farthest to the left are placed those statements representing the

51. L. L. Thurstone and E. J. Chave. The Measurement of Attitude. Univ. of Chic. Press, 1929.

strongest attitude in favor of the object at issue. In the middle pile are put the statements expressing medium position on the issue. The statements are eventually arranged in such a way that the difference between the piles adjoining each other appear to the majority of subjects about the same or equal to the difference between any other two adjoining piles.

Since subjects often tend to place a statement more frequently into the end piles than into the intermediate piles, Droba⁵² has suggested that the whole series of statements be divided into two groups for and against an object; and he has further suggested subdividing each of the two groups according to a strong attitude "against," a mild attitude "against," a strong attitude "for," and a mild attitude "for." The subdivisions may be continued until a desired number of piles or groups are obtained.

The method of equal appearing intervals is a variation of the method of mean gradation first used by Plateau, a Belgian physicist, about the middle of the nineteenth century. It was probably first suggested by Boas, a German writer, in the second half of the last century and was later used by a number of European and American psychophysicists for the solution of psychophysical problems.⁵³

Chave⁵⁴ and Droba⁵⁵ first used this method of measuring at-

52. D. D. Droba. "Methods For Measuring Attitudes." Op. cit.

53. Ibid.

54. E. J. Chave. "A New Type of Scale for Measuring Attitudes." Rel. Educ., 1928, vol. 23, pp. 264-369.

55. D. D. Droba. A Scale for Measuring Attitude Toward War. Chicago: Univ. Chic. Press, 1930.

titudes. Chave applied it to the measurement of attitudes toward the church and published his scale in collaboration with Thurstone⁵⁶, while Droba used the method for measuring attitudes toward war. Following these studies a number of other experiments were reported using the method.⁵⁷

56. L. L. Thurstone and E. J. Chave. The Measurement of Attitude. Op. cit. Also, A Scale for Measuring Attitude Toward the Church. Chicago: Univ. Chic. Press, 1929.

57. The following employed The Method of Equal Appearing Intervals:

E. J. Chave and L. L. Thurstone. A Scale for Measuring Attitude Toward God. Chicago: Univ. Chic. Press, 1931.

E. D. Hinckley. A Scale for Measuring Attitude Toward the Negro. Chicago: Univ. Chic. Press, 1930.

Charles S. Johnson. "Measurement of Racial Attitudes." Amer. Sociol. Soc. Publ., 1931, vol. 25, pp. 150-153.

D. Katz. A Scale for Measuring Attitude Toward the Law. Chicago: Univ. Chic. Press, 1931.

Ruth C. Peterson. A Scale for Measuring Attitude Toward the Chinese. Chicago: Univ. Chic. Press, 1931. Also. A Scale for Measuring Attitude Toward Capital Punishment. Chicago: Chicago: Univ. Chic. Press, 1931. A Scale for Measuring Attitude Toward The Germans. Chicago: Univ. Chic. Press, 1931.

A. C. Rosander and L. L. Thurstone. A Scale for Measuring Attitude Toward the United States Constitution. Chicago: Univ. Chic. Press, 1931.

Hattie N. Smith. "A Scale for Measuring Attitudes About Prohibition." J. Abn. & Soc. Psychol., 1932, vol. 26, pp. 429-37.

Hattie N. Smith and L. L. Thurstone. A Scale for Measuring Attitude Toward Prohibition. Chicago: Univ. Chic. Press, 1931.

Samuel A. Stouffer. "Experimental Comparison of a Statistical and a Case History Technique of Attitude Research." Amer. Sociol. Soc. Publ., 1931, vol. 25, pp. 154-156.

M. B. Thiele and L. L. Thurstone. A Scale for Measuring Attitude Toward Patriotism. Chicago: Univ. Chic. Press, 1931.

L. L. Thurstone. "The Measurement of Change in Social Attitudes." J. Soc. Psychol., 1931, vol. 2, pp. 230-235.

A short discussion of Droba's scale of Militarism-Pacifism⁵⁸ is given here to illustrate further the method of equal appearing intervals. He collected 237 statements about war from books, magazines, newspapers, students' written statements, and his own resources. The longest and least clear statements were eliminated and 130 left for experimental purposes. The 300 students used were instructed to classify the 130 statements into eleven groups according to the degree of militarism and pacifism expressed in the statements. To extreme left were to be put statements expressing the extreme of militarism and to the right statements expressing the extreme of pacifism.

Forty-four statements were finally chosen on the basis of scale values and variabilities to constitute two forms of the scale such as "War is the tonic of races" and "There is no justification of war."

L. L. Thurstone. "Influence of Motion Pictures on Children's Attitudes." J. Soc. Psychol., 1931, vol. 2, pp. 291-305.

L. L. Thurstone and A. C. Rosander. A Scale for Measuring Attitude Toward Censorship. Chicago: Univ. Chic. Press, 1931.

L. L. Thurstone. A Scale for Measuring Attitude Toward Communism. Chicago: Univ. Chic. Press, 1931.

L. L. Thurstone and Thelma G. Thurstone. A Scale for Measuring Attitude Toward Evolution. Chicago: Univ. Chic. Press, 1931.

L. L. Thurstone and C. K. A. Wang. A Scale For Measuring Attitude Toward Sunday Observance. Chicago: Univ. Chic. Press, 1931. Also A Scale for Measuring Attitude Toward Birth Control. Univ. Chic. Press, 1931. A Scale for Measuring Attitude Toward the Treatment of Criminals. Univ. Chic. Press, 1931.

58. D. D. Droba. "A Scale of Militarism-Pacifism," J. of Educ. Psychol., 1931, vol. 22, pp. 96 ff.

The time required for administration of the scale usually required but twenty minutes. The subjects were instructed to mark all statements with a plus sign with which they agreed. If a subject did not agree with a statement he was asked to mark it with a minus sign. If it appeared ambiguous and he could not decide either for or against it, he was asked to mark it with a question mark.

The scoring was based on equivalent numbers ranging from 0 to 21, number 0 being assigned to the most extremely militaristic statement and number 21 to the most extremely pacifistic statement. An individual score was the average of equivalent numbers of all the statements marked plus. The correlation between the two forms of the scale was found to be .83. The estimated reliability of the two forms combined was .90.

(6) The Method of Paired Comparisons. The essential feature of the method of paired comparisons is that the indicators are presented to the subject in pairs and he has to decide which of the two is preferable. Words or statements may be used for the purpose. Each word or statement, as the case may be, is paired with every other one.

The method was first developed by G. T. Fechner, but it was first applied to attitude measurement by Thurstone⁵⁹. He also devised a technique for constructing a scale on the basis of percentages of preferred items. Thurstone⁶⁰ employed the method

59. L. L. Thurstone. "The Method of Paired Comparisons for Social Values." J. Abn. & Soc. Psychol., 1927, vol. 21, pp. 384-400.

60. Op. cit. "An Experimental Study of Nationality Preferences." J. Gen. Psychol., 1928, vol. 1, pp. 405-425.

again in studying nationality preferences. Two hundred and thirty-nine undergraduates were asked to underline one nationality of each pair with whom they would rather associate, e.g., English-Swede. The subject was instructed to underline one of the two, even though he found it difficult to decide. There were twenty-one nationalities making 210 such pairs. Proportions, such as 98.8 per cent preferred to associate with Americans rather than Englishmen, were calculated. The rank order of the twenty-one nationalities was ascertained by a simple summation of the proportions. Sigma values were read off from appropriate tables for each proportion. Then the difference between the sigma values of two items in each pair was calculated. The scale separations between the sigma values of the adjacent items were obtained by getting the average of the sigma differences. The next step was to choose the scale value of one of these nationalities as an origin and to calculate the scale values of the other nationalities from this origin. Thurstone chose the American nationality as an origin. When finished, the rank order of the twenty-one nationalities was determined as follows: American, Englishman, Scotchman, Irishman, Frenchman, German, Swede, etc.

Guilford⁶¹ suggested a short-cut to calculating scale values from the percentages that are obtained for each item. The scale value calculated by the Guilford method was found to correlate

61. J. P. Guilford. "The Method of Paired Comparisons as a Psychometric Method." Psychol. Rev., 1928, vol. 35, pp. 494-506. "Some Empirical Tests of the Method of Paired Comparison." J. Gen Psychol., 1931, vol. 5, pp. 64-77. "Racial Preferences of a Thousand American University Students." J. Soc. Psychol., 1931, vol. 2, pp. 179-204.

almost perfectly with the scale values of the elaborate Thurstone method. The latter method was also tested in a weight experiment under conditions not quite comparable with conditions in an attitude experiment. He was lead to believe that instead of asking one subject to make a large number of judgments it would have been better to use a large number of subjects and have each make only one judgment about the whole series. The Guilford method is a more convenient method to use in attitude measurement, however, the main weakness is that the unit does not remain constant.

Eggen⁶² measured the attitudes toward twenty-five races and nationalities such as Austrian, Belgium, Canadian, Chinese, and the like. His technique was very similar to that of Thurstone, so it will not be elaborated here. The purpose of his study was to see if the scale finally obtained was different under different conditions of instruction. The difference was found to be negligible.

Droba⁶³ has valued the method somewhat as follows. It cannot be used to measure individual attitudes, as it is impossible to obtain individual scores, due to the fact that the very calculation of the scale values is dependent upon a combination of markings of a number of individuals. Neither can the standing of a group of individuals on an attitude scale of this type be

62. F. R. Eggen. An Experimental Study of Attitude Toward Races and Nationalities, Master's thesis. University of Chicago, 1928.

63. D. D. Droba. "Methods for Measuring Attitudes." Psychol. Bull., 1932, vol. 29, p. 310.

determined by a single score. The scatter of the scale values themselves along the scale is the only picture of the attitude of a group.

He believes that for the purpose of comparing the attitudes of two or more groups the method is a useful and objective tool. A correlation can be calculated between the scale values obtained from one group with the scale values obtained from another group. If the correlation is high the two groups agree closely with respect to the object of the attitude. If the correlation is low the agreement is slight and the attitudes of the two groups toward the issue in question are shown to be markedly different.

It is in the latter respect that the writer has elected to employ the technique in comparing the attitudes of junior high students with those of a similar number of adults in the same community with respect to the problem of honesty.

PROCEDURE

Description of the test used in this study. The test employed in the present study was prepared from a list of statements of conduct situations by pairing each statement with every other statement. It was intended that the statements call for judgments of social situations. No attempt was made to weigh statements evenly, however, it was hoped that somewhat of a range in degree of seriousness might be present, and that some of them would portray social or group responsibilities, while others would be purely individual in character. Throughout the discussion of the investigation statements have been referred to by number to

prevent so frequent repetition of the statements, themselves. A more complete discussion of the test will follow the list of statements.

- (1) Stealing small articles from a person who does not need them.
- (2) Getting even with an enemy.
- (3) Misrepresenting facts to protect oneself.
- (4) Selling an object for more than it is worth.
- (5) Misrepresenting facts to protect a friend.
- (6) Misrepresenting an article that is being sold.
- (7) Destroying or defacing public property.
- (8) Shirking one's work.
- (9) Refusing to pay what an object is worth when the owner is forced to sell.
- (10) Neglecting to pay debts according to agreements.
- (11) Failure to turn all one's property in when the tax assessor calls.
- (12) "Hit-and-run-driver."
- (13) Personal use of money which belongs to someone else.
- (14) Keeping found objects.
- (15) Failure to keep a promise.
- (16) Failure to correct a false statement which may hurt someone else.
- (17) Making a promise one does not expect to keep.
- (18) Cheating in an examination.
- (19) Cheating in a game of any kind.
- (20) Failure to return extra change in case of a merchant's error.
- (21) Failure to stop at a stop sign.
- (22) Buying alcoholic beverages.

(23) Getting intoxicated.

(24) Smoking.

(25) Defacing property belonging to an individual.

It will be noted that in some cases complete statements were not used. This was done to shorten the test. It was, however, intended that the thought be perfectly clear, and that each statement should express a particular honesty situation. Statement (24) above, perhaps, needs a word of explanation in this respect. In the particular community in which the study was made smoking is considered morally degrading, detrimental to the health of the smoker, and in general "sinful." Until recently teachers' contracts included a statement preventing public school teachers from smoking. While such a statement no longer appears in teacher's contracts, it is tabooed by so many people in the community that teachers are prevented from smoking. Yet at the same time all members of the School Board smoke whenever and wherever they choose. Student-smoking is taboo. Consequently smoking is in many instances done on the sly, and is therefore believed to produce honesty situations.

It was intended that some of the statements be fairly significant, while others were expected to be relatively unimportant, so as to provide a suitable range. As was mentioned before, the test was formed by pairing each of the twenty-five statements with every other statement, thus making 300 pairs including twenty-four repetitions of each statement. The test is too long to include here, so only a sample of the form used is given. The pairs are numbered as they were in the test where they were arranged at random.

67. A. Keeping found objects.
B. Misrepresenting facts to protect a friend.
105. A. Misrepresenting facts to protect oneself.
B. Buying alcoholic beverages.
119. A. Smoking.
B. Buying alcoholic beverages.
142. A. Getting intoxicated.
B. Making a promise one does not expect to keep.
145. A. Making a promise one does not expect to keep.
B. "Hit-and-run-driver."
146. A. Personal use of money which belongs to someone else.
B. Selling an object for more than it is worth.
149. A. Keeping found objects.
B. Failure to return extra change in case of a merchant's error.
161. A. Neglecting to pay debts according to agreements.
B. Cheating in a game of any kind.
203. A. Failure to turn all one's property in when the tax assessor calls.
B. Selling an object for more than it is worth.
206. A. Failure to keep a promise.
B. Getting even with an enemy.
223. A. Failure to turn all one's property in when the tax assessor calls.
B. Cheating in a game of any kind.
238. A. Stealing small articles from a person who does not need them.
B. Refusing to pay what an object is worth when the owner is forced to sell.
249. A. Making a promise one does not expect to keep.
B. Shirking one's work.
251. A. Defacing property belonging to an individual.
B. Buying alcoholic beverages.
253. A. Misrepresenting facts to protect a friend.
B. Cheating in an examination.
265. A. Personal use of money which belongs to someone else.
B. Destroying or defacing public property.

269. A. Refusing to pay what an object is worth when the owner is forced to sell.
B. Cheating in an examination.
273. A. Keeping found objects.
B. Failure to correct a false statement which may hurt someone else.
289. A. Misrepresenting facts to protect oneself.
B. Misrepresenting facts to protect a friend.
300. A. Cheating in an examination.
B. Buying alcoholic beverages.

As indicated in the above sample, the first statement appearing in each pair was preceded by the letter "A," and the second by "B." The subject was instructed to read the statements in each pair, and then to draw a line through the letter "A" or "B" preceding the statement in each pair that he believed to be the most serious. Thus, judgment was rendered on but two statements at a time. Further instructions were given that he should mark one statement in each pair regardless of the fact that in some instances he might think them to be approximately equal.

Subjects. The study was made in Sterling, Kansas, a small city of slightly less than 2,000 population. Sterling is located in central Kansas, and is probably a typical trading center for a wheat-farming community comprising some fifteen miles in diameter. There are several well-attended churches, a public library, a denominational college, and a public school system providing education through the first twelve grades. The only manufacturing industry in town is a flour mill. Among the residents are to be found a fairly large group of retired farmers.

The test was given to the students of the Junior High School in their regular social science classes and to the Rotary and

Lions Club each of which gave one of its regular meetings over to checking the test. The time required by the students varied from twenty to forty-five minutes with an average time of approximately twenty-five minutes. Both the Rotary and the Lions Club members required a little longer time, the range being from thirty to sixty minutes with an average of approximately thirty-five minutes. It is not known how long was required by the other sixty-five adults, consisting of both men and women, who were selected by random sampling from the community. Some of them were church members and members of the Parent-Teachers Association, while others were members of neither.

In securing the information from the sixty-five adults, mentioned above, the writer explained to each person individually just what was to be done and why. In a few cases adults preferred not to commit themselves on the test in spite of the fact that everyone taking the test was assured that no reference whatever would be made to the persons taking it, and that no names were desired on the test sheets. In the main, however, everyone was very cooperative, and interested in the outcome of the investigation.

The test was given to seventeen members of the Lions Club, eighteen members of the Rotary Club, to sixty-five other adults--making a total of one hundred adults--, and to 122 students of the Junior High School who were present the day the tests were given. Thus, the study included 222 persons in the community.

RESULTS

After the test was given to the various groups the next step was to tabulate the results. In doing this it was found most convenient to record the number of times statement "A" was considered to be worse than statement "B" in each of the three hundred pairs. The results pertaining to each group were recorded separately for the sake of comparison. The total number of times each of the twenty-five statements was preferred over every other statement was then determined. This information is shown in Tables I, II, III, IV, and V which appear on pages 31, 34, 35, 36, and 37.

These tables show the seriousness with which the separate groups held each of the twenty-five statements which was indicated by the number of times each statement was checked as being worse than the other twenty-four with which it was paired. Table I shows the results of the Rotary Club; Table II, the Lions Club; Table III, the sixty-five other adults selected at random; Table IV, the summarized totals of each of the three preceding adult groups; and Table V, the Junior high school students. As a matter of convenience in reading the following tables, which at first may appear to be somewhat complicated, detailed directions are given for reading Table I. The same directions may, however, be followed in reading each of the other four tables with but one exception, i.e., that in Table IV only the summarized totals from Tables I, II, and III are given.

TABLE I
 A TABLE SHOWING THE TOTAL NUMBER OF TIMES EACH OF THE TWENTY-FIVE STATEMENTS WAS PREFERRED OVER EVERY OTHER STATEMENT, THE RANK, AND THE PERCENTAGE OF POSSIBLE PREFERENCE BY THE ROTARY CLUB CONSISTING OF EIGHTEEN MEMBERS.

	Statement Numbers																									Total Times not Preferred
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
1		4	6	3	1	8	7	0	6	7	6	16	15	4	5	11	8	5	6	10	6	3	7	2	10	156
2	14		7	6	7	10	12	8	7	16	9	15	16	6	12	15	13	11	10	11	6	8	11	1	11	242
3	12	11		8	5	12	12	5	9	13	10	17	13	6	10	15	16	9	11	13	5	7	8	3	11	241
4	15	12	10		6	16	15	7	14	16	14	17	15	10	15	18	16	13	13	14	8	9	9	1	17	300
5	17	11	13	12		17	15	8	10	18	15	17	17	11	15	16	13	13	14	12	11	9	11	3	12	310
6	10	8	6	2	1		12	3	5	16	8	13	16	2	13	14	11	10	9	10	7	5	7	10	10	208
7	11	6	6	3	3	6		4	6	15	18	15	13	3	7	14	11	6	9	10	7	5	7	1	8	184
8	18	10	13	11	10	15	14		10	17	12	15	18	11	17	17	17	11	5	13	8	9	11	3	14	299
9	12	11	9	4	8	13	12	8		17	11	16	14	4	13	16	11	10	15	12	6	8	6	0	10	246
10	11	2	5	2	0	2	3	1	1		3	14	13	0	5	8	5	1	6	3	3	5	5	2	4	104
11	12	9	8	4	3	10	10	6	7	15		16	13	3	10	16	12	10	11	13	5	7	8	1	10	219
12	2	3	1	1	1	5	3	3	2	4	2		5	2	1	2	3	2	2	3	0	4	4	0	3	58
13	3	2	5	3	1	2	5	0	4	5	5	13		2	3	10	5	4	1	5	3	5	3	0	7	96
14	14	12	12	8	7	16	15	7	14	18	15	16	16		16	16	17	14	14	16	10	7	11	3	16	310
15	13	6	8	3	3	5	11	1	5	13	8	17	15	2		15	14	13	11	10	3	4	8	1	10	199
16	7	3	3	0	2	4	4	1	2	10	2	16	8	2	3		9	4	4	6	4	3	6	2	7	112
17	10	5	2	2	5	7	7	1	7	13	6	15	13	1	4	9		7	6	7	4	4	5	0	8	148
18	13	7	9	5	5	8	12	7	8	17	8	16	14	4	5	14	11		11	10	6	4	8	3	9	214
19	12	8	7	5	4	9	9	13	3	12	7	16	17	4	7	14	12	7		8	7	7	9	1	9	207
20	8	7	5	4	6	8	8	5	6	15	5	15	13	2	8	12	11	8	10		5	4	9	3	8	185
21	12	12	13	10	7	11	11	10	12	15	13	18	15	8	15	14	14	12	11	13		11	12	6	14	289
22	15	10	11	9	9	13	13	9	10	13	11	14	13	11	14	15	14	14	11	14	7		17	2	12	281
23	11	7	10	9	7	11	11	7	12	13	10	14	15	7	10	12	13	10	9	9	6	1		0	10	224
24	16	17	15	17	15	8	17	15	18	16	17	18	18	15	17	16	18	15	17	15	12	16	18		17	383
25	8	7	7	1	16	8	10	4	8	14	8	15	11	2	8	11	10	9	9	10	4	6	8	1		185
Total Preference	276	190	191	132	122	224	248	133	186	328	213	374	336	122	233	320	284	218	225	247	143	151	208	49	247	
Rank	6	17	16	22	24	12	7	21	18	3	14	1	2	23	10	4	5	13	11	8	20	19	15	25	9	
Per cent of Preference	64	44	44	31	28	52	57	31	43	76	49	87	78	28	54	74	66	50	52	57	33	35	48	11	58	

Directions for reading Table I. The numbers across the top beginning with 1 and continuing to the right to 25 correspond to the numbers assigned to the statements on pages 25 and 26. The numbers on the left side of the table beginning with 1 at the top and proceeding downward to 25 also refer to the statements bearing those numbers on the page mentioned above. The number in the square headed by statement 1 at the top and by statement 2 at the left is the total number of times the Rotary Club checked statement 1 as being worse than statement 2. In short, 14 of the 18 members checked item 1 as being more undesirable or a more reprehensible form of conduct than that represented by item 2. Proceed in this manner to read the numbers in all the squares.

Illustration: Opposite statement 1 at the top and statement 2 to the left is 14; opposite statement 2 at the top and statement 1 to the left is 4; and 4 added to 14 gives a total of 18 which is equal to the number of members of the Rotary Club taking the test. In this way the preference numbers in each square can be checked.

By adding the numbers in the column headed by statement 1 at the top the total preference given to statement 1 by the Rotary Club may be determined. This number is placed at the bottom of the column headed by statement 1 at the top, and is 276.

By multiplying the number of members of the Rotary Club (18) by the number of times each statement occurs in the test (24) the maximum total preference (432) is obtained. To the right of the table opposite statement 1 on the left of the table will be found 156 which is the total number of times the Rotary Club did not prefer statement 1 over each of the other statements, and 156 added to 276 (the total preference given to statement 1) is 432. Thus, the sum of any total preference number at the bottom of the table added to the corresponding total to the right must always give 432, if no error has been made. In this way each total preference number at the bottom of the table was checked.

Attention is again called to the fact that the term, "total preference" refers to the total number of times that particular statement was considered to be worse than the other twenty-four statements with which it was paired, and the total preference for each statement may be found at the bottom of the column headed by the number of that particular statement at the top. Thus, the total preferences for statements 1, 2, 3, etc. may be read across the bottom of the table as 276, 190, 191, etc., consecutively.

Just below the total preference numbers at the bottom of the page will be found the corresponding rank

given to each of the statements, and below this is given the per cent of preference⁶⁴ given each of the statements.

64. Preference here refers to seriousness, since subjects were instructed to check the statement in each pair they considered to be most serious.

TABLE II.

A TABLE SHOWING THE TOTAL NUMBER OF TIMES EACH OF THE TWENTY-FIVE STATEMENTS WAS PREFERRED OVER EVERY OTHER STATEMENT, THE RANK, AND THE PERCENTAGE OF PREFERENCE BY THE LIONS CLUB CONSISTING OF SEVENTEEN MEMBERS

	Statement Numbers																									Total Times Preferred
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
1		4	3	2	5	9	8	2	2	8	7	12	11	3	8	10	11	7	5	7	4	2	5	0	10	145
2	13		7	4	10	12	13	5	5	14	10	13	14	6	15	16	14	11	9	9	6	3	7	0	10	226
3	14	10		4	4	7	13	6	6	10	15	14	12	4	12	12	14	10	9	13	6	6	7	1	13	222
4	15	13	13		14	16	13	11	11	17	13	15	14	12	16	17	16	13	15	17	12	8	10	1	15	317
5	12	7	13	3		15	14	8	5	16	15	14	15	9	12	16	15	14	10	11	8	5	13	3	9	262
6	8	5	10	1	2		11	4	2	14	12	13	16	4	10	12	13	12	10	8	4	4	6	1	7	189
7	9	4	4	4	3	6		4	4	10	8	15	12	8	12	11	11	9	8	5	5	5	9	1	9	176
8	15	12	11	6	9	13	13		5	14	14	14	14	13	14	14	16	14	13	13	12	8	9	16	15	297
9	15	12	11	6	12	15	13	12		16	14	16	16	9	14	17	16	11	13	13	8	11	9	1	13	293
10	9	3	7	0	1	3	7	3	1		8	13	10	1	7	6	6	6	7	3	5	4	7	0	6	123
11	10	7	2	4	2	5	9	3	3	9		11	10	4	5	12	13	5	7	4	5	4	5	0	8	147
12	5	4	3	2	3	4	2	3	1	4	6		5	3	3	5	6	5	5	3	2	4	4	0	2	84
13	6	3	5	3	2	1	5	3	1	7	7	12		3	9	10	9	4	6	4	4	5	5	0	7	121
14	14	11	13	5	8	13	9	4	8	16	13	14	14		12	13	15	10	12	15	8	8	11	2	13	261
15	9	2	5	1	5	7	5	3	3	10	12	14	8	5		11	12	5	10	4	8	4	6	0	8	157
16	7	1	5	0	1	5	6	3	0	11	5	12	7	4	6		11	5	5	5	4	5	5	0	6	119
17	6	3	3	1	2	4	6	1	1	11	4	11	8	2	5	6		6	7	4	4	5	7	0	5	112
18	10	6	7	4	3	5	8	3	6	11	12	12	13	7	12	12	11		6	7	6	5	9	1	10	186
19	12	8	8	2	7	7	9	4	4	10	10	12	11	5	7	12	10	11		8	9	6	7	1	8	188
20	10	8	4	0	6	9	12	4	4	14	13	14	13	2	13	12	13	10	9		6	6	8	0	12	202
21	13	11	11	5	9	13	12	5	9	12	12	15	13	9	9	13	13	11	8	11		8	11	2	12	247
22	15	14	11	9	12	13	12	9	6	13	13	13	12	9	13	12	12	12	11	11	9		11	3	11	266
23	12	10	10	7	4	11	8	8	8	10	12	13	12	6	11	12	10	8	10	9	6	6		0	11	214
24	17	17	16	16	14	16	16	1	16	17	17	17	17	15	17	17	17	16	16	17	15	14	17		17	375
25	7	7	4	2	8	10	8	2	4	11	9	15	10	4	9	11	12	7	9	5	5	6	6	0		171
Total Preference	263	182	186	91	146	219	232	111	115	285	261	324	287	147	251	289	296	222	220	206	161	142	194	33	237	
Rank	6	17	16	24	20	13	10	23	22	5	7	1	4	19	8	3	2	11	12	14	18	21	15	25	9	
Per cent of Preference	64	44	46	22	36	54	57	27	28	70	64	79	70	36	61	71	73	54	54	50	39	35	47	9	59	

TABLE III.

A TABLE SHOWING THE TOTAL NUMBER OF TIMES EACH OF THE TWENTY-FIVE STATEMENTS WAS PREFERRED OVER EVERY OTHER STATEMENT, THE RANK, AND THE PERCENTAGE OF PREFERENCE BY 65 OTHER ADULTS

	Statement Numbers																									Total Times Preferred
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
1	27	18	7	14	34	25	11	13	35	21	50	37	14	24	43	35	18	18	27	11	21	30	7	23	563	
2	38	27	10	14	24	35	15	17	37	27	45	38	16	37	43	41	25	28	31	15	23	34	12	27	659	
3	47	38	20	7	34	38	14	19	40	36	49	50	18	36	52	50	29	39	32	21	25	40	6	43	783	
4	58	55	45	32	58	59	32	43	60	46	59	56	44	48	56	62	46	49	53	32	37	49	21	56	1156	
5	51	51	58	33	50	49	30	38	54	49	53	50	36	44	57	57	45	41	46	29	35	46	13	45	1060	
6	31	41	31	7	15	36	12	21	47	31	51	46	7	45	50	52	34	25	32	18	26	35	8	34	735	
7	40	30	27	6	16	29	10	22	37	28	53	43	17	30	45	41	25	24	32	15	22	35	8	37	672	
8	54	50	51	33	35	53	55	33	57	47	55	57	39	60	59	56	52	45	53	39	42	51	11	47	1134	
9	52	48	46	22	27	44	43	32	58	44	54	54	36	50	57	54	42	46	46	21	38	36	13	40	1003	
10	30	28	25	5	11	18	28	8	7	13	47	36	10	22	39	33	11	20	21	8	16	32	4	22	494	
11	44	38	29	19	16	34	37	18	21	52	52	44	19	35	55	42	32	30	35	17	28	36	7	44	784	
12	15	20	16	6	12	14	12	10	11	18	13	23	7	10	26	18	13	13	16	5	11	21	5	10	325	
13	28	27	15	9	15	19	22	8	11	29	21	42	8	23	40	28	18	22	28	9	19	25	5	18	489	
14	51	49	47	21	29	58	48	26	29	55	46	58	57	54	55	57	42	34	53	28	32	41	12	51	1033	
15	41	28	29	17	21	20	35	5	15	43	30	55	42	11	46	54	29	38	29	17	26	35	7	33	706	
16	22	22	13	9	8	15	20	6	8	26	10	39	25	10	19	25	16	20	15	10	19	30	8	21	416	
17	30	24	15	3	8	13	24	9	11	32	23	47	37	8	11	40	25	19	23	11	21	37	6	23	500	
18	47	40	36	19	20	31	40	13	23	54	33	52	47	23	36	49	40	27	37	20	27	43	12	40	809	
19	47	37	26	16	24	40	41	20	19	45	35	52	43	31	27	45	46	38	36	25	23	42	11	40	809	
20	38	34	33	12	19	33	33	12	19	44	30	49	37	12	36	50	42	28	29	11	24	38	10	27	700	
21	54	50	44	33	36	47	50	26	44	57	48	60	56	37	48	55	54	45	40	54	39	48	20	52	1097	
22	44	42	40	28	30	39	43	23	27	49	37	54	46	33	39	46	44	38	42	41	26	57	11	39	918	
23	35	31	25	16	19	30	30	14	29	33	29	44	40	24	30	35	28	22	23	27	17	8	3	27	619	
24	58	53	59	44	52	57	57	54	52	61	58	60	60	53	58	57	59	53	54	55	45	54	62	57	1332	
25	42	38	22	9	20	31	28	18	25	43	21	55	47	14	32	44	42	25	25	38	13	26	38	8	704	
Total Preference	997	901	777	404	500	825	888	426	557	1066	776	1235	1071	527	854	1144	1060	761	751	860	463	642	941	228	856	
Rank	6	8	14	24	21	13	9	23	19	4	17	1	3	20	12	2	5	16	15	10	22	18	7	25	11	
Per cent of Preference	64	58	50	26	32	53	57	27	36	68	48	79	69	34	55	73	68	48	48	55	30	41	60	15	55	

TABLE IV.

A TABLE SHOWING THE TOTAL NUMBER OF TIMES EACH OF THE TWENTY-FIVE STATEMENTS WAS PREFERRED OVER EVERY OTHER STATEMENT, THE RANK, AND THE PERCENTAGE OF PREFERENCE BY THE COMBINED ADULT GROUPS CONSISTING OF 100 PERSONS.

		Statement Numbers																									Total Times Not Preferred	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25		
	1																											864
	2																											1127
	3																											1246
	4																											1773
	5																											1632
	6																											1132
	7																											1032
	8																											1730
	9																											1542
	10																											721
	11																											1150
	12																											467
	13																											706
	14																											1604
	15																											1062
	16																											647
	17																											760
	18																											1209
	19																											1204
	20																											1087
	21																											1633
	22																											1465
	23																											1057
	24																											2090
	25																											1060
Total Preference		1536	1273	1154	627	1268	1368	670	858	1679	1250	1933	1694	796	1338	1753	1640	1196	1191	1313	767	935	1343	310	1340			
Rank		6	12	17	24	21	13	7	23	19	4	14	1	3	20	10	2	5	15	16	11	22	18	8	25	9		
Per cent of Preference		64	53	48	26	32	53	57	28	36	70	52	82	71	33	56	73	68	50	50	55	32	39	56	13	56		

TABLE V.

A TABLE SHOWING THE TOTAL NUMBER OF TIMES EACH OF THE TWENTY-FIVE STATEMENTS WAS PREFERRED OVER EVERY OTHER STATEMENT, THE RANK, AND THE PERCENTAGE OF PREFERENCE BY THE 122 JUNIOR HIGH STUDENTS.

	Statement Numbers																									Total Times not Preferred
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
1	41	51	46	50	55	78	41	68	74	60	86	77	92	50	72	76	68	56	56	43	56	76	45	70	1487	
2	81	78	69	63	76	93	65	76	80	79	98	82	60	77	73	83	80	68	82	54	66	82	52	73	1790	
3	71	44	62	51	66	81	58	77	68	81	94	92	24	58	85	72	69	60	67	42	70	85	52	72	1601	
4	76	53	60	66	74	74	101	56	75	68	94	82	43	63	75	74	64	58	84	35	66	82	47	70	1615	
5	72	59	71	56	65	88	88	68	89	85	95	88	41	60	72	82	74	64	73	45	71	91	46	77	1700	
6	67	46	56	48	57	64	46	62	88	69	91	74	31	58	73	66	62	61	74	32	63	74	55	76	1493	
7	44	29	41	21	34	58	35	44	47	40	75	65	28	54	61	60	51	45	40	31	52	62	35	63	1115	
8	81	57	64	73	54	76	87	64	84	80	104	89	58	69	76	88	77	72	82	61	75	89	50	81	1791	
9	54	46	45	66	54	60	78	58	88	44	88	70	38	56	78	63	62	59	74	34	70	76	45	77	1483	
10	48	42	54	47	33	34	75	38	34	54	83	74	21	51	64	61	36	49	48	23	48	86	41	53	1197	
11	62	43	41	54	37	53	82	42	78	68	84	60	38	39	62	68	51	47	56	30	62	71	39	60	1327	
12	36	24	28	28	27	31	47	18	34	39	38	53	14	18	36	30	28	34	36	21	34	56	25	35	770	
13	45	40	30	40	34	48	57	33	52	48	62	69	22	46	65	65	46	46	41	31	54	68	40	59	1141	
14	30	62	98	79	81	91	94	64	84	101	84	108	100	88	91	81	79	80	93	46	71	88	59	77	1929	
15	72	45	64	59	62	64	68	53	66	71	83	104	76	34	73	89	71	70	56	37	62	82	45	63	1569	
16	50	49	37	47	50	49	61	46	44	58	60	86	57	31	49	72	44	48	42	33	55	85	50	67	1270	
17	46	39	50	48	40	56	62	34	59	61	54	92	57	41	33	50	52	50	53	24	67	78	46	51	1243	
18	54	42	53	58	48	60	71	45	60	86	71	94	76	43	57	78	70	41	43	41	63	79	45	66	1438	
19	66	54	62	64	58	61	77	50	63	73	75	88	76	42	52	74	72	81	70	50	57	81	59	70	1575	
20	66	40	55	38	49	48	82	40	48	74	66	86	81	29	66	80	69	79	52	32	62	75	44	74	1435	
21	79	68	80	87	77	90	91	61	88	99	92	101	91	76	85	89	98	81	72	90	77	99	74	95	2040	
22	66	56	52	56	51	59	70	47	52	74	60	88	68	51	60	67	55	59	65	60	45	98	42	57	1458	
23	46	40	37	40	31	48	60	33	46	36	51	66	54	34	40	37	44	43	41	47	23	24	26	42	989	
24	77	70	70	75	76	67	87	72	77	81	83	97	82	63	77	72	76	77	63	78	48	80	96	80	1824	
25	52	49	50	52	45	46	59	41	45	69	62	89	63	45	59	55	71	56	52	48	27	65	80	42	1320	
Total Preference	1441	1138	1327	1313	1228	1435	1813	1137	1445	1731	1601	2158	1787	999	1359	1658	1685	1490	1353	1493	888	1470	1939	1104	1608	
Rank	14	21	18	19	20	15	3	22	13	5	9	1	4	24	16	7	6	11	17	10	25	12	2	23	8	
Per cent of Preference	49	39	45	45	42	49	62	39	49	59	55	74	61	34	46	57	58	51	46	51	30	50	66	38	55	

Explanation and Interpretation of Tables I to V. The "total preference" numbers at the bottom of the tables were derived by adding the corresponding figures in the column immediately above. These numbers represent the total number of times each of the twenty-five statements was preferred over all the other statements by the members in the groups indicated in the tables. For example, in Table I there were eighteen men in the Rotary Club who took the test, and since each statement was repeated twenty-four times it was possible for any statement to have been preferred 432 times, but statement "1" in column "1" was checked only 276 times. The corresponding number at the right opposite statement "1" on the left is 156. This is the total number of times statement "1" was not checked. The numbers on the right were merely placed there for the purpose of checking the accuracy of the total preference numbers at the bottom. This was done by adding each total preference number to the number on the right to which it corresponded. If it was correct the sum was always 432 in Table I, and in the other tables the number of subjects taking the test multiplied by the number of times each statement was repeated in the pairs. This proved to be a very helpful method in checking the data for errors, since any errors in the preceding tabulations would show up at this point.

The total preference numbers in each of the tables above provide an index to the seriousness with which each group held each of the statements. The total preference numbers furnish the foundation for the remainder of the thesis. It was from them that the rank of the statements was determined. Since the state-

ment that was checked the greatest number of times also received the greatest total preference number, it was ranked as first. In all of the tables it will be found that statement "12," Hit-and-run driver, received this ranking, while statement "24," Smoking, was ranked as twenty-fifth by each of the adult groups, and twenty-third by the junior high school students.

The per cent of preference which is shown at the foot of each of the tables was determined in the following way. Since it was possible for the members of the Rotary Club in Table I to have preferred any statement 432 times, this number was considered as 100 per cent. Referring to statement "1" which was preferred 276 times, it may be seen that 276 is 64 per cent of 432. The per cent of preference just below the rank shows more clearly the degree of difference in the ratings the statements actually received.

A summary of the per cent of preference is given in Table VI, page 40, showing a comparison of the per cents of preference given each of the statements by the three adult groups separately, by the combined adult groups and by the junior high students.

TABLE VI.

A TABLE SHOWING PER CENT OF PREFERENCE COMPARISONS BETWEEN THE VARIOUS GROUPS CONSISTING OF THE 18 MEMBERS OF THE ROTARY CLUB, THE 17 MEMBERS OF THE LIONS CLUB, THE 65 OTHER ADULTS, THE 100 ADULTS IN THE COMBINED ADULT GROUP WHICH IS A COMBINATION OF THE THREE PRECEDING GROUPS, AND THE 122 JUNIOR HIGH STUDENTS.

Statement Numbers	The 18 Rotary Club Members	The 17 Lions Club Members	The 65 Other Adults	The 100 Adults in Combined Ad. Groups	The 122 Junior High Students
1.	63.89	64.46	63.91	64.00	49.21
2.	43.98	44.36	57.76	53.04	38.87
3.	44.21	45.59	49.88	48.08	45.32
4.	30.56	22.30	25.90	26.12	44.84
5.	28.24	35.78	32.05	32.00	41.94
6.	51.85	53.68	52.88	52.87	49.01
7.	57.41	56.86	56.92	57.00	61.92
8.	30.78	27.21	27.31	27.92	38.83
9.	43.06	28.26	35.71	35.75	49.35
10.	75.93	69.85	68.33	69.96	59.12
11.	49.31	63.97	47.74	52.08	54.68
12.	86.57	79.41	79.17	82.21	73.70
13.	77.78	70.34	68.65	70.58	61.03
14.	28.24	36.03	33.78	33.17	34.12
15.	53.94	61.25	54.74	55.75	46.41
16.	74.07	70.84	73.33	73.04	56.63
17.	65.51	72.55	67.95	68.33	57.58
18.	50.46	54.41	48.15	49.83	50.89
19.	52.08	53.92	48.15	49.62	46.21
20.	57.15	50.49	55.13	54.71	50.99
21.	33.10	39.46	29.68	31.96	30.33
22.	34.95	34.80	41.15	38.96	50.20
23.	48.10	47.45	60.32	55.96	66.22
24.	11.34	8.09	14.62	12.92	37.70
25.	57.15	58.88	54.87	55.83	54.92

Directions for Reading Table VI. The numbers in the column on the left correspond to the statements opposite these numbers on pages 25 and 26. The numbers in each of the other columns opposite the statement numbers are the respective per cents of preference which were given by the groups indicated at the top.

K. S. T. C.

TABLE VII.

A TABLE SHOWING A COMPARISON OF THE RANKING GIVEN EACH OF THE 25 STATEMENTS BY THE VARIOUS GROUPS CONSISTING OF THE 18 MEMBERS OF THE ROTARY CLUB, THE 17 MEMBERS OF THE LIONS CLUB, THE 65 OTHER ADULTS, THE 100 ADULTS IN THE COMBINED ADULT GROUP WHICH IS A COMBINATION OF THE THREE PRECEDING GROUPS, AND THE 122 JUNIOR HIGH STUDENTS.

Statement Numbers	The 18 Rotary Club Members	The 17 Lions Club Members	The 65 Other Adults	The 100 Adults in Combined Ad. Groups	The 122 Junior High Students
1.	6	6	6	6	14
2.	17	17	8	12	21
3.	16	16	14	17	18
4.	22	24	24	24	19
5.	24	20	21	21	20
6.	12	13	13	13	15
7.	7	10	19	7	3
8.	21	23	23	23	22
9.	18	22	19	19	13
10.	5	5	4	4	5
11.	14	7	17	14	9
12.	1	1	1	1	1
13.	2	4	3	3	4
14.	23	19	20	20	24
15.	10	8	12	10	16
16.	4	3	2	2	7
17.	5	2	5	5	6
18.	13	11	16	15	11
19.	11	12	15	16	17
20.	8	14	10	11	10
21.	20	18	22	22	25
22.	19	21	18	18	12
23.	15	15	7	8	2
24.	25	25	25	25	23
25.	9	9	11	9	8

Directions for Reading Table VII. The numbers in the column headed, "Statement Numbers," correspond to the statements opposite these numbers on pages 25 and 26. The numbers under each of the other columns refer to the rank given each of the twenty-five statements by the groups indicated. For example, Statement "1" is ranked sixth by the first four groups, and fourteenth by the Junior High Students.

While Table VI provides an index to the degree of seriousness with which each of the statements have been held by the groups, it does not show a clear comparison of the ranking given by these groups. Table VII, which immediately follows Table VI, has been prepared to show the relative ranking given each statement by the same groups. It will be recalled that the statement which was checked the greatest number of times was ranked as first in seriousness, since the subjects were instructed to check the statement in each pair which they considered to be worse. Tables VI and VII both show comparisons of the adult groups with one another, and with the junior high students; but it is somewhat difficult to visualize the degree of difference between the ratings of the various statements when given merely in per cents of preference or in ranking order, so Figures I to V have been designed to show more graphically on a scale the degree of seriousness with which each statement was considered. Figure I refers to the Rotary Club, Figure II to the Lions Club, Figure III to the sixty-five adults selected at random, Figure IV to the combined adult groups, and Figure V to the junior high students. These figures may be found on the pages that follow.

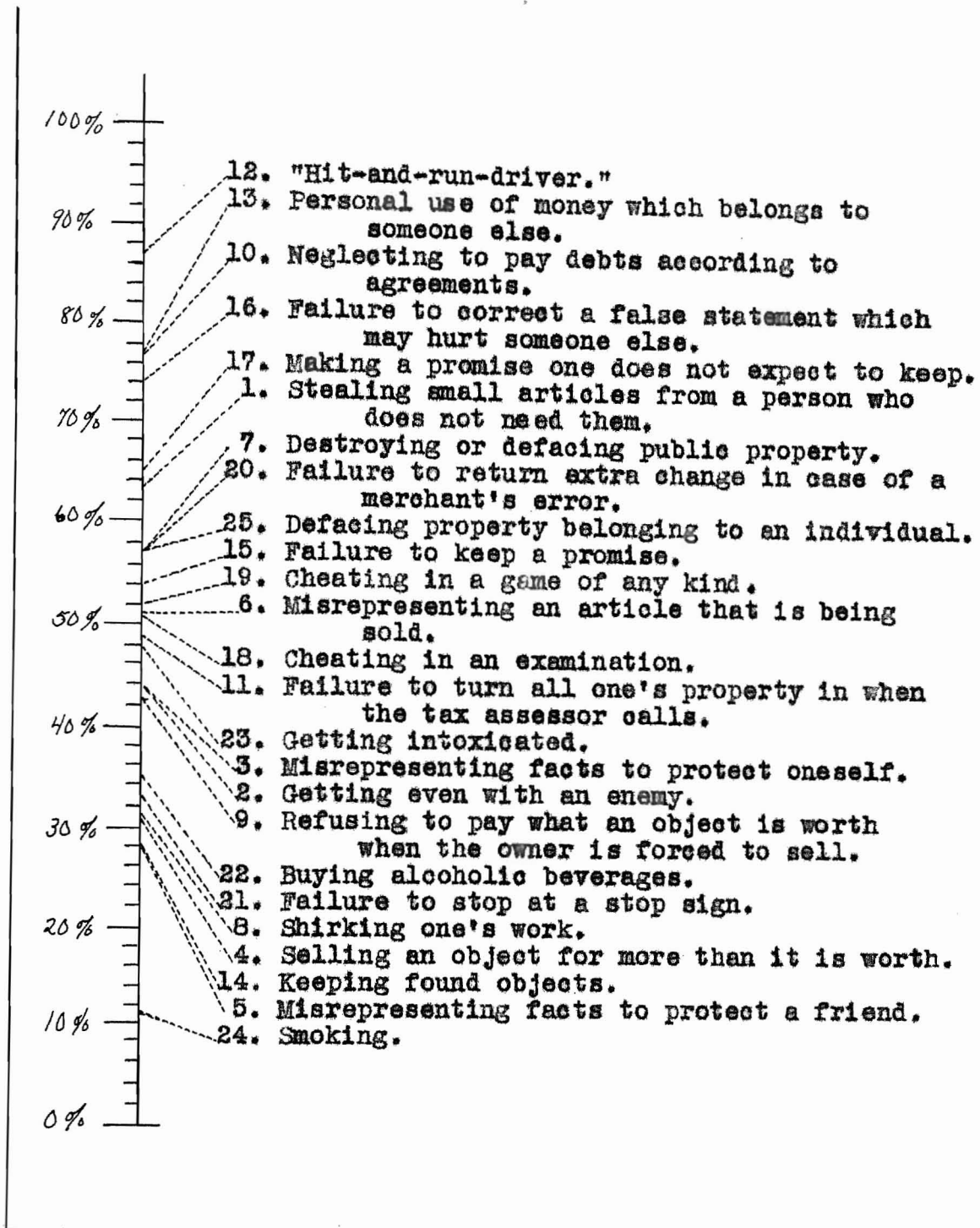


FIGURE I. A Scale showing the percentage of preference by the Rotary Club of the 25 statements. (Preference refers to degree of seriousness of statements, e.g., statement 12 is regarded worse than all the others, and is found at the top of the list with percentage of preference of approximately 87.)

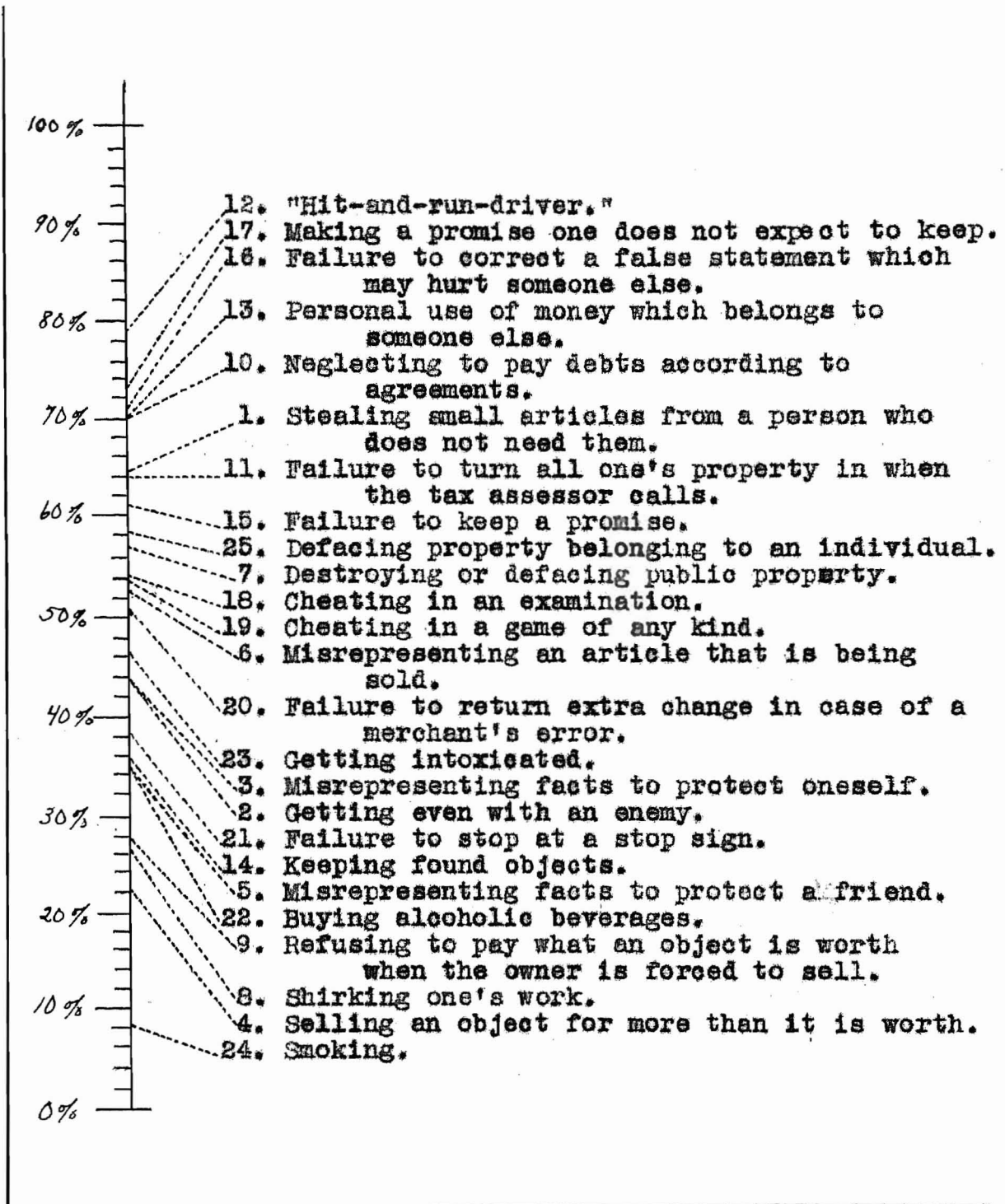


FIGURE II. A Scale showing the percentage of preference by the Lions Club of the 25 statements. (Preference refers to degree of seriousness of statements, e.g., statement 12 is regarded worse than all the others, and is found at the top of the scale with a percentage of preference of approximately 79.)

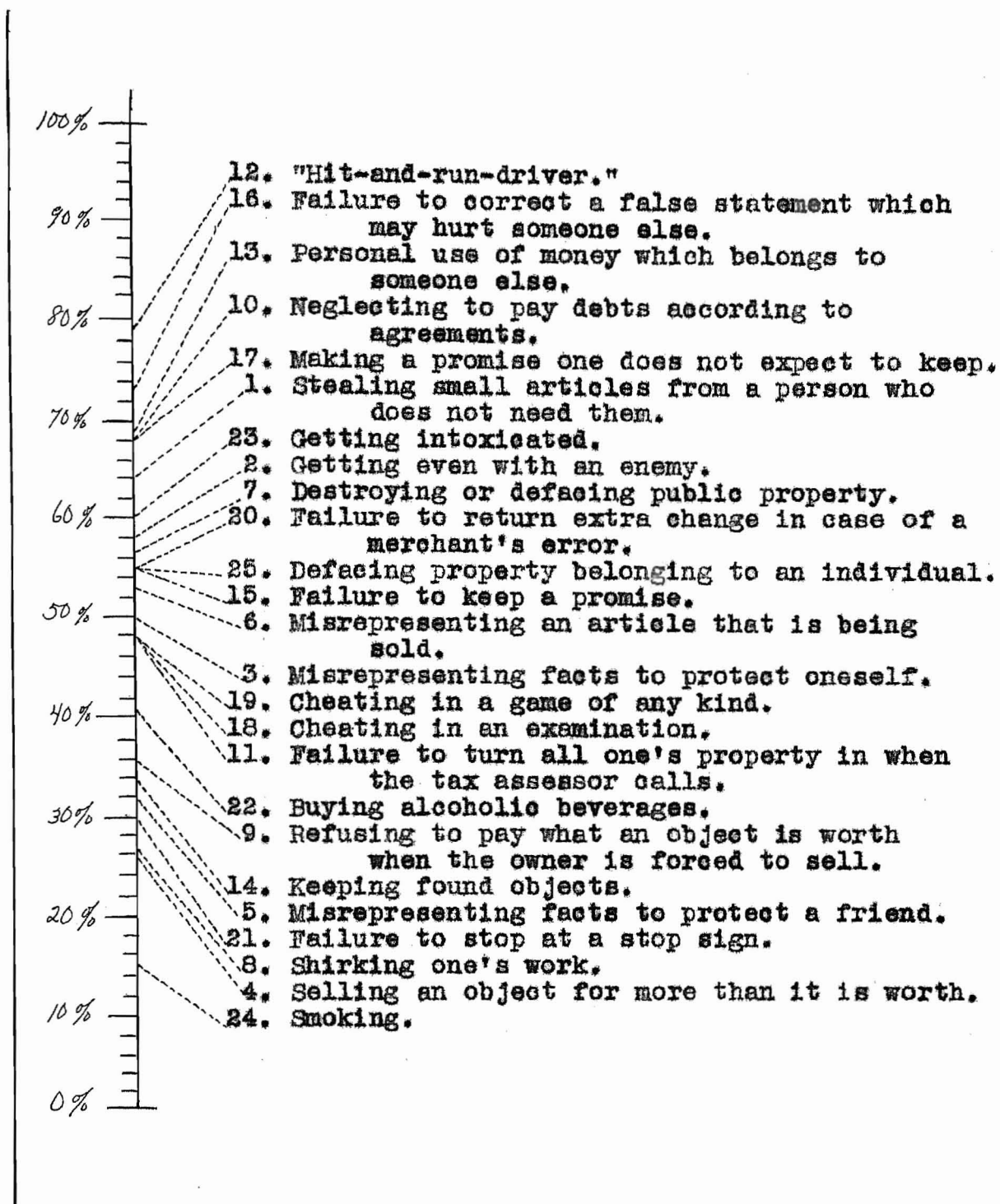


FIGURE III. A Scale showing the percentage of preference by the sixty-five other adults of the 25 statements. (Preference refers to degree of seriousness of statements, e.g., statement 12 is regarded worse than all the others, and is found at the top of the scale with a percentage of preference of approximately 79.)

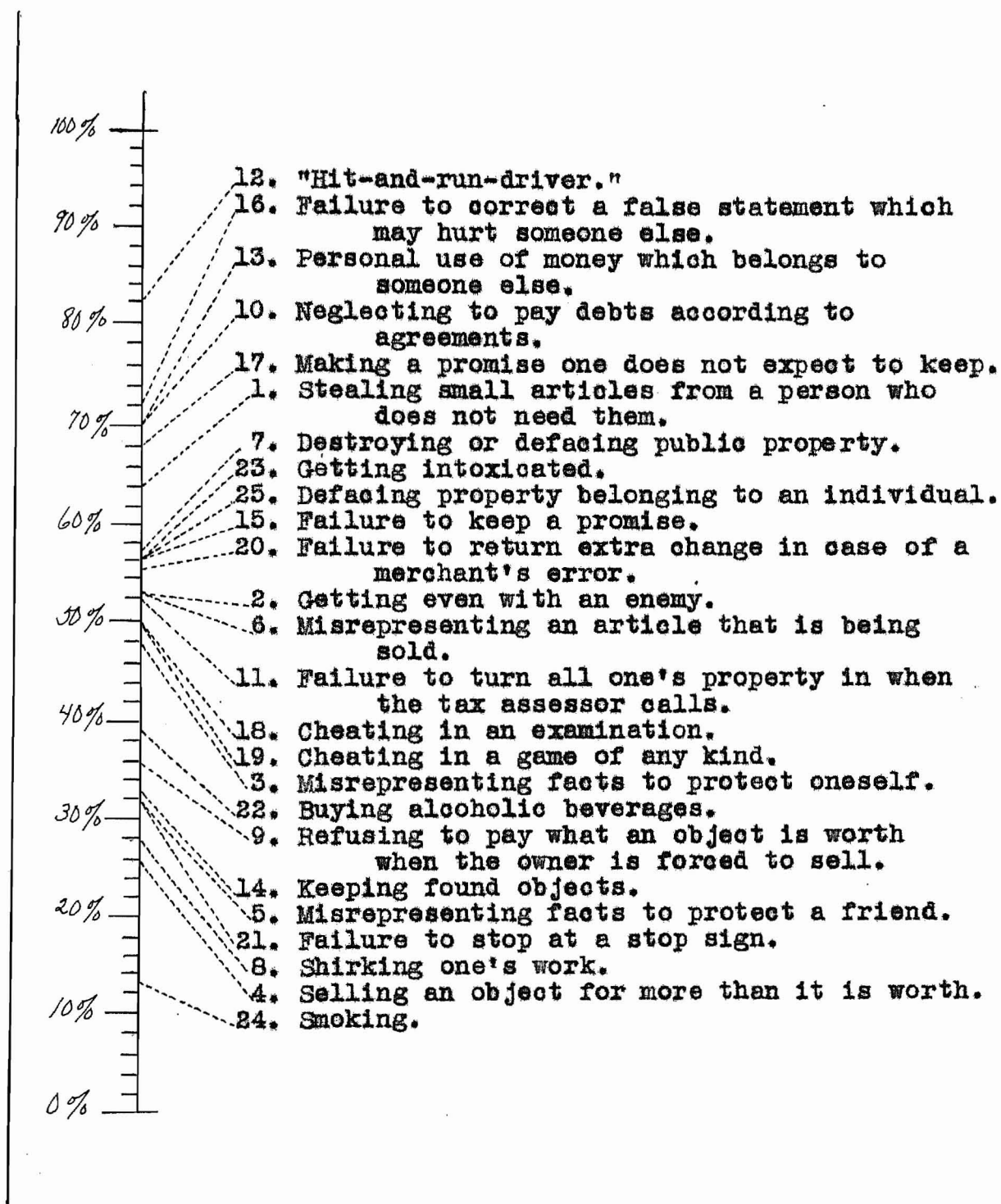


FIGURE IV. A Scale showing the percentage of preference by the Combined Adult Groups of the 25 statements. (Preference refers to degree of seriousness of statements, e.g., statement 12 is regarded worse than all the others, and is found at the top of the scale with a percentage of preference of approximately 82.)

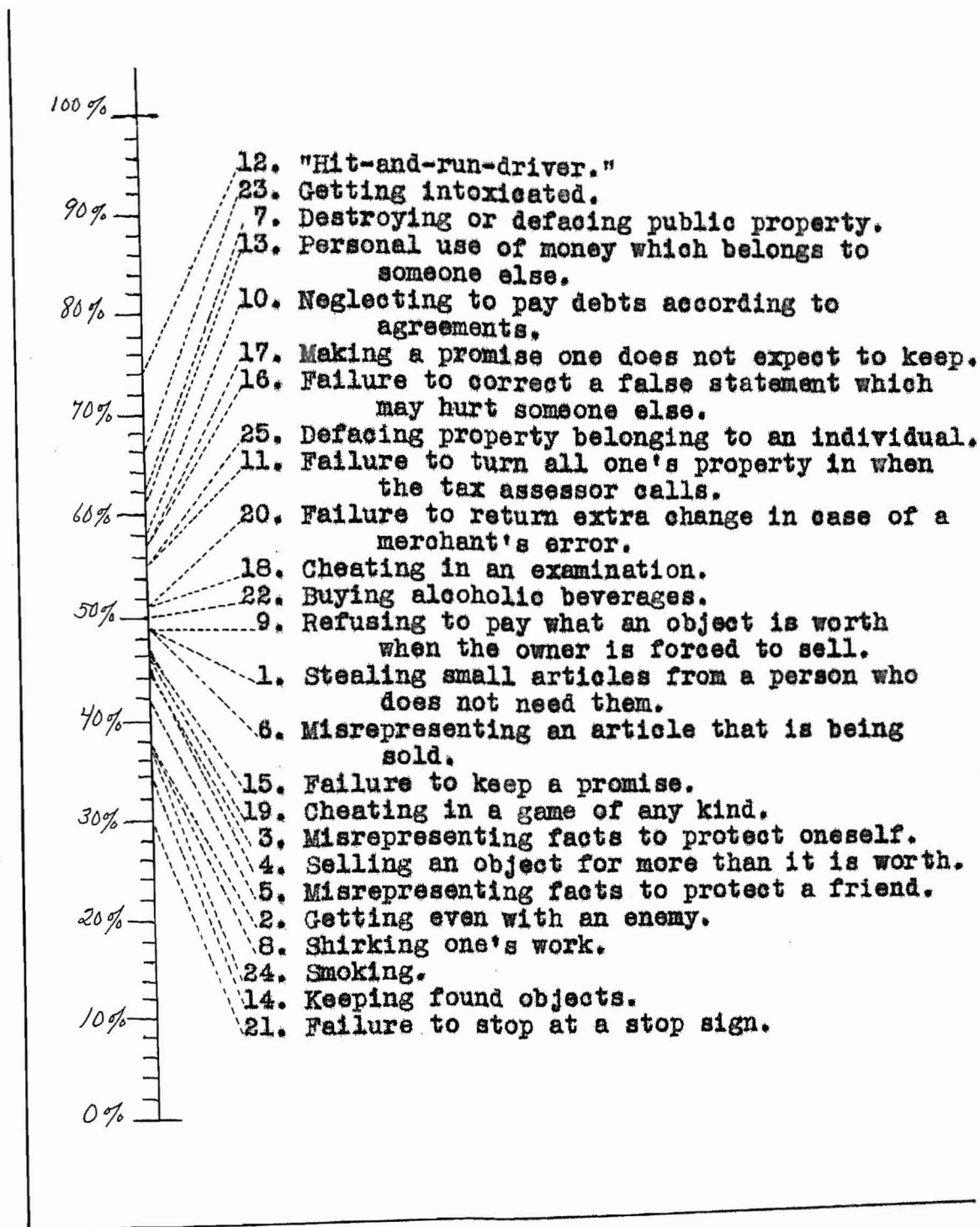


FIGURE V. A Scale showing the percentage of preference by the Junior High Students of the 25 statements. (Preference refers to degree of seriousness of statements, e.g., statement 12 is regarded worse than all the others, and is found at the top of the scale with a percentage of preference of approximately 74.)

In the foregoing tables and figures very few, if any, differences are evident between the various adult groups, although there appear to be a greater difference between the combined adult groups and the junior high students. Figure VI, which follows, shows a comparison of the two latter groups in terms of per cents of preference on the scale used in the preceding figures. Figure VI is followed by Figure VII which sets forth the same information in the form of a graph. Figures VI and VII not only point out the differences, but show the extent of difference of opinion between the students and the adults.

In Figure VII the per cents of preference were arranged horizontally in ascending order, while the statements were arranged vertically in ascending order of preference to the right by the combined adult groups. The graph of the combined adult groups is shown by the black line, and that of the junior high students by a red line.

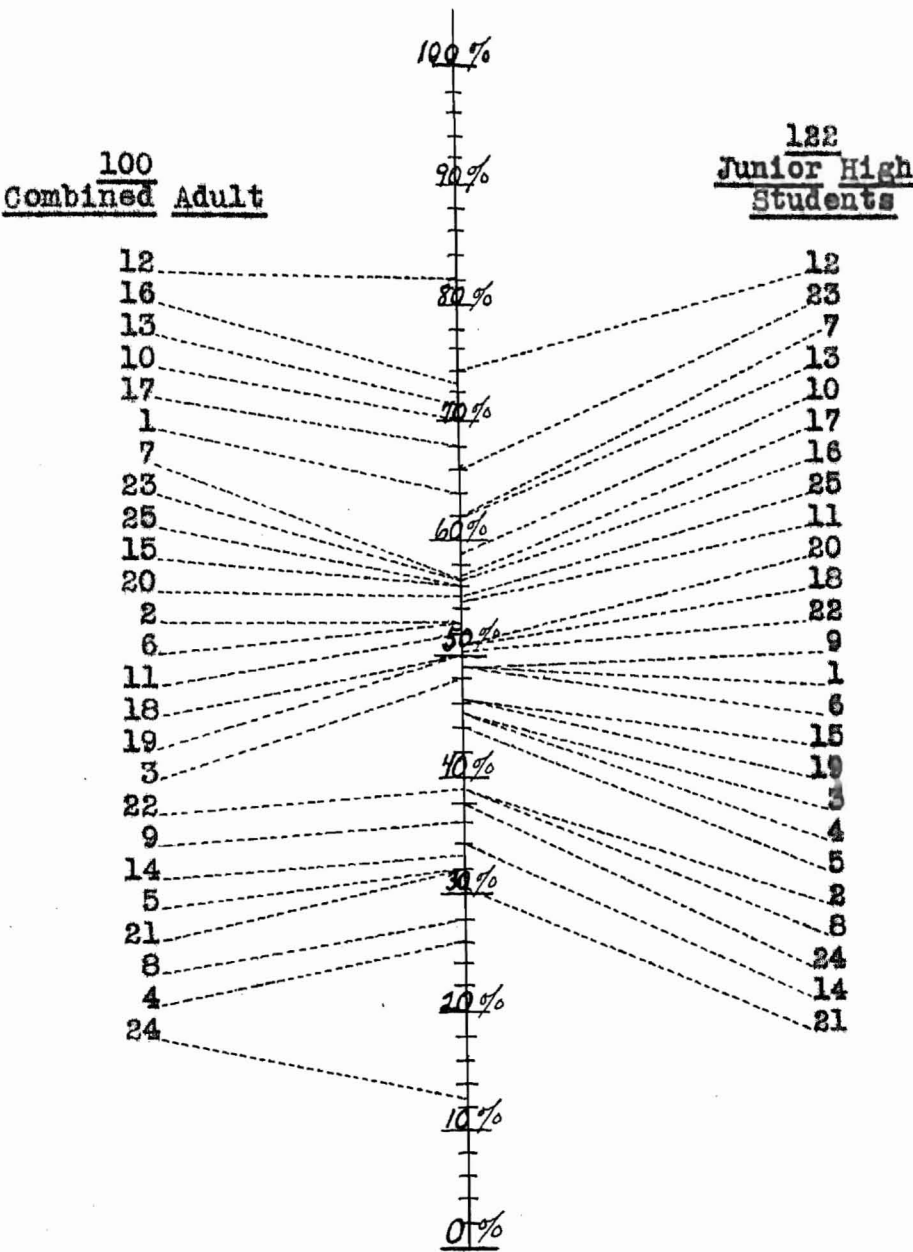


FIGURE VI. A Scale showing a comparison of the percentage of preference between the 100 Combined Adult scores and those of the 122 Junior High Students. (Preference refers to degree of seriousness of statements, e.g., statement 12 is regarded worse than all the others, and is found at the top of the scale.) The numbers in the columns refer to the respective statements in Figures IV and V.

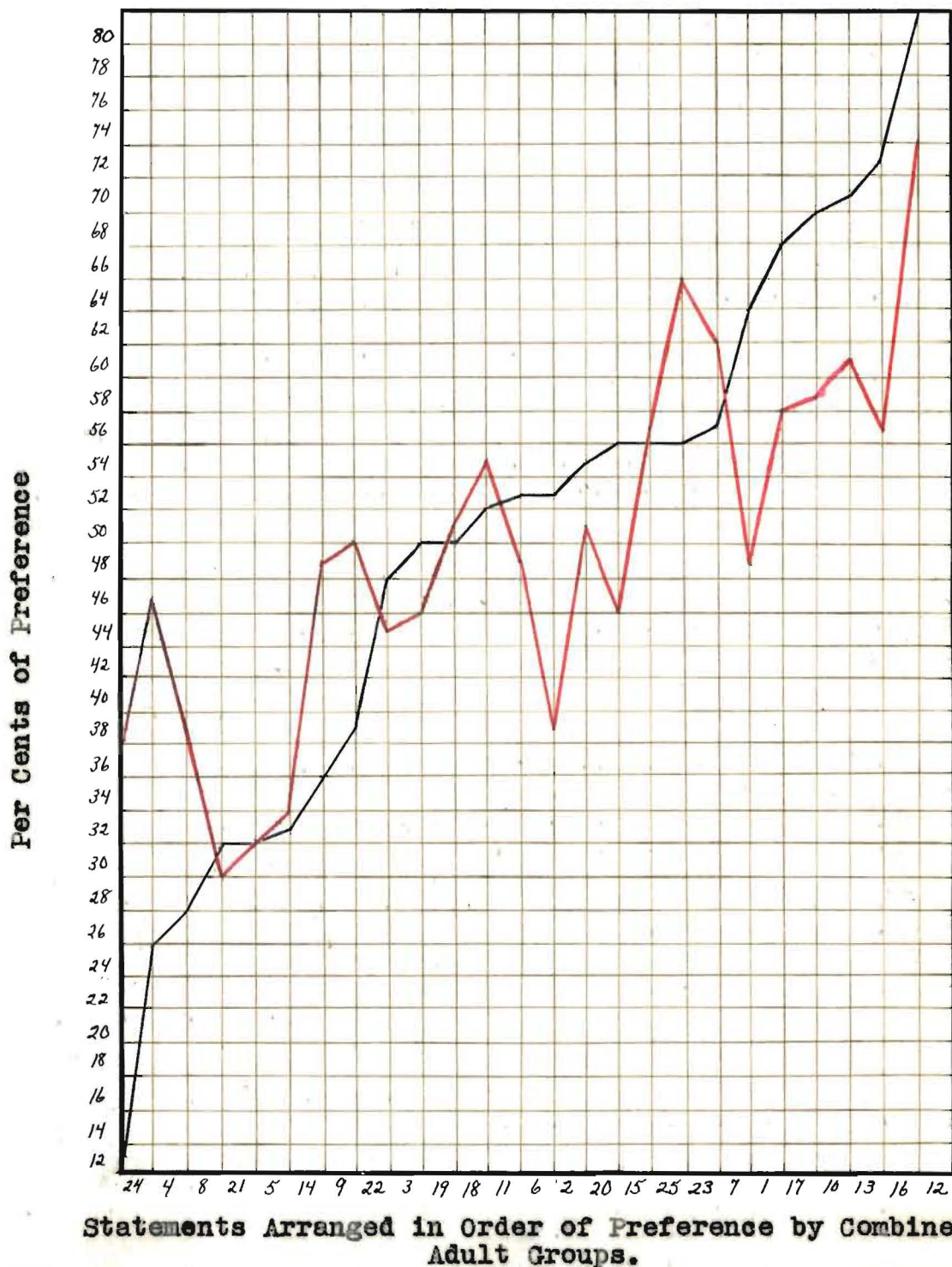


FIGURE VII. A graph showing a comparison between the Combined Adult Groups and the Junior High Students in per cents of preference. (Preference refers to degree of seriousness, e.g., statement 12 is considered the most serious by both groups.) Black line is graph of Combined Adult Groups. Red line of Junior High Students. (See pages 25 and 26 for statements.)

Figures VI and VII show the difference between the opinions of the adults and the students. The significance of these differences is better illustrated in Table VIII which is found on the following page. Comparisons have been made here in terms of coefficients of correlation which illustrate mathematical evaluations of the extent of similarity and difference in the scores given the statements by the groups studied. These scores may be found at the foot of Tables I to V, pages 31, 34, 35, 36, and 37 listed as total preference numbers. These numbers correspond to the total number of times each of the statements were selected as being the most serious.

TABLE VIII

A TABLE SHOWING COMPARISONS OF ALL POSSIBLE COEFFICIENTS OF CORRELATION BETWEEN TOTAL PREFERENCE SCORES OF EACH OF THE FOLLOWING: ROTARY CLUB, LIONS CLUB, SIXTY-FIVE ADULTS SELECTED AT RANDOM, THE COMBINED ADULT GROUPS, AND THE JUNIOR HIGH STUDENTS

Group Comparisons	Coefficients of Correlation
<u>Adult Group Comparisons</u>	
Lions Club and Rotary Club	.883
Lions Club and The Sixty-Five Adults	.879
Lions Club and Combined Adult Groups	.950
Rotary Club and The Sixty-Five Adults	.968
Rotary Club and Combined Adult Groups	.963
The Sixty-Five Adults and Combined Adult Groups	.978
<u>Average of Adult Group Comparisons</u>	.937
<u>Comparison of Adult Groups With Junior High Students</u>	
Lions Club and Junior High Students	.717
Rotary Club and Junior High Students	.629
The Sixty-Five Adults and Junior High Students	.668
Combined Adult Groups and Junior High Students	.757
<u>Average for Adult Groups When Compared With Junior High Students</u>	.693
Difference Between the Average of the Various Adult Group Comparisons and the Average for the Adult Groups When Compared with the Junior High Students	.244
Difference Between the Coefficient of Correlation of the Comparison of Combined Adult Groups with Junior High Students and the Average of the Coefficients of Correlation for the Comparisons of the Various Adult Groups with One Another	.180
Average Difference	.212

In Table VIII a positive correlation was found in each comparison, and the coefficients all run high, the lowest being .629 between the Rotary Club and the Junior High Students, while the highest, .978, was between the sixty-five adults selected at random and the combined adult group. The latter comparison was expected to yield a high coefficient, however, since these sixty-five adults also made up sixty-five per cent of the combined adult group. The highest coefficient of correlation was .968 which was derived from the comparison of the Rotary Club with the sixty-five adults selected at random. The lowest coefficient of correlation found among the comparisons of the adult groups was .879. The average of the coefficients derived from comparisons of the adult groups was .937.

The highest coefficient of correlation found when the adult groups were compared with the students was .757. The lowest was .629, and the average was .693. Since the average for the adult comparisons with one another was .937, this made an average difference of .244 between coefficients of correlation derived when the adult groups were compared with one another and when they were compared with the students.

When the scores of the combined adult groups were compared with the scores of the students a coefficient of correlation of .757 was obtained. When this coefficient is subtracted from the average of the coefficients of correlation found in the comparisons of the adult groups with one another there is a difference of .180. Now, by adding the two differences together and dividing by two the average of the differences in each case is

found to be .212. Thus the average difference between the adults and the students might be said to be something more than twenty per cent, while the greatest difference between the coefficients of correlation when the adult groups were compared with one another was .099, or approximately ten per cent. Hence, the difference between the opinions of the students and the adults might be estimated to be more than twice as great as the greatest difference that existed between the opinions of the various adult groups.

SUMMARY

A scale has been constructed by the method of paired comparison to determine the relative degree of seriousness with which a group of junior high school students and adult citizens hold the twenty-five statements of socially undesirable conduct. The study not only gives the rank order of the statements as they represent the opinions of each group, but it also gives the scale distance between the various statements. That is, it is possible to determine by inspecting the scales which of any two items is considered the more undesirable by the groups included in the study, and also how much more undesirable it is.

The attitudes of both students and adults were determined by means of the same test in which the subjects were asked to check the statement in each pair which they thought to be most serious. Every statement of conduct was paired with every one of the other twenty-four statements, making 300 comparisons in all. The attitudes of the adult and junior high school groups

have been compared. These comparisons were made in terms of (1) the per cents of preference (Figures I to VII, pp. 43, 44, 45, 46, 49, 50), (2) the ranking given each statement (Tables VI and VII, pp. 49, 50), and (3) in coefficients of correlation between the adult groups and the junior high students calculated from the original scores of the various groups (Table VIII, p. 52).

While the attitudes of the various adult groups differ, one group from another, as is shown in their ratings of the statements used in the test, the degree of difference here is slightly less than half as great as the difference that exists between the adults and the students.

The scores of the groups studied bear a close similarity as illustrated in the high coefficients of correlation derived from comparisons mentioned in Table VII, page 52. Upon the basis of this similarity of opinions between adults and students one is led to believe that the younger generation is not "going to the dogs" very much more rapidly than the one preceding it. To what extent students' opinions were the result of indoctrination by adults in the community is not revealed in this investigation.

BIBLIOGRAPHY

1. Allport, F. H., and G. W. "Personality Traits; Their Classification and Measurement;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 16, pp. 6-40 (1921).
2. Allport, F. H., and Hartman, D. A. "The Measurement and Motivation of Atypical Opinion in a Certain Group;" in AMERICAN POLITICAL SCIENCE REVIEW, Vol. 19, pp. 735-760 (1925).
3. Allport, F. H., and Hartman, D. A. "A Technique for the Measurement and Analysis of Public Opinion;" in AMER-SOCIOLOGICAL SOCIETY PUBLICATION, Vol. 20, pp. 241-244 (1926).
4. Allport, G. W. "The Study of the Undivided Personality;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 19, pp. 132-141 (1924).
5. Allport, G. W. "A Test for Ascendance-Submission;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 23, pp. 118-136 (1928).
6. Allport, G. W. "Concepts of Trait and Personality;" in PSYCHOLOGICAL BULLETIN, Vol. 24, pp. 284-293 (1927).
7. Allport, G. W. "The Composition of Political Attitudes;" in AMERICAN JOURNAL OF SOCIOLOGY, Vol. 35, pp. 220-238 (1929).
8. Allport, G. W., and Vernon, P. E. A Study of Values. Houghton Mifflin and Co., Boston, 1931.
9. Albig, William. "Opinions Concerning Unskilled Mexican Immigrants;" in SOCIOLOGY AND SOCIAL RESEARCH, Vol. 15, pp. 62-72 (1930).
10. Anderson, C. J. Social Attitudes of Athletes. M. A. Thesis, University of Texas, 1927.
11. Anderson, W. A. "The Occupational Attitudes and Choices of a Group of College Men;" in SOCIAL FORCES, Vol. 6, pp. 278-283 (1927); Vol. 6, pp. 467-473 (1928).
12. Angell, R. C. The Campus: A Study of Contemporary Undergraduate Life in the American University. Appleton Co., New York, 1928, 239 pages.
13. Arai, C. Cultural Conflicts in Homes of the Second-Generation Japanese. M. A. Thesis, University of Washington, 1929.

14. Arnett, Claude E., Davidson, H. H., and Lewis, H. H. "Prestige as a Factor in Attitude Changes;" in SOCIOLOGY AND SOCIAL RESEARCH, Vol. 16, pp. 49-55 (1931).
15. Babcock, M. E. A Comparison of Delinquent and Non-delinquent Boys by Objective Measures of Personality. Author, Honolulu, 1932.
16. Bain, Read. "An Attitude on Attitude Research;" in AMERICAN JOURNAL OF SOCIOLOGY, Vol. 33, pp. 940-957 (1928).
17. Bain, Read. "Theory of Measurement of Attitudes and Opinions;" in PSYCHOLOGICAL BULLETIN, Vol. 27, pp. 357-379 (1930). Gives a bibliography of the field since 1925.
18. Bain, Read. "Religious Attitudes of College Students;" in AMERICAN JOURNAL OF SOCIOLOGY, Vol. 32, pp. 762-770 (1927).
19. Bain, Read. "The Validity of Diaries and Life-Histories;" in JOURNAL OF EDUCATIONAL SOCIOLOGY, Vol. 3, pp. 150-164 (1929).
20. Bain, Read. "The Impersonal Confession and Social Research;" in JOURNAL OF APPLIED SOCIOLOGY, Vol. 9, pp. 351-356 (1925).
21. Bain, Read. "Stability in Questionnaire Response;" in AMERICAN JOURNAL OF SOCIOLOGY, Vol. 37, pp. 445-453 (1931).
22. Balch, E. Relationship of Social Case History to the Diagnosis and Treatment of Juvenile Delinquency. M. A. Thesis, University of Southern California, 1927.
23. Bamford, E. F. A Study of Social Attitudes. Doctoral Dissertation, University of Southern California, 1928.
24. Barrett, M. "The Order of Merit Method and the Method of Paired Comparisons;" in JOURNAL OF PHILOSOPHY, Vol. 10, pp. 382-384, July 3, 1913). See also PSYCHOLOGICAL REVIEW, Vol. 21, pp. 278-294 (1914).
25. Beckham, Albert Sidney. "A Study of Race Attitudes in Negro Children of Adolescent Age;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 29, pp. 18-29 (1934).
26. Bellman, E. S. Men's Attitudes Toward Outside Activities of Married Women, M. A. Thesis, University of Kansas, 1929.
27. Bernard, L. L. Introduction to Social Psychology. Holt and Co., New York, 1926, pp. 246-261; Bibliography, pp. 613-615.

28. Bernays, E. L. "Manipulating Public Opinion: The Why and the How;" in AMERICAN JOURNAL OF SOCIOLOGY, Vol. 33, pp. 958-971 (1928).
29. Biddle, W. W. "Propaganda and Education;" in TEACHERS COLLEGE CONTRIBUTION TO EDUCATION, No. 531, pp. vii-84.
30. Binnewies, W. G. "A Method of Studying Rural Social Distance;" in JOURNAL OF APPLIED SOCIOLOGY, Vol. 10, pp. 239-242 (1926).
31. Binnewies, W. G. "Measuring Changes in Opinion;" in SOCIOLOGY AND SOCIAL RESEARCH, Vol. 16, pp. 143-148 (1931).
32. Binnewies, W. G. "The Measurement of Community Spirit;" in SOCIOLOGY AND SOCIAL RESEARCH, Vol. 12, pp. 264-267 (1928).
33. Blanchard, P., and Manasses, C. New Girls for Old. Macaulay, New York, 1930.
34. Blanchard, P., and Paynter, R. H. "Changing the Child's Behavior by Indirect Methods;" in JOURNAL OF APPLIED SOCIOLOGY, Vol. 9, pp. 425-436 (1925).
35. Blanchard, P., and Paynter, R. H. "Changing the Child's Behavior by Indirect Methods;" in JOURNAL OF APPLIED SOCIOLOGY, Vol. 9, pp. 338-350 (1925).
36. Blanchard, P., and Paynter, R. H. The Educational Achievement of Children with Personality and Behavior Difficulties. Joint Committee on Methods of Preventing Delinquency, New York, 1928.
37. Blanchard, P., and Paynter, R. H., "The Socio-Psychological Status of Children from Marginal Families;" in FAMILY, Vol. 8, pp. 3-10 (1927).
38. Bogardus, E. S. "Community Life Histories;" in JOURNAL OF APPLIED SOCIOLOGY, Vol. 11, pp. 370-378 (1927).
39. Bogardus, E. S. "Social Distance and Its Origins;" in JOURNAL OF APPLIED SOCIOLOGY, Vol. 9, pp. 216-226 (1925).
40. Bogardus, E. S. "Measuring Social Distance;" in JOURNAL OF APPLIED SOCIOLOGY, Vol. 9, pp. 299-308 (1925).
41. Bogardus, E. S. "Static Social Distance;" in JOURNAL OF APPLIED SOCIOLOGY, Vol. 11, pp. 579-583 (1927).
42. Bogardus, E. S. "Social Distance in the City;" in PROCEEDINGS OF THE AMERICAN SOCIOLOGICAL SOCIETY, Vol. 20, pp. 40-46 (1926).

43. Bogardus, E. S. "Social Distance Between Groups;" in JOURNAL OF APPLIED SOCIOLOGY, Vol. 10, pp. 473-479 (1926).
44. Bogardus, E. S. "Mutations of Social Distance;" in JOURNAL OF APPLIED SOCIOLOGY, Vol. 11, pp. 77-84 (1926).
45. Bogardus, E. S. "Race Friendliness and Social Distance;" in JOURNAL OF APPLIED SOCIOLOGY, Vol. 11, pp. 272-287 (1927).
46. Bogardus, E. S. Immigration and Race Attitudes. D. C. Heath & Co., New York, 1928.
47. Bogardus, E. S. "Sex Differences in Racial Attitudes;" in SOCIOLOGY AND SOCIAL RESEARCH, Vol. 12, pp. 279-285 (1928).
48. Bogardus, E. S. "Occupational Distance;" in SOCIOLOGY AND SOCIAL RESEARCH, Vol. 13, pp. 73-81 (1928).
49. Bogardus, E. S. "American Attitudes Toward Filipinos;" in SOCIOLOGY AND SOCIAL RESEARCH, Vol. 14, pp. 59-69 (1929).
50. Bogardus, E. S. "Filipino Immigrant Attitudes;" in SOCIOLOGY AND SOCIAL RESEARCH, Vol. 14, pp. 469-479 (1930).
51. Bogardus, E. S. "Analyzing Changes in Public Opinion;" in JOURNAL OF APPLIED SOCIOLOGY, Vol. 9, pp. 372-381 (1925).
52. Bogardus, E. S. "Personality and Occupational Attitudes;" in SOCIOLOGY AND SOCIAL RESEARCH, Vol. 12, pp. 73-79 (1927).
53. Bogardus, E. S. "Leadership and Social Distance;" in SOCIOLOGY AND SOCIAL RESEARCH, Vol. 12, pp. 173-178 (1927).
54. Bogardus, E. S. "Leadership and Attitudes;" in SOCIOLOGY AND SOCIAL RESEARCH, Vol. 13, pp. 376-381 (1929).
55. Bogardus, E. S. Fundamentals of Social Psychology. Century Co., 1924, chapter v.
56. Bogardus, E. S. "Exploring for the Causes of Crime;" in SOCIAL FORCES, Vol. 3, pp. 464-466 (1928).
57. Boynton, P. "A Study of the Relationship Between the Intelligence and Moral Judgments of College Students;" in G. PEABODY COLLEGE FOR TEACHERS CONTRIBUTION TO EDUCATION, No. 51 (1929).
58. Bridges, J. W. "Emotional Instability of College Students;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 22, pp. 227-234 (1927).
59. Bridges, K. M. B. "Occupational Interests of Three-Year-Old Children;" in PEDAGOGICAL SEMINAR, Vol. 34, pp. 415-423 (1927).

60. Brietz, M. Case Studies of Delinquent Girls in North Carolina. M. A. Thesis, University of North Carolina, 1928.
61. Brogan, A. P. "Moral Valuations About Men and Women;" in INTERNATIONAL JOURNAL OF ETHICS, Vol. 35, pp. 105-124 (1925).
62. Brogan, A. P. "What Is a Sin in College?" NATION, Vol. 120, pp. 570-571 (1925).
63. Brown, G. V. A Study of Changes in Social Attitudes: With Particular Reference to the Columbia Conserve Company. M. A. Thesis, University of Cincinnati, 1929.
64. Brotemarkle, R. A. "The Analytical Study of the Student Personnel Problem;" in JOURNAL OF APPLIED PSYCHOLOGY, Vol. 13, pp. 1-42 (1928).
65. Brown, L. G. "The Development of Diverse Patterns of Behavior Among Children of the Same Family;" in FAMILY, Vol. 9, pp. 35-39 (1928).
66. Burgess, E. W. "The Family and the Person;" in PROCEEDINGS OF THE AMERICAN SOCIOLOGICAL SOCIETY, Vol. 22, pp. 133-143 (1928).
67. Burgess, E. W. "Statistics and Case Studies;" in SOCIOLOGY AND SOCIAL RESEARCH, Vol. 12, pp. 103-120 (1927).
68. Busch, H. M. "Race Attitudes of Children;" in RELIGIOUS EDUCATION, Vol. 21, pp. 277-281 (1926).
69. Calkins, Dorothy M. "Social Situations and Religious Attitudes;" in SOCIOLOGY AND SOCIAL RESEARCH, Vol. 14, pp. 249-255 (1930).
70. Calkins, D. M. The Social Background and Development of Religious Attitudes of a Selected Group. M. A. Thesis, University of Southern California, 1927.
71. Carlson, H. S. "Information and Certainty in Political Opinions: A Study of University Students During a Campaign;" in UNIVERSITY OF IOWA STUDENT, Vol. 4, No. 1, 48 pages, 1931.
72. Carmichael, A. M. "To What Objective Stimuli do Six-year-old Children Respond with Intentional Misrepresentation of Facts?" in JOURNAL OF GENETIC PSYCHOLOGY, Vol. 35, pp. 73-83 (1928).
73. Catlin, G. E. G. "The Delimitation and Measurability of Political Phenomena;" in AMERICAN POLITICAL SCIENCE REVIEW, Vol. 21, pp. 255-269 (1927).

74. Cavan, R. T., and Cavan, J. T. "The Attitudes of Young Business Women Toward Home and Married Life;" in RELIGIOUS EDUCATION, Vol. 22, pp. 817-820 (1927).
75. Chambers, E. V. "A Study of Dishonesty Among the Students of a Parochial Secondary School;" in PEDAGOGICAL SEMINAR, Vol. 33, pp. 717-728 (1926).
76. Chapin, F. S. Cultural Change. Century Co., New York, 1928, pp. 425-437.
77. Chapin, F. S. "Measuring the Volume of Social Stimuli: A Study in Social Psychology;" in SOCIAL FORCES, Vol. 4, pp. 479-495 (1926).
78. Chave, E. J. "A New Type of Scale for Measuring Attitudes;" in RELIGIOUS EDUCATION, Vol. 23, pp. 364-369 (1928).
79. Chave, E. J. "Measurement of Ideas of God;" in RELIGIOUS EDUCATION, Vol. 27, pp. 252-254 (1932).
80. Chave, E. J., and Thurstone, L. L. A Scale for Measuring Attitude Toward God. University of Chicago Press, Chicago, 1931.
81. Clark, E. L. "The Value of Student Interviews;" in JOURNAL OF PERSONNEL RESEARCH, Vol. 5, pp. 204-207 (1926).
82. Clark, W. W. "The Measurement of Social Attitudes;" in JOURNAL OF APPLIED SOCIOLOGY, Vol. 8, pp. 345-354 (1924).
83. Clevett, M. A. "An Experiment in Physical Education Activities Related to the Teaching of Honesty and Motor Skills;" in RESEARCH QUARTERLY OF AMERICAN PHYSICAL EDUCATION ASSOCIATION, Vol. 3, pp. 121-127 (1932).
84. Coe, G. A. "What Teachers of Secondary Education Think of Military Training in High Schools;" in SCHOOL AND SOCIETY, Vol. 26, pp. 174-178 (1927).
85. Cooley, C. H. "The Life-Study Method as Applied to Rural Social Research;" in PROCEEDINGS OF THE AMERICAN SOCIOLOGICAL SOCIETY, Vol. 23, pp. 248-254 (1929).
86. Cooley, C. H. "The Case Study of Small Institutions as a Method of Research;" in PROCEEDINGS OF THE AMERICAN SOCIOLOGICAL SOCIETY, Vol. 22, pp. 123-132 (1928).
87. Conklin, E. S. "The Determination of Normal Extrovert-Introvert Interest Differences;" in PEDAGOGICAL SEMINAR, Vol. 34, pp. 28-37 (1927).
88. Conklin, E. S. "Some Mental Effects of Menstruation;" in PEDAGOGICAL SEMINAR, Vol. 34, pp. 557-567 (1927).

89. Courthial, A. "Emotional Differences of Delinquent and Non-delinquent Girls of Normal Intelligence;" in ARCHIVES OF PSYCHOLOGY, No. 133, p. 100 (1931).
90. Cowdery, K. M. "The Measurement of Professional Attitudes: Differences Between Lawyers, Physicians, and Engineers;" in JOURNAL OF PERSONNEL RESEARCH, Vol. 5, pp. 131-141 (1926)
91. Crosland, H. R., and Beck, L. F. "Objective Measurements of Emotion. A Symposium of Three Experimental Papers;" in UNIVERSITY OF OREGON PUBLICATION, Vol. 1, No. 3, pp. 133-202 (1931).
92. Daniel, R. P. "A Psychological Study of Delinquent and Non-delinquent Negro Boys;" in TEACHERS COLLEGE CONTRIBUTION TO EDUCATION, No. 546, pp. vi-59 (1932).
93. Davis, J. "Testing the Social Attitudes of Children in the Government Schools in Russia;" in AMERICAN JOURNAL OF SOCIOLOGY, Vol. 32, pp. 947-952 (1927).
94. Dewey J. Human Nature and Conduct. Holt & Co., New York, 1922.
95. Donnelly, H. I. Measuring Certain Aspects of Faith in God. Westminster Press, New York, 1931, 118 pages.
96. Droba, D. D. The Measurement of Social Attitudes. 2. Attitude Toward War. University of Chicago Press, Chicago, 1930.
97. Droba, D. D. A Scale for Measuring Attitude Toward War. University of Chicago Press, Chicago, 1930.
98. Droba, D. D. "A Scale of Militarism-Pacifism;" in JOURNAL OF EDUCATIONAL PSYCHOLOGY, Vol. 22, pp. 96-111 (1931).
99. Droba, D. D. "Statements as Opinion Indicators;" in SOCIOLOGY AND SOCIAL RESEARCH, Vol. 15, pp. 555-557 (1931).
100. Droba, D. D. "Effect of Various Factors on Militarism-Pacifism;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 26, pp. 141-153 (1931).
101. Droba, D. D. "Methods Used for Measuring Public Opinion;" in AMERICAN JOURNAL OF SOCIOLOGY, Vol. 37, pp. 410-423 (1931).
102. Droba, D. D. "Education and Negro Attitudes;" in SOCIOLOGY AND SOCIAL RESEARCH, Vol. 17, pp. 137-141 (1932).
103. Dudycha, G. J. "The Moral and Popular Beliefs of College Freshmen;" in SCHOOL AND SOCIETY, Vol. 32, pp. 69-72 (1930).

104. Dudycha, G. J. "The Religious Beliefs of College Freshmen;" in SCHOOL AND SOCIETY, Vol. 31, pp. 206-208 (1930).
105. Dudycha, G. J. "The Social Beliefs of College Seniors;" in AMERICAN JOURNAL OF SOCIOLOGY, Vol. 37, pp. 775-780 (1932).
106. Faris, E. "The Nature of Human Nature;" in PROCEEDINGS OF AMERICAN SOCIOLOGICAL SOCIETY, Vol. 20, pp. 15-29 (1926).
107. Faris, E. "The Subjective Aspect of Culture;" in PROCEEDINGS OF AMERICAN SOCIOLOGICAL SOCIETY, Vol. 19, pp. 37-46 (1925).
108. Faris, E. "Attitudes and Behavior;" in AMERICAN JOURNAL OF SOCIOLOGY, Vol. 34, pp. 271-281 (1928).
109. Faris, E. "The Concept of Social Attitudes;" in JOURNAL OF APPLIED SOCIOLOGY, Vol. 9, pp. 404-409 (1925).
110. Faris, E. "Social Psychology in America; A Topical Summary of Current Literature;" in AMERICAN JOURNAL OF SOCIOLOGY, Vol. 34, pp. 623-630 (1927). A Bibliographical review.
111. Fenton, N. "The Only Child;" in JOURNAL OF GENETIC PSYCHOLOGY, Vol. 35, pp. 546-555 (1928).
112. Fisher, L. A Study of the Life-Histories of Twenty Delinquent Girls. M. A. Thesis, University of Southern California, 1927.
113. Flugel, J. C. "On the Mental Attitude to Present Day Clothes;" in BRITISH JOURNAL OF MEDICAL PSYCHOLOGY, Vol. 9, pp. 97-149 (1929).
114. Folsom, J. K. "The Conditioned Response and Personality;" in INDUSTRIAL PSYCHOLOGY, Vol. 1, pp. 804-810 (1926).
115. Folsom, J. K. Social Psychology. Harper & Brothers, New York, 1931.
116. Frederick, R. "An Investigation into Some Social Attitudes of High School Pupils;" in SCHOOL AND SOCIETY, Vol. 25, pp. 410-412 (1927).
117. Freyd, M. "The Measurement of Interests in Vocational Selection;" in JOURNAL OF PERSONNEL RESEARCH, Vol. 1, pp. 310-328 (1922).
118. Freyd, M. "The Graphic Rating Scale;" in JOURNAL OF EDUCATIONAL PSYCHOLOGY, Vol. 14, pp. 83-102 (1923).
119. Freyer, D. "Predicting Abilities from Interest;" in JOURNAL OF APPLIED PSYCHOLOGY, Vol. 11, pp. 212-225 (1927). Short Bibliography.

120. Garrett, H. E. "Jews and Others; Some Group Differences in Personality, Intelligence and College Achievement;" in PERSONNEL JOURNAL, Vol. 7, pp. 341-348 (1928).
121. Garrett, H. E. "Personality as 'Habit Organization;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 21, pp. 250-255 (1926).
122. Garrison, K. C., and Mann, Margaret. "A Study of the Opinions of College Students;" in JOURNAL OF SOCIAL PSYCHOLOGY, Vol. 2, pp. 168-178 (1931).
123. Gibson, W. L. Comparative Study of the Immigrant and Negro Press in Their Relation to Social Attitudes. M. A. Thesis, Ohio State University, 1927.
124. Gilliland, A. R. "A Study of the Superstitions of College Students;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 24, pp. 472-479 (1930).
125. Gross, A. J. The Family as a Builder of Social Attitudes. M. A. Thesis, Baylor University.
126. Guilford, J. P. "Some Empirical Tests of the Method of Paired Comparisons;" in JOURNAL OF GENERAL PSYCHOLOGY, Vol. 5, pp. 64-77 (1931).
127. Guilford, J. P. "Racial Preference of a Thousand American University Students;" in JOURNAL OF SOCIAL PSYCHOLOGY, Vol. 2, pp. 179-204 (1931).
128. Guilford, J. P. "An Attempted Study of Emotional Tendencies in Criminals;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 21, pp. 240-244 (1926).
129. Guilford, J. P. "The Method of Paired Comparisons as a Psychometric Method;" in PSYCHOLOGICAL REVIEW, Vol. 35, pp. 494-506 (1928).
130. Guthrie, E. F. Crises in Personality. Doctoral dissertation, University of Washington, 1930.
131. Guthrie, E. R. "Measuring Student Opinion of Teachers;" in SCHOOL AND SOCIETY, Vol. 25, pp. 175-176 (1927).
132. Guthrie, E. R. "Measuring Introversiion and Extroversiion;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 22, pp. 82-88 (1927). A Bibliography.
133. Haggerty, M. E. "The Incidence of Undesirable Behavior in Public School Children;" in JOURNAL OF EDUCATIONAL RESEARCH, Vol. 12, pp. 102-122 (1925).

134. Harper, H. R. What European and American Students Think on International Problems. Teachers College Bureau of Publications, Columbia University, New York, 1931, 255 pages.
135. Harper, M. H. "Social Beliefs and Attitudes of American Educators;" in COLUMBIA UNIVERSITY, TEACHERS COLLEGE CONTRIBUTION TO EDUCATION, No. 294 (1927) 91 pages.
136. Harris, A. J., and Remmers, H. H., and Ellison, C. E. "The Relation Between Liberal and Conservative Attitudes in College Students, and Other Factors;" in JOURNAL OF SOCIAL PSYCHOLOGY, Vol. 3, pp. 320-336 (1932).
137. Hart, H. "A Test of Social Attitudes and Interests;" in UNIVERSITY OF IOWA STUDENT IN CHILD WELFARE, II, No. 4, 1923, 40 pages. Good Bibliography.
138. Hart, H. "The Transformation of Motivation;" in AMERICAN JOURNAL OF SOCIOLOGY, Vol. 35, pp. 588-600 (1930).
139. Hartshorne, H., and May, M. A. "First Steps Toward a Scale for Measuring Attitudes;" in JOURNAL OF EDUCATIONAL PSYCHOLOGY, Vol. 17, pp. 145-162 (1926).
140. Hartshorne, H., and May, M. A. Studies in Service and Self-Control. Macmillan, New York, 1929.
141. Hartshorne, H., and May, M. A. Studies in Deceit. Macmillan, New York, 1928.
142. Hartshorne, H., and May, M. A., Et Al. "Testing the Knowledge of Right and Wrong;" in RELIGIOUS EDUCATION, Vol. 21, pp. 539-554 (1926).
143. Hawthorn, H. B. "Methods of Studying Personality Developments in Rural and Urban Groups;" in PROCEEDINGS OF AMERICAN SOCIOLOGICAL SOCIETY, Vol. 23, pp. 274-283 (1929).
144. Hawthorne, J. W. "A Group Test for the Measurement of Cruelty-Compassion: A Proposed Means of Recognizing Potential Criminality;" in JOURNAL OF SOCIAL PSYCHOLOGY, Vol. 3, pp. 189-211 (1932).
145. Healy, W., and Bronner, A. F. Case Studies. Judge Baker Foundation, Boston, 1922-23.
146. Healy, W. The Individual Delinquent. Little, Brown, & Co., 1920. Especially Book I, pp. 3-182.
147. Heidbreder, E. F. "The Normal Inferiority Complex;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 22, pp. 243-258 (1927).

148. Heidbreder, E. F. "Introversion and Extroversion in Men and Women;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 22, pp. 52-61 (1927).
149. Heidbreder, E. F. "Measuring Introversion and Extroversion;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 21, pp. 120-134 (1926).
150. Hersey, R. B. "Periodic Emotional Changes in Male Workers;" in PERSONNEL JOURNAL, Vol. 7, pp. 459-464 (1929).
151. Hevner, Kate. "A Comparative Study of Three Psychophysical Methods;" in JOURNAL OF GENERAL PSYCHOLOGY, Vol. 4, pp. 191-212 (1930).
152. Hewlett, T. C., and Lester, O. P. "Measuring Introversion and Extroversion;" in PERSONNEL JOURNAL, Vol. 6, pp. 352-360 (1927).
153. Hinckley, E. D. A Scale for Measuring Attitudes Toward the Negro. University of Chicago Press, Chicago, 1930.
154. Hinckley, E. D. "The Influence of Individual Opinion on Construction of an Attitude Scale;" in JOURNAL OF SOCIAL PSYCHOLOGY, Vol. 3, pp. 283-296 (1932).
155. Hoffman, O. F. "The Nature of Life-Histories;" in JOURNAL OF APPLIED SOCIOLOGY, Vol. 11, pp. 147-159 (1926).
156. Holt, E. B. The Freudian Wish. Holt & Co., New York, 1915, Especially Chapters iii and iv.
157. House, F. N. "Wishes and Attitudes as Social Forces;" in AMERICAN JOURNAL OF SOCIOLOGY, Vol. 31, pp. 512-525.
158. House, F. N. The Range of Social Theory. Holt & Co., New York, 1929, Chapter xv, especially pp. 192-199.
159. Hubbard, R. M. "Interest Studied Quantitatively;" in JOURNAL OF PERSONNEL RESEARCH, Vol. 4, pp. 365-378 (1926).
160. Hughes, W. H. "Relation of Intelligence to Trait Characteristics;" in JOURNAL OF EDUCATIONAL PSYCHOLOGY, Vol. 17, pp. 482-494 (1926).
161. Hull, C. L. "Variability in the Amount of Different Traits Possessed by the Individual;" in JOURNAL OF EDUCATIONAL PSYCHOLOGY, Vol. 18, pp. 97-106 (1927).
162. Hurd, F. Influence of the Motion Picture on Attitudes; M. A. Thesis, Dartmouth College, 1929.
163. Hypes, J. L. "The Social Distance Score-Card as a Teaching Device;" in SOCIAL FORCES, Vol. 7, pp. 234-237 (1928).

164. Jasper, H. H. "Optimism and Pessimism in College Engineers;" in AMERICAN JOURNAL OF SOCIOLOGY, Vol. 34, pp. 856-873 (1929).
165. Jochev, K. "The Case Method in Social Research;" in SOCIAL FORCES, Vol. 7, pp. 203-211 (1928). Bibliography.
166. Johnson, Charles S. "Measurement of Racial Attitudes;" in AMERICAN SOCIOLOGICAL SOCIETY PUBLICATIONS, Vol. 25, pp. 150-153 (1931).
167. Johnson, G. B. "Newspaper Advertisements and Negro Culture;" in SOCIAL FORCES, Vol. 3, pp. 706-709 (1925).
168. Jones, E. S. "Opinions of College Students;" in JOURNAL OF APPLIED PSYCHOLOGY, Vol. 10, pp. 427-436 (1926).
169. Jones, M. C. "The Elimination of Children's Fears;" in JOURNAL OF EXPERIMENTAL PSYCHOLOGY, Vol. 7, pp. 382-390 (1924).
170. Jones, M. C. "Conditioning and Unconditioning Emotions in Infants;" in CHILDHOOD EDUCATION, Vol. 1, pp. 317-322 (1925).
171. Jones, V. "Disagreement Among Teachers as to Right and Wrong;" in TEACHERS COLLEGE RECORD, Vol. 31, pp. 24-36 (1929).
172. Jones, V. "Ideas on Right and Wrong Among Teachers and Children;" in TEACHERS COLLEGE RECORD, Vol. 30, pp. 529-541 (1929).
173. Jordan, F. "A Study of Personal and Social Traits in Relation to High School Teaching;" in JOURNAL OF EDUCATIONAL SOCIOLOGY, Vol. 3, pp. 27-43 (1929).
174. Katz, D. "Student Opinion at Syracuse;" in PERSONNEL JOURNAL, Vol. 7, pp. 103-110 (1929).
175. Katz, D. A Scale for Measuring Attitude Toward the Law. University of Chicago Press, Chicago, 1931.
176. Katz, D. and Allport, F. H. Students' Attitudes. Craftsman Press, Syracuse, 1931.
177. Kelloway, W. F. "Young People's Attitudes Toward Worship;" in RELIGIOUS EDUCATION, Vol. 25, pp. 303-305 (1930).
178. Kershner, J. H. "Race Prejudice: A Form of Group Prejudice;" in JOURNAL OF APPLIED SOCIOLOGY, Vol. 11, pp. 446-452 (1927).
179. Kohler, W. Gestalt Psychology. H. Liveright, New York, 1929, pp. 184 ff, pp. 323 ff, and Chapters ix and x.

180. Koos, Leonard, The Questionnaire in Education. Macmillan Co., 1928.
181. Kornhauser, A. W. "Reliability of Average Ratings;" in PERSONNEL JOURNAL, Vol. 5, pp. 309-317 (1926).
182. Kornhauser, A. W. "Results from a Quantitative Questionnaire on Likes - Dislikes Used with a Group of College Freshmen;" in JOURNAL OF APPLIED PSYCHOLOGY, Vol. 11, pp. 85-94 (1927).
183. Kornhauser, A. W. "A Comparison of Raters;" in PERSONNEL JOURNAL, Vol. 5, pp. 309-317 (1926).
184. Kornhauser, A. W. "A Comparison of Ratings on Different Traits;" in PERSONNEL JOURNAL, Vol. 5, pp. 440-446 (1927).
185. Kornhauser, A. W. "Changes in the Information and Attitudes of Students in an Economic Course;" in JOURNAL OF EDUCATIONAL RESEARCH, Vol. 22, pp. 288-298 (1930).
186. Kreuger, E. F. "The Values of Life-History Documents for Social Research;" in JOURNAL OF APPLIED SOCIOLOGY, Vol. 9, pp. 196-201 (1925).
187. Kreuger, E. F. "The Technique of Securing Life-History Documents;" in JOURNAL OF APPLIED SOCIOLOGY, Vol. 9, pp. 290-298 (1925).
188. Kulp, D. H., and Davidson, H. H. "Can Neumann's 'Attitude Indicator' be Used as a Test?" in TEACHERS COLLEGE RESEARCH, Vol. 22, pp. 332-337 (1931).
189. Lapiere, R. T. "Race Prejudice: France and England;" in SOCIAL FORCES, Vol. 7, pp. 101-111 (1927).
190. Larson, J. A. Lying and Its Detection. University of Chicago Press, Chicago, 1932.
191. Lasker, Bruno. Jewish Experiences in America. The Inquiry, New York, 1930.
192. Lasker, Bruno. Race Attitudes in Children. Holt & Co., New York, 1929, 394 pages. Chapter xvi.
193. Lasswell, H. D. "The Theory of Political Propaganda;" in AMERICAN POLITICAL SCIENCE REVIEW, Vol. 31, pp. 627-231 (1927).
194. Lee, A. S. "Attitudes as a Factor of Teaching in Normal Schools;" in JOURNAL OF EDUCATIONAL SOCIOLOGY, Vol. 2, pp. 232-238 (1928).

195. Lehman, H. C., and Witty, P. A. "Play Interests as Evidence of Sex Differences in Aesthetic Appreciations;" in AMERICAN JOURNAL OF PSYCHOLOGY, Vol. 40, pp. 449-457 (1928).
196. Lehman, H. C., and Witty, P. A. "Some Compensatory Mechanisms of the Negro;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 23, pp. 28-37 (1928).
197. Lehman, H. C., and Witty, P. A. "Statistics Show--;" in JOURNAL OF EDUCATIONAL PSYCHOLOGY, Vol. 19, pp. 175-184 (1928). Bibliography.
198. Lentz, T. F., Jr. "Utilizing Opinion for Character Measurement;" in JOURNAL OF SOCIAL PSYCHOLOGY, Vol. 1, pp. 536-542 (1930).
199. Lentz, T. F., Hirshstein, B., and Finch, F. H. "Evaluation of Methods of Evaluating Test Items;" in JOURNAL OF EDUCATIONAL PSYCHOLOGY, Vol. 23, pp. 344-350 (1932).
200. Likert, R. "A Technique for the Measurement of Attitudes;" in ARCHIVES OF PSYCHOLOGY, No. 140, pp. 55 ff.
201. Lind, A. W. "Occupational Attitudes of Orientals in Hawaii;" in SOCIOLOGY AND SOCIAL RESEARCH, Vol. 13, pp. 245-255 (1929).
202. Lockhart, E. G. "The Attitudes of Children Toward Certain Laws;" in RELIGIOUS EDUCATION, Vol. 25, pp. 144-149 (1930).
203. Lockhart, E. G. "The Attitudes of Children Toward Law;" in IOWA STUDENT CHARACTER, Vol. 3, No. 1, 1930, 61 pages.
204. Lundberg, G. A. "The Demographic and Economic Basis of Political Radicalism and Conservatism;" in AMERICAN JOURNAL OF SOCIOLOGY, Vol. 32, pp. 719-732 (1927).
205. Lundberg, G. A. "The Newspaper and Public Opinion;" in SOCIAL FORCES, Vol. 4, pp. 709-715 (1926).
206. Lundberg, G. A. Social Research: A Study in the Methods of Gathering Data. Longmans, New York, 1929, Chapter ix, "Measurement of Attitudes." Bibliography.
207. Lundberg, G. A. "Sex Differences on Social Questions;" in SCHOOL AND SOCIETY, Vol. 23, pp. 596-600 (1926).
208. Lundeen, G. E., and Caldwell, O. W. "A Study of Unfolded Beliefs Among High School Seniors;" in JOURNAL OF EDUCATIONAL RESEARCH, Vol. 22, pp. 257-273 (1930).
209. Luria, A. R. The Nature of Human Conflicts. (Trans. by W. H. Gantt.) Liveright, New York, (1932) pp. xii-431.

210. Lynd, R. S. and H. M. Middletown, a Study in Contemporary American Culture. Harcourt, New York, 1929.
211. McChristie, M. E. "That Blamed Old Fool;" in SURVEY, Vol. 63, p. 21 (1929).
212. McChristie, M. E. "Peg's Permanent;" in SURVEY, Vol. 63, pp. 510 ff (1930).
213. McClenahan, B. A. The Changing Urban Neighborhood: A Sociological Study. University of Southern California Student, Social Science Series, 1929, No. 1, xi - 140.
214. McKay, H. D. The Development of Personality Traits. Doctoral dissertation, University of Chicago, 1930.
215. Maller, J. B. "The Measurement of Conflict Between Honesty and Group Loyalty;" in JOURNAL OF EDUCATIONAL PSYCHOLOGY, Vol. 23, pp. 187-191 (1932).
216. Maller, J. B. "The Personality of Jewish College Students;" in JEWISH EDUCATION, Vol. 3, p. 9 (1931).
217. Maller, J. B. "Size of Family and Personality of Offspring;" in JOURNAL OF SOCIAL PSYCHOLOGY, Vol. 2, pp. 3-27 (1931).
218. Manson, G. E. A Bibliography of the Analysis and Measurement of Human Personality up to 1926. National Research Council Reprint, No. 72, 1926.
219. Manson, G. E. "Bibliography on Psychological Tests and Other Objective Measures in Industrial Personnel;" in JOURNAL OF PERSONNEL RESEARCH, Vol. 4, pp. 310-328 (1926). Classified bibliography, titles pp. 539-650 especially valuable.
220. Markey, J. F. Trends in American Sociology. Harpers, New York, 1929, pp. 126-135.
221. Marston, L. R. The Emotions of Young Children: An Experimental Study in Introversiion and Extroversiion. University of Iowa Student in Child Welfare, Vol. 3, 1925, 99 pages.
222. Mathews, C. O. "The Effect of the Order of Printed Response-words on an Interest Questionnaire;" in JOURNAL OF EDUCATIONAL PSYCHOLOGY, Vol. 20, pp. 128-134 (1929).
223. May, M. A., and Hartshorne, H. "Personality and Character Tests;" in PSYCHOLOGY BULLETIN, Vol. 23, pp. 395-411 (1926); Vol. 24, pp. 418-435; Vol. 25, pp. 422-443; Vol. 26, pp. 418-444.
224. May, M. A., and Hartshorne, H. "Objective Methods of Measur-

- ing Character;" in PEDAGOGICAL SEMINAR, Vol. 32, pp. 45-67 (1925). Bibliography and review.
225. Meltzer, H. Children's Social Concepts. Teachers College Contribution to Education, No. 192, Columbia University, New York, 1925, 91 pages.
226. Miller, Kelly. "Is Race Prejudice Innate or Acquired?" in JOURNAL OF APPLIED SOCIOLOGY, Vol. 11, pp. 516-524 (1927).
227. Miller, R. M. "Superstitions Among College Students;" in SOCIOLOGY AND SOCIAL RESEARCH, Vol. 13, pp. 361-365 (1929).
228. Moore, Gwyn, and Garrison, K. C. "A Comparative Study of Social and Political Attitudes of College Students;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 27, pp. 195-208 (1932).
229. Moore, Henry T. "Innate Factors in Radicalism and Conservatism;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 20, pp. 234-244 (1925-26).
230. Morris, A. "Some Social and Mental Aspects of Mendicancy;" in SOCIAL FORCES, Vol. 5, pp. 605-613 (1927).
231. Murphy, Gardner, and Murphy, L. B. Experimental Social Psychology. Harpers, New York, 1931.
232. Myrick, H. L., and Sheffield, A. E. "Reflective By-Products of a Social Treatment Interview;" in SOCIAL FORCES, Vol. 3, pp. 657-665 (1925).
233. Nathan, M. The Attitude of the Jewish Student in the College and Universities Toward His Religion. A Social Study of Religious Changes. Bloch Publishing Co., New York, 1932, 264 pages.
234. Neumann, G. B. A Study of Interest Attitudes of High School Students. Teachers College Contribution to Education, No. 239, 1926, 126 pages.
235. Neumann, George G. A Study of International Attitudes of High School Students. Teachers College Contribution to Education, No. 239, 1926.
236. Neumann, Kulp, and Davidson. Test of International Attitudes. Bureau of Publications, Teachers College, Columbia University, New York, 1930.
237. Newcomb, R. C. An Analysis of the Concept Personality Type. M. A. Thesis, University of Chicago, 1929.
238. Nimkoff, M. The Role of the Family in the Formation and

Development of Certain Social Attitudes Among Children. Doctoral dissertation, University of Southern California, 1928.

239. Nimkoff, M. F. "Parent-Child Intimacy: An Introductory Study;" in SOCIAL FORCES, Vol. 7, pp. 244-249 (1928).
240. Odum, H. W., and Jocher, K. Introduction to Social Research. Holt & Co., New York, 1929. Especially Chapter xv.
241. Park, R. E. "The Concept of Social Distance;" in JOURNAL OF APPLIED SOCIOLOGY, Vol. 8, pp. 339-344 (1924).
242. Park, R. E., and Burgess, E. W. Introduction to the Science of Sociology. University of Chicago Press, Chicago, 1924, Chapter vii, "Social Forces;" especially pp. 438-443.
243. Pearson, R. R. The Social Modification of Possession Habits at the Pre-School Level. Doctoral dissertation, University of Chicago, 1929.
244. Perry, H. E. "The Questionnaire Method;" in JOURNAL OF APPLIED SOCIOLOGY, Vol. 10, pp. 155-158 (1925).
245. Peterson, Ruth C. A Scale for Measuring Attitude Toward Capital Punishment. University of Chicago Press, Chicago, 1931.
246. Peterson, Ruth C. A Scale for Measuring Attitude Toward the Chinese. University of Chicago Press, Chicago, 1931.
247. Peterson, Ruth C. A Scale for Measuring Attitude Toward the Germans. University of Chicago Press, Chicago, 1931.
248. Peterson, R. C., and Thurstone, L. L. "The Effect of a Motion Picture Film on Children's Attitudes Toward Germans;" in JOURNAL OF EDUCATIONAL PSYCHOLOGY, Vol. 23, pp. 241-246 (1932).
249. Pickett, J. Occupational Attitudes of Teachers in Relation to Their Social Status and Leadership in the Community. M. A. Thesis, University of Southern California, 1929.
250. Pintner, R. "Neurotic Tendency and Its Relation to Some Other Mental Traits;" in SCHOOL AND SOCIETY, Vol. 36, pp. 765-767 (1932).
251. Pitkin, W. B. The Psychology of Happiness. Simon and Schuster, New York, 1929. See pp. 33-41 for attitudes.
252. Poole, W. C., Jr. "Social Distance and Personal Distance;" in JOURNAL OF APPLIED SOCIOLOGY, Vol. 10, pp. 114-120 (1926).

253. Poole, W. C., Jr. "The Social Distance Margin Reviewed;" in SOCIOLOGY AND SOCIAL RESEARCH, Vol. 13, pp. 49-54 (1928).
254. Poole, W. C., Jr., and H. K. "The Laws of Social Distance;" in JOURNAL OF APPLIED SOCIOLOGY, Vol. 11, pp. 365-369 (1927).
255. Porter, Eliot. Student Opinion on War: An Investigation. Doctor's Thesis, University of Chicago, 1926.
256. Prince, M. "Why We Have Traits;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 23, pp. 422-433 (1929).
257. Quirolgico, J. R. An Analysis of Social Attitudes. M. A. Thesis, University of Southern California, 1929.
258. Ravitch, J. "Relative Rate of Change in Customs and Beliefs of Modern Jews;" in PROCEEDINGS OF THE AMERICAN SOCIOLOGICAL SOCIETY, Vol. 19, pp. 171-176 (1925).
259. Reinhardt, J. M. "Students and Race Feeling;" in SURVEY, Vol. 61, pp. 239-240 (1928).
260. Remmers, H. H. The College Professor as the Student Sees Him. Bulletin of Purdue University: Students in Higher Education, Vol. 29, 1929, 63 pages.
261. Remmers, H. H. "The Measurement of Interest Differences Between Students of Engineering and Agriculture;" in JOURNAL OF APPLIED PSYCHOLOGY, Vol. 13, pp. 105-119 (1929).
262. Rhyne, J. J. A Case Study of Five Hundred Mill-Village Families. Doctoral dissertation, University of North Carolina, 1927.
263. Rice, S. A. "Undergraduate Attitudes Toward Marriage and Children;" in MENTAL HYGIENE, Vol. 13, pp. 788-793 (1929).
264. Rice, S. A. "Stereotypes: A Source of Error in Judging Human Character;" in JOURNAL OF PERSONNEL RESEARCH, Vol. 5, pp. 267-276 (1926).
265. Rice, S. A. "Differential Changes of Political Preference Under Campaign Stimulation;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 21, pp. 297-303 (1926).
266. Rice, S. A. Quantitative Methods in Politics. Knopf, New York, 1928. Chapters iii and iv are especially good on theory of measurement.

267. Rice, S. A. Statistics in Social Studies. University of Pennsylvania Press, Philadelphia, 1930.
268. Rice, S. A. Measurements of Social Attitude and Public Opinion. U. S. Department of Agriculture, Bureau of Agricultural Economics Bulletin, February, 1930, pp. 11-20. A similar paper may be found in Proceedings of the American Sociological Society, 1930, pp. 20-23 by G. W. Allport.
269. Rice, S. A., and Weaver, W. W. "The Verification of Social Measurements Involving Subjective Classifications;" in SOCIAL FORCES, Vol. 8, pp. 16-28 (1929).
270. Roback, A. A. A Bibliography of Character and Personality. Harvard University Press, Cambridge, 1927. This is a very complete bibliography on personality in general up to 1927.
271. Root, W. I. "The Psychology of Radicalism;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 19, pp. 341-356 (1925).
272. Rossander, A. C. "Can Attitudes Be Measured?" PHI DELTA KAPPAN, Vol. 13, No. 3, pp. 75-79 and 90-93 (1930). Gives a discussion and evaluation of different techniques for measuring attitudes.
273. Rossander, A. C., and Thurstone, L. L. A Scale for Measuring Attitude Toward the United States Constitution. University of Chicago Press, Chicago, 1931.
274. Russell, B. The Analysis of Mind. Allen and Urwin, London, 1921. Especially pp. 58-76 and 77-92.
275. Sayles, M. B. The Problem Child at Home: A Study in Parent-Child Relationships. Commonwealth Fund, New York, 1928, pp. x - 342.
276. Sayles, M. B. The Problem Child in School: Narratives from Case Records of Visiting Teachers. Joint Committee on Methods of Preventing Delinquency, New York, 1925, 287 pages.
277. Schiller, B. "A Quantitative Analysis of Marriage Selection in a Small Group;" in JOURNAL OF SOCIAL PSYCHOLOGY, Vol. 3, pp. 297-319 (1932).
278. Seymour, J. S. "Rural Social Distance of Normal School Students;" in SOCIOLOGY AND SOCIAL RESEARCH, Vol. 14, pp. 238-248, 1930.
279. Shaw, C. R. Family Background in Male Juvenile Delinquency. Doctoral dissertation, University of Chicago, 1930.

280. Shaw, C. R. "Case Study Method;" in PROCEEDINGS OF THE AMERICAN SOCIOLOGICAL SOCIETY, Vol. 21, pp. 149-157 (1927).
281. Shaw, R. W. Some Aspects of Self-Insight as Found in Students of a Two-Year Normal School. Teachers College Contribution to Education, No. 448, 1931, pp. viii - 78.
282. Sheldon, H. C. The Place of Autistic Mechanisms in the Institutional Formulations of Certain Divergent Sects. Doctoral dissertation, University of Wisconsin, 1930.
283. Shideler, E. F. "The Social Distance Margin;" in SOCIOLOGY AND SOCIAL RESEARCH, Vol. 12, pp. 243-252 (1928).
284. Shuttleworth, F. K. "A New Method of Measuring Character Traits;" in SCHOOL AND SOCIETY, Vol. 19, pp. 679-682 (1924).
285. Smith, Hattie N. "A Scale for Measuring Attitudes About Prohibition;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 26, pp. 429-437 (1932).
286. Smith, Hattie N., and Thurstone, L. L. A Scale for Measuring Attitude Toward Prohibition. University of Chicago Press, Chicago, 1931.
287. Smith, W. C. "The Rural Mind: A Study of Occupational Attitude;" in AMERICAN JOURNAL OF SOCIOLOGY, Vol. 32, pp. 771-786 (1927).
288. Sorokin, Pitirim. Contemporary Sociological Theories. Harper Brothers, New York, 1928. Chapter xi, especially pp. 644-659.
289. Stabler, D. A. "The Relation Between the Civic Information Possessed by Ninth-Grade Pupils and Their Practices in Citizenship;" in SCHOOL REVIEW, Vol. 37, pp. 697-706 (1929).
290. Stalnaker, J. M., and Eggan, F. "American Novelists Ranked: a Psychological Study;" in ENGLISH JOURNAL, Vol. 18, pp. 295-307 (1929).
291. Stokes, S. M. and Cline, W. F. "The Avocations of One Hundred College Freshmen;" in JOURNAL OF APPLIED PSYCHOLOGY, Vol. 13, pp. 257-265 (1929).
292. Stouffer, Samuel A. "Experimental Comparison of a Statistical and a Case History Technique of Attitude Research;" in AMERICAN SOCIOLOGICAL SOCIETY PUBLICATION, Vol. 25, pp. 154-156 (1931).
293. Stratten, T. "Appraising the Results of a Summer Camp;" in RELIGIOUS EDUCATION, Vol. 24, pp. 565-571 (1929).

294. Strong, E. K. "Interest Analysis of Personnel Managers;" in JOURNAL OF PERSONNEL RESEARCH, Vol. 5, pp. 335-342 (1926).
295. Sturges, H. A. "The Theory of Correlation Applied in Studies of Changing Attitudes;" in AMERICAN JOURNAL OF SOCIOLOGY, Vol. 33, pp. 269-275 (1927).
296. Sullenger, T. E. Social Determinants of Juvenile Delinquency. Doctoral dissertation, University of Chicago, 1930.
297. Sunne, D. "Personality Tests: White and Negro Adolescents;" in JOURNAL OF APPLIED PSYCHOLOGY, Vol. 9, pp. 256-280 (1925).
298. Sweet, L. The Measurement of Personal Attitudes in Younger Boys. Y. M. C. A. Occasional Studies No. 9, New York Association Press, National Council Y.M.C.A., 1929.
299. Sweet, L. "The Persistence of Certain Personal Attitudes in Younger Adolescent Boys;" in JOURNAL OF EDUCATIONAL RESEARCH, Vol. 22, pp. 245-249 (1931).
300. Swift, L. B. Burgess, E; W. Elliott, T. D., Queen, S. A., Myrick, Helen, and Colcord, J. C. "Technique of Interviewing;" in SOCIAL FORCES, Vol. 6, pp. 524-569 (1928).
301. Symonds, P. M. "What is an Attitude?" in PSYCHOLOGICAL BULLETIN, Vol. 27, pp. 200-201 (1927). An abstract.
302. Symonds, P. M. The Nature of Conduct. Macmillan, New York, 1928. Especially pp. 216-239.
303. Symonds, P. M. Diagnosing Personality and Conduct. The Century Co., 1931, 602 pages. An exceptionally fine analysis of various techniques for measuring personality involving most of the techniques for measuring attitudes.
304. Symonds, P. M. "A Social Attitude Questionnaire;" in JOURNAL OF EDUCATIONAL PSYCHOLOGY, Vol. 16, pp. 316-322 (1925).
305. Symonds, P. M. "The Present Status of Character Measurement;" in JOURNAL OF EDUCATIONAL PSYCHOLOGY, Vol. 15, pp. 484-498 (1924). Bibliography.
306. Tallman, L. Attitudes of College Students Toward Self-Government. M. A. Thesis, University of Southern California, 1927.
307. Tanquist, M. R. An Experimental Study of the Effects of Competition and Equal and Unequal Remuneration of the

Efficiency of the Work of Children Between Five and Seven Years of Age. Doctoral dissertation, University of Minnesota, 1930.

308. Terman, L. M. Genetic Studies of Genius. Stanford University Press, Palo Alto, 1925-30, Vol. I, Chapter xvii, pp. 485-517, Chapter xviii, pp. 518-555; Vol III.
309. Tewater, M. Analysis with Source Materials Illustrating the Attitude of Parents, Teachers and Others as Contributing Factors in the Development of the Problem Child Situations. M. A. Thesis, University of Southern California, 1927.
310. Thiele, M. B., and Thurstone, L. L. A Scale for Measuring Attitude Toward Patriotism. University of Chicago Press, Chicago, 1931.
311. Thomas, D. S., Et Al. Some New Techniques for Studying Social Behavior. Child Delinquency Monograph, No. 1, New York, 1929.
312. Thomas, D. V. An Analysis of Student Attitudes in Relation to Campus Social Organization. M. A. Thesis, University of Nebraska, 1927.
313. Thomas, W. I. The Unadjusted Girl. Little, Brown & Co., 1923, pp. 1-69.
314. Thomas, W. I. "The Problem of Personality in the Urban Environment;" in PROCEEDINGS OF THE AMERICAN SOCIOLOGICAL SOCIETY, Vol. 20, pp. 30-39 (1926).
315. Thomas, W. I., and Znaniecke, F. The Polish Peasant in America. Badger, Boston, 1918. Vol. I, Methodological Note, pp. 1-86; and Introduction to Vol. III, pp. 5-88.
316. Thompson, L. A. "Measuring Susceptibility to Monotony;" in PERSONNEL JOURNAL, Vol. 8, pp. 172-196 (1929).
317. Thurstone, L. L. "Theory of Attitude Measurement;" in PSYCHOLOGICAL REVIEW, Vol. 36, pp. 222-241 (1929).
318. Thurstone, L. L. "The Measurement of Social Attitudes;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 26, pp. 249-269 (1931).
319. Thurstone, L. L. (Ed). Social Attitude Scales. University of Chicago Press, Chicago, 1930.
320. Thurstone, L. L. "An Experimental Study of Nationality Preferences;" in JOURNAL OF GENERAL PSYCHOLOGY, Vol. 1, pp. 405-425 (1928). An application of Thurstone's technique for measuring attitudes.

321. Thurstone, L. L. "The Method of Paired Comparisons for Social Values;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 21, pp. 384-400 (1927).
322. Thurstone, L. L. "A Scale for Measuring Attitude Toward the Movies;" in JOURNAL OF EDUCATIONAL RESEARCH, Vol. 22, pp. 89-94 (1930).
323. Thurstone, L. L. "The Measurement of Opinion;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 22, pp. 415-430 (1928).
324. Thurstone, L. L. "Influence of Motion Pictures on Children's Attitudes;" in JOURNAL OF SOCIAL PSYCHOLOGY, Vol. 2, pp. 291-305 (1931).
325. Thurstone, L. L. "The Measurement of Change in Social Attitudes;" in JOURNAL OF SOCIAL PSYCHOLOGY, Vol. 2, pp. 230-235 (1931).
326. Thurstone, L. L. "Attitudes Can Be Measured;" in THE AMERICAN JOURNAL OF SOCIOLOGY, Vol. 33, pp. 529-554 (1928).
327. Thurstone, L. L. "Rank Order as a Psychophysical Method;" in JOURNAL OF EXPERIMENTAL PSYCHOLOGY, Vol. 14, pp. 187-201 (1931).
328. Thurstone, L. L. "A Mental Unit of Measurement;" in PSYCHOLOGICAL REVIEW, Vol. 24, pp. 415-423 (1927). A discussion of the unit of measurement at the basis of his technique for measuring attitudes.
329. Thurstone, L. L. A Scale for Measuring Attitude Toward Communism. University of Chicago Press, Chicago, 1931.
330. Thurstone, L. L., and Thurstone, Thelma G. A Scale for Measuring Attitude Toward Evolution. University of Chicago Press, Chicago, 1931.
331. Thurstone, L. L., and Chave, E. J. A Scale for Measuring Attitude Toward the Church. University of Chicago Press, Chicago, 1929.
332. Thurstone, L. L., and Chave, E. J. The Measurement of Attitude. A Psychological Method and Some Experiments with a Scale for Measuring Attitude Toward the Church. University of Chicago Press, Chicago, 1929.
333. Thurstone, L. L., and Rosander, A. C. A Scale for Measuring Attitude Toward Censorship. University of Chicago Press, Chicago, 1931.
334. Thurstone, L. L., and Wang, C. K. A. A Scale for Measuring Attitude Toward Sunday Observance. University of Chicago Press, Chicago, 1931.

335. Travis, R. C. "The Measurement of Fundamental Character Traits by a New Diagnostic Test;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 19, pp. 400-420 (1925).
336. Tuttle, H. S. "Testing the Curriculum in Its Natural Setting;" in RELIGIOUS EDUCATION, Vol. 24, pp. 173-175(1929).
337. Tuttle, H. S. "Honesty Finds in Children;" in JOURNAL OF EDUCATIONAL SOCIOLOGY, Vol. 5, pp. 233-239 (1931).
338. Tyler, H. T. The Bearing of Certain Personality Factors Other Than Intelligence on Academic Success. Teachers College Contribution to Education, No. 468, 1931, pp. vi - 89.
339. Vance, R. B. "Cotton Culture and Social Life and Institutions of the South;" in PROCEEDINGS OF THE AMERICAN SOCIOLOGICAL SOCIETY, Vol. 23, pp. 50-59 (1929).
340. Vaughn, W. F. "An Experimental Study of Political Prejudice;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 25, pp. 268-274 (1930).
341. Verry, E. E. "A Study of Personality in Pre-School Groups;" in SOCIAL FORCES, Vol. 3, pp. 645-648 (1925).
342. Verry, E. E. A Study of Mental and Social Attitudes in the Free-Play of Pre-School Children. M. A. Thesis, University of Iowa.
343. Vetter, G. B. "The Measurement of Social and Political Attitudes and the Related Personality Factors;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 25, pp. 149-189 (1930).
344. Voelker, P. F. The Function of Ideals and Attitudes in Social Education. Teachers College Contribution to Education, No. 112, 1921, 126 pages.
345. Walker, M. A Study of Interaction in Young Children With Special Reference to Subordination and Domination. Doctoral dissertation, University of Minnesota, 1929.
346. Wang, C. K. A., and Thurstone, L. L. A Scale for Measuring Attitude Toward the Treatment of Criminals. University of Chicago Press, Chicago, 1931.
347. Wang, C. K. A., and Thurstone, L. L. A Scale for Measuring Attitude Toward Birth Control. University of Chicago Press, Chicago, 1931.
348. Washburne, J. N. "The Impulsions of Adolescents as Revealed by Written Wishes;" in JOURNAL OF JUVENILE RESEARCH, Vol. 16, pp. 193-212 (1932).

349. Washburn, M. and Others. "The Moore Test of Radicalism and Conservatism;" in AMERICAN JOURNAL OF PSYCHOLOGY, Vol. 38, pp. 449-452 (1927).
350. Waters, R. H. "A Study of Customer Attitude;" in JOURNAL OF APPLIED PSYCHOLOGY, Vol. 15, pp. 252-258 (1931).
351. Watson, Goodwin B. Experimentation and Measurement in Religious Education. Association Press, New York, 1927.
352. Watson, Goodwin B. "Character Tests and Their Application through 1930;" in REVIEW OF EDUCATIONAL RESEARCH, Vol. 2, No. 3, pp. 227-233 (1932), National Education Association, Washington, D. C.
353. Watson, Goodwin B. "A Supplementary Review of Measures of Personality;" in JOURNAL OF EDUCATIONAL PSYCHOLOGY, Vol. 18, pp. 73-87 (1927).
354. Watson, Goodwin B. "Measures of Character and Personality;" in PSYCHOLOGICAL BULLETIN, Vol. 29, pp. 147-176 (1932).
355. Watson, Goodwin B. A Survey of Public Opinion on Some Religious and Economic Issues. Teachers College Contribution, New York, 1927.
356. Watson, Goodwin B. The Measurement of Fairmindedness. Teachers College Contribution to Education, No. 176, 1925, 97 pages.
357. Watson, Goodwin B. "The Measurement of Less Tangible Qualities;" in VOCATIONAL GUILD, Vol. 4, pp. 281-289 (1926).
358. Watson, Goodwin (Ed.) Series of Character and Personality Tests. Association Press, 347 Madison Avenue, N.Y.C.
359. Watson, Goodwin B. "An Approach to the Study of Worship;" in RELIGIOUS EDUCATION, Vol. 24, pp. 849-858 (1929).
360. Watson, Goodwin B. "Orient and Occident: An Opinion Study;" in RELIGIOUS EDUCATION, Vol. 24, pp. 322-328 (1929).
361. Watson, Gladys H. Success and Failure in the Teaching Profession. Published by the author at Teachers College, Columbia University, New York, 1932, 99 pages.
362. Watson, J. B. "The Myth of the Unconscious;" in HARPER'S MAGAZINE, Vol. 155, pp. 502-508 (1927).
363. Watson, J. B. "Experimental Studies on the Growth of Emotions;" in PEDAGOGICAL SEMINAR, Vol. 32, pp. 328-348; and "Recent Experiments on How We Lose and Change our Emotional Equipment," pp. 349-371 (1925).

364. Watson, J. B. "The Heart or the Intellect?" HARPER'S MAGAZINE, Vol. 156, pp. 345-352 (1928).
365. Watson, J. B. "Behaviorism: A Psychology Based on Reflexes;" in ARCHIVES OF NEUROLOGY AND PSYCHIATRY, Vol. 15, pp. 185-202 (1926).
366. Watson, J. B., and Raynor, R. "Studies in Infant Psychology;" in SCIENTIFIC MONTHLY, Vol. 13, pp. 493-515 (1921).
367. Watson, M. E. Factors in the Emotional Lives of Parents which Affect the Behavior of Children. Doctoral dissertation, University School of Education, New York, 1930.
368. Weinland, J. D. "An Objective Method for the Measurement of Attitudes;" in JOURNAL OF APPLIED PSYCHOLOGY, Vol. 14, pp. 427-436 (1930).
369. Wembridge, E. R. Other People's Daughters. Houghton Mifflin, Boston, 1926, pp. ix - 333.
370. Wheeler, D. and Jordan, H. "Change of Individual Opinion to Accord with Group Opinion;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 24, pp. 203-206 (1929).
371. Wickman, E. K. Children's Behavior and Teacher's Attitudes. Joint Committee on Methods of Preventing Delinquency, New York, 1928.
372. Wilkinson, F. "Social Distance Between Occupations;" in SOCIOLOGY AND SOCIAL RESEARCH, Vol. 13, pp. 234-244 (1929).
373. Willey, M. M., and Rice, S. A. "William Jennings Bryan as a Social Force;" in SOCIAL FORCES, Vol. 2, pp. 338-344 (1924).
374. Williams, J. M. The Principles of Social Psychology. Knopf, New York, 1922, Chapter 1.
375. Willis, W. C. "The Measure of Social Attitudes;" in JOURNAL OF APPLIED SOCIOLOGY, Vol. 8, pp. 183-188 (1924).
376. Willoughby, R. R. "A Sampling of Student Opinion;" in JOURNAL OF SOCIAL PSYCHOLOGY, Vol. 1, pp. 164-169 (1930).
377. Wilson, W. R., "A Large Scale Experiment in Student Ratings;" in PSYCHOLOGICAL BULLETIN, Vol. 28, p. 248 (1931).
378. Witmer, H. L. The Attitudes of Mothers Toward Sex Education. University of Minnesota Press, Minneapolis, 1929, pp. v - 112.
379. Witty, P. A., and Lehman, H. C. "Some Suggestive Results

Regarding Sex Differences in Attitude Toward School Work;" in EDUCATION, Vol. 8, pp. 56-60 (1929).

380. Witty, P. A., and Lehman, H. C. "The Play Behavior of Fifty Gifted Children;" in JOURNAL OF EDUCATIONAL PSYCHOLOGY, Vol. 18, pp. 259-265 (1927).
381. Woodward, L. L. Relations of Religious Training and Life Patterns to the Adult Religious Life. Teachers College Contribution to Education, No. 527, Columbia University, 1932, 75 pages.
382. Woolston, H. "Stepbrothers: A Study of Prejudice and Convention;" in SOCIAL FORCES, Vol. 6, pp. 368-375 (1928).
383. Wright, V. C. Analysis of Various Measures of Personality. Doctoral dissertation, University of Wisconsin, 1930.
384. Wu, C. L. Attitudes Toward Negroes, Jews and Orientals. Doctoral dissertation, Ohio State University, 1927.
385. Yeakum, C. S., and Manson, G. K. "Self-Ratings as a Means of Determining Trait-Relationships and Relative Desirability;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 21, pp. 52-64 (1926).
386. Young, D. "Some Effects of a Course in American Race Problems, on the Race Prejudice of Four Hundred and Fifty Undergraduates of the University of Pennsylvania;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 22, pp. 335-242 (1927).
387. Young, K. The Social Psychology of Oriental-Occidental Prejudices. American Council of the Institute of Pacific Relations, 129 E. 52d Street, New York, 1929, pp. 1-23.
388. Young, K. "The Measurement of Personal and Social Traits;" in JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, Vol. 22, pp. 431-442 (1928). Abstract in PROCEEDINGS OF AMERICAN SOCIOLOGICAL SOCIETY, Vol. 21, pp. 92-105 (1927).
389. Young, K. "The Field of Social Attitudes;" in JOURNAL OF APPLIED SOCIOLOGY, Vol. 8, pp. 183-188 (1924).
390. Young, K. "Topical Summary of Current Literature: Personality Studies;" in AMERICAN JOURNAL OF SOCIOLOGY, Vol. 32, pp. 952-971 (1927). Bibliography of 189 references.
391. Young, K. and Others. Social Attitudes. Holt & Co., New York, 1931.
392. Young, J. R. "The Changing Attitudes of Adolescents Toward Religion and Church;" in RELIGIOUS EDUCATION, Vol. 24,

pp. 775-778 (1929).

393. Young, P. V. "Occupational Attitudes and Values of Russian Lumber Workers;" in *SOCIOLOGY AND SOCIAL RESEARCH*, Vol. 12, pp. 543-553 (1929).
394. Young, P. V. and E. F. "Getting at the Boy Himself: Through the Personal Interview;" in *SOCIAL FORCES*, Vol. 6, pp. 408-415 (1928).
395. Young, P. V. and E. J. "Mutation of Personality;" in *JOURNAL OF APPLIED SOCIOLOGY*, Vol. 9, pp. 442-449 (1925).
396. Zeleny, L. D. "A Measure of Social Opinions of Students;" in *JOURNAL OF APPLIED SOCIOLOGY*, Vol. 11, pp. 56-64 (1926).
397. Zeleny, L. D. "Pupil-Teacher Relationships;" in *SOCIOLOGY AND SOCIAL RESEARCH*, Vol. 13, pp. 265-275 (1929).
398. Zimmerman, C. C. "Types of Farmers' Attitudes;" in *SOCIAL FORCES*, Vol. 5, pp. 591-596 (1927).
399. Zimmerman, C. C., and Anderson, C. A. "Attitudes of Rural Preachers Regarding Church Union and Science;" in *SOCIOLOGY AND SOCIAL RESEARCH*, Vol. 12, pp. 144-150 (1927).
400. Zimmerman, C. C., and Black, J. D. The Marketing Attitudes of Minnesota Farmers. University of Minnesota Agricultural Experiment Station, Technical Bulletin, No. 45, 1926.
401. Zimmerman, C. C., Sims, N. L., and Hamilton, C. H. Social Attitudes. U. S. Department of Agriculture, Bureau of Agricultural Economics Bulletin, February, 1930, p. 9.
402. Zorbaugh, H. W. The Gold Coast and the Slum. University of Chicago Press, Chicago, 1929.
403. Zyve, C. "Experiments in the Teaching of Integrity;" in *TEACHERS COLLEGE RECORD*, Vol. 32, pp. 359-374 (1931).

T H.