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ABSTRACT

In this report a scale is developed to provide an accurate measurement of attitudes about the police held by students and local communities. Discussed are: (1) the collection of 325 expressions of opinion toward the police; (2) the determination of the scale values; (3) the selection of unambiguous statements; and (4) the attitude scales. The possible uses and the limitations of the scales conclude the report. (AF)

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DEVELOPMENT OF A SCALE OF  
ATTITUDES TOWARD THE POLICE

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The law enforcement institution of our country has come under critical scrutiny in the past five years as a result of their conduct in the exercise of power and control of citizens and more recently college and university students. Increasingly colleges and universities are modeling their security units more closely with the traditional police institutions that exist in the local community. This would be evidenced more in terms of the campus police units legal power to act with the same authority as local law enforcement units while attempting to become more sensitive to the academic community they serve. As students increasingly continue to test the legal authority of the university and as a result become involved in confrontation with police authority (local and campus) it becomes necessary to assess the perceptions and process of how students and citizens regard the police institution. In an effort to provide an accurate measurement of the attitudes held by students and citizens regarding the police, the following attitude scale was developed. The scale reported here is basically of the Thurstone equal-appearing interval type, with a slight variation in the statistical treatment of the data collected. The general format for the development of the scale was suggested by Edwards (1957).

#### COLLECTION OF OPINION STATEMENTS

The first step in the scale development was to collect approximately 325 expressions of opinions toward the police. This was accomplished by personal recorded interviews with a wide range of individuals comprised of students from various divisions at the University of Missouri at Columbia. Also personal interviews were conducted with local citizens of the community in which the university is located. Expressions of opinion were also taken

from national news media and various national publications. In selecting the 250 statements, an attempt was made to maintain a balance of apparently favorable, apparently neutral, and apparently unfavorable opinions. Also statements were edited in accordance with criteria suggested by Edwards and Kilpatrick (1948, p. 337).

### DETERMINING SCALE VALUES

Two hundred fifty selected and edited statements of attitude were presented to forty judges comprised of 15 local citizens, 12 graduate students, 5 college administrators, 4 college teachers and 4 undergraduate students.

Each judge rated each of the 250 statements on an eleven-point scale on which a rating of one represented an extremely unfavorable attitude, a rating of six represented a neutral attitude, and a rating of eleven represented an extremely favorable attitude. The judges received the following written instructions for making their ratings:

**INSTRUCTIONS:** We are in the process of developing an attitude scale to measure general attitudes toward the police. We ask your cooperation in acting as judges for the initial construction of the scale. Your task will be to judge each of the following 250 statements according to the instructions below. We do not ask for your personal attitudes toward each statement, but rather a judgement of the degree of favorableness or unfavorableness of each statement in relation to the police. The following statements reflect positive (favorable) attitudes, some reflect neutral attitudes (neither positive or negative) and some reflect negative attitudes. Your job is to rate each statement according to how negative or positive an attitude it reflects toward the police. You are to judge each statement in an (11) point scale ranging from (1) extremely negative to (11) extremely positive with (6) representing a neutral attitude. Ratings between (1) and (6) mean various degrees of negative attitudes and ratings between (6) and (11) mean various degrees of positive attitude. Remember that you are to rate how negative, positive, or neutral an attitude each statement reflects---not whether you agree or disagree with each statement. Place your choice of the number on the scale which best represents your judgement of the statement next to the statement in the space provided. Work quickly and write your responses clearly.

1	2	3	4	5	6	7	8	9	10	11
Extremely Negative					Neutral					Extremely Positive

The scale value of each statement can be considered the average value of the distribution of judgements by the judges. This value was arrived at by computing the mean of the distribution of all 40 judges responses to each individual statement.

\* It should be noted that the Thurstone technique uses the median for the computation of this scale value. The author decided to utilize the mean as it was felt this was a more valid measure of central tendency.

The scale values ranged across the possible values from one to eleven, with the number of statements in the extremely negative and extremely positive range being relatively small.

The scale values of the attitude items included in the scale appear in Table I.

TABLE I

DISTRIBUTION OF SCALE VALUES( 40 Judges, 236 Items)

Scale Values, Mean	Number of items, f
1.00-2.00	2
2.00-3.00	15
3.00-4.00	25
4.00-5.00	28
5.00-6.00	30
6.00-7.00	50
7.00-8.00	41
8.00-9.00	28
9.00-10.00	14
10.00-11.00	3

### SELECTION OF UNAMBIGUOUS STATEMENTS

From the distribution of ratings assigned to each attitude statement, the standard deviation-Q Value- was computed as a measure of the variability of the ratings and therefore as an index to the ambiguity of the statements. A statement having an excessively high standard deviation was considered to be too ambiguous to use in the attitude scale, since it had been understood quite differently by different judges. One of the statements (" The United States is getting like Nazi Germany with the police power "), for example, had a Q of only 1.08, indicating that it was quite clear in meaning and understood and rated much the same by most of the judges who responded to it. Another statement (" They should prosecute, not persecute") was so variously interpreted that it received many ratings above its mean scale value and many below it, as indicated by its relatively high Q of 2.99. The values of the standard deviations of the 236 statements were approximately normally distributed from a minimum of 1.08 to a maximum of 3.40 . Their distribution appears in Table II.

TABLE II

DISTRIBUTION OF Q VALUES ( 40 Judges, 236 Items)

Standard Deviation, Q	Number of items, f
3.00-3.50	14
2.50-3.00	39
2.00-2.50	107
1.50-2.00	60
1.00-1.50	16

\* It should be noted that the Thurstone technique uses the quartile deviation for the computation of the Q Value. The author uses the standard deviation as a more valid indicator of variability.

### THE ATTITUDE SCALES

The final selection of items for two matched forms of the scale was by the combined criteria of scale value and Q value. A bivariate distribution of scale values and Q values was utilized in selecting items of maximum discriminative power at each level of scale value. The two matched forms of the scale appear as "Attitudes Toward the Police (Form A)" and "Attitudes Toward the Police (Form B)". Tables III and IV contain summaries of item statistics for forms A and B, respectively. Each form of the scale contains 20 attitude statements arranged in an order of scale values that simplifies scoring but is not readily transparent to the respondent. The order is one of ascending scale value from item 11 through item 20 and then from item 1 through 10; that is, the order of scale values is as follows:

TABLE III

"Attitudes Toward the Police" Form A: Summary of Items

Attitude Scale Item Number	Scale Value	Q Value	Statement Number
1	6.80	1.96	101
2	7.52	1.75	213
3	7.82	1.90	75
4	8.37	1.87	106
5	8.45	1.88	116
6	8.80	1.45	212
7	9.12	1.66	50
8	9.47	1.46	146
9	9.60	1.42	114
10	10.40	1.94	220
11	1.95	1.08	108
12	2.75	1.25	236
13	2.87	1.57	111
14	3.20	1.71	13
15	3.55	1.61	159
16	3.82	1.82	110
17	4.07	1.83	119
18	5.72	1.69	195
19	6.32	1.91	127
20	6.45	1.61	11

**TABLE IV****" Attitudes Toward the Police " Form B : Summary of Items**

<b>Attitude Scale Item Number</b>	<b>Scale Value</b>	<b>Q Value</b>	<b>Statement Number</b>
1	6.82	1.72	150
2	7.45	1.99	141
3	7.97	1.74	105
4	8.27	1.89	39
5	8.47	1.86	152
6	8.87	1.65	163
7	9.20	1.41	6
8	9.37	1.31	190
9	9.75	1.14	68
10	10.40	1.94	220
11	1.90	1.12	214
12	2.45	1.75	53
13	2.80	1.71	143
14	3.15	1.79	124
15	3.40	1.61	4
16	3.95	1.4.	153
17	4.35	1.83	104
18	5.27	1.94	203
19	6.35	1.98	176
20	6.45	1.79	99

Each respondent indicates his attitudes by placing a check mark by the statements with which he agrees. Scoring the attitude scale is extremely simple. A subject's score is merely the median or midscore scale values of the attitude statements that he checks agreement with. If the subject has agreed with an odd number of statements, and if the median method of scoring is used, then the score is simply the scale value of the middle statement when they are arranged in rank order of their scale values. For example, if a subject has agreed with five statements with scale values of 3.2, 4.5, 5.6, 7.2 and 8.9, his score would be the scale value of the middle statement or 5.6. If an even number of statements are agreed with and the median method of scoring is used, then the midpoint of the scale distance between the two middle statements if taken as the score. For example, if the subject has agreed with 4 statements with scale values of 4.5, 5.6, 7.2, and 8.9, his score would be

$5.6 + (7.2 - 5.6) / 2 = 6.4$  . If a subject does not endorse at least one of the twenty statements, his responses are unscorable; but such cases are exceedingly rare.

### DISCUSSION

Data gained from the use of this attitude scale could be utilized in the following situations:

1) The development of a new campus police unit: A chief administrator involved in developing a campus police unit could utilize the attitude survey to become sensitive to the attitudes of students, faculty and community citizens. This information would help in developing policies and operational functions that would relate to the needs and concerns of members in the educational community.

2) Assessment of problem areas: On a campus where there exists a poor relationship between the campus or local police and students information gained from the attitude scale could provide some insight into the dynamics of the problem. This information could provide a vehicle for discussion of pertinent issues and the possible resolution of the problem.

3) Utilization for orientation and trainings: This attitude scale could be utilized by a campus or local police unit in the orientation and in-service training of their personnel. By assessing the attitudes of new personnel a chief administrator would be able to isolate perceptions of the police role that might not be congruent with the particular functions that individual would be asked to perform.

### LIMITATIONS

The author would point out certain limitations in the development of this attitude scale as a result of the variation in statistical treatment of scale values and Q values from Thurstone's technique. It would appear that as a result of the use of the mean to establish scale values instead of the median (as Thurstone suggests) the including of extreme responses narrows the range of scale values as well as increasing the range of variance for each scale value established. Variance, or Q values, would tend to be decreased with the use of quartile deviation due to the fact that this statistical method only takes into account fifty percent of the responses to each statement. This difference in statistical treatment may account for the rather high Q values determined in this particular scale development. In previous scale development utilizing the basic Thurstone statistical methodology, with approximately the same number of statements, considerably lower Q values were obtained (Barker-APGA 1966-June). This would suggest replication possibilities for this scale development, utilizing the same data with the application of median and quartile deviation as determinants of scale value and Q value.

It should also be noted that due to a time factor statements surviving the test for ambiguity (Q value) were not subjected to either a scale discrimination item analysis or a subsequent cross validation of that item analysis. Both of these techniques are described by Thurstone and serve as additional selection processes.

Finally, it should be noted that the last 14 statements were eliminated from analysis due to technical problems. This was not considered detrimental to the final

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scale, as the last 14 statements upon scrutiny would not have provided any additional significant scale or Q values . Thurstone in his description of the ratio of presented statements to number of final statements in the scale has used a 190:20 ratio as a guideline. This scale operated with a ratio of 236:20 which was considered adequate by the author, although the including of additional statements would have been preferable if they would have provided significant scale and Q values.

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