Measuring Attitude Toward the Job

H. H. REMMERS

Probably no other factor is so important in vocational adjustment as the attitude of the worker toward his job, provided always that he is possessed of a reasonable degree of the requisite abilities for any specific work.[1] As Hoppock has shown[2] and as ordinary observation corroborates, it is possible for the humblest worker to be successful and happy in his job, however menial and unattractive it may be, and, conversely, the holder of a socially desirable job who has all of the necessary characteristics except a favorable attitude, may be a dismal failure in the job because of his attitude.

High school courses in vocations are presumably designed to orient the prospective worker to the vocational possibilities ahead of him and to create favorable attitudes toward such jobs as will fit his abilities. The well-known fact that half or more than half of high school pupils, when asked to indicate their vocational choices, choose some one of the learned professions—medicine, law, engineering, teaching—indicates another serious problem in the general area of attitudes. Since only very few can eventually enter these professions, there is bound to be an enormous debit in the way of frustration and attendant unhappiness, except for the degree to which it is possible to change the attitudes of the potential also-rans through educational procedures such as the course in vocations, and through guidance procedures in general.

On neither of these counts—that of guiding and forming attitudes of prospective workers, and that of follow-up after vocational placement—does it require lengthy argument to demonstrate that some method of appraising and measuring such attitudes is important. This need strongly impressed the present writer while teaching a course in the psychological aspects of guidance, and led to an attempted solution through the construction of a measuring device by means of which to measure with reasonable accuracy attitude toward vocations.

II

The Thurstone technique of constructing attitude scales is the soundest technique yet invented for scaling attitudes,[3] but, while theoretically sound, the construction of such scales is tremendously expensive and laborious. Probably a hundred hours for the construction and experimental validation of such a scale is a conservative estimate. With some twenty-odd thousand job classifications given in the United States census report, it required no very elaborate calculations to establish the fact that some hundreds of years would be needed to construct a

[1] Experimental studies of the effect of various educational procedures upon attitudes are being carried on at Purdue University with the aid of a grant from the Josiah Macy, Jr. Foundation.

[2] Hoppock, Robert, *Job Satisfaction,* New York, Harper and Brothers, 1935, p. 303.

[3] Thurstone, L. L., and Chave, E. J., *Measurement of Attitude toward the Church,* Chicago, University of Chicago Press, 1929. Thurstone, L. L., "Theory of Attitude Measures," *Psychological Review,* XXVI, 1929, pp. 222-241.

scale for each job. While theoretically sound from a psychological standpoint, this technique was not practicable.

It then occurred to the writer that it might be possible to modify the Thurstone technique by constructing a single scale that would measure attitude toward any vocation, and this hypothesis was experimentally tested by a student[4] under the writer's direction. The result is two equivalent forms of a scale by means of which it is possible to measure on a true psychological scale the attitude toward any occupation or job in two or three minutes with a degree of reliability possessed by standard intelligence and achievement tests at present available.[5] There is little or no point in a detailed technical report of this work in the present paper. Those interested in the technique can obtain such a report in the monograph in which Miller's study is one of ten studies dealing with attitudes and their measurement. In the actual measurement the subject's attitude is measured in terms of opinions which he is willing to endorse concerning the job in question. These opinions have been experimentally scaled so that a numerical score representing the subject's attitude is obtained. The scoring is very rapid—it can be done almost by inspection, and the scoring of a standard mental test is by comparison a long task.

A few illustrative scale items from Form A will give the general idea of the nature of the scale:[6]

"1. I'd rather work at this occupation than eat." (Scale value 10.4)

"23. I don't think this work would harm anyone." (Scale value 6.1)

"45. This is the worst occupation in the country." (Scale value 0.6)

The name of the job or vocation is written in by the subject at the time the measurement is obtained, the statements being so worded, as is apparent from the scale items above, as to be applicable to any occupation. The median value of the statements endorsed by the subject constitutes the attitude score.

III

By way of illustrating group results obtained with the scale, the distributions of attitudes in Table I and Figure 1 are of interest. Table I gives the results of high school pupil attitudes toward the occupations of doctor, farmer, day laborer, carpenter, and the vocation chosen by the pupil himself. Under the last category of "chosen vocation" the 177 boys involved chose sixty different occupations, ranging from aviation to specialist in osteology.[7]

The five distributions of Table I present a picture which should be of interest to every person concerned with vocational guidance. Among those who have concerned themselves with the problem of attitudes toward vocations, there is general agreement that the social status of the individual worker, as he understands it, is a major determining factor in his satisfaction. In the light of this proposition the median score values in Table I are of considerable interest. The opinion on the scale which most nearly corresponds to the scale value of 8.74 for the chosen vocation is Item 13, "This is a good job" (scale value 8.6). The scale item corresponding to the median for day laborer is "Why should one work on

[4] Miller, Harold E., "The Construction and Evaluation of a Scale of Attitudes toward Occupations," in *Studies in Attitudes, A Contribution to Social-Psychological Research Methods. Purdue University Studies in Higher Education,* XXVI, December, 1934, pp. 68-76.

[5] Remmers, H. H., "Measuring Attitudes toward Vocations," *op. cit.*, pp. 77-83.

[6] Miller, Harold E., *op. cit.*, pp. 71-72.

[7] For the Table I data, I am indebted to John Hancock who collected them in the course of another study as yet unpublished.

this job when so many other jobs are better?" (scale value 3.4).

It is also of interest to note that each column of Table I, except the one for the chosen vocation, presents a definite bimodal distribution with the trough of the curve at or near the indifferent point. In general attitude toward vocations these students are either for or against, not neutral.

TABLE I

FREQUENCY DISTRIBUTION OF HIGH SCHOOL BOYS' ATTITUDE SCORES FOR THE VOCATIONS INDICATED

Scale Values	(A) Doctor	(B) Farmer	(C) Laborer	(D) Carpenter	(E) Chosen Vocation
10.0–10.4	3	..	..	..	..
9.5– 9.9	..	1	..	2	3
9.0– 9.4	13	3	1	5	58
8.5– 8.9	21	6	3	4	67
8.0– 8.4	19	8	3	7	39
7.5– 7.9	16	6	3	10	6
7.0– 7.4	13	3	3	3	2
6.5– 6.9	10	12	4	10	..
6.0– 6.4	14	12	6	15	..
5.5– 5.9	4	8	1	6	..
5.0– 5.4	..	7	3	5	..
4.5– 4.9	9	15	11	14	..
4.0– 4.4	12	19	17	17	..
3.5– 3.9	18	34	30	28	1
3.0– 3.4	5	21	39	20	1
2.5– 2.9	5	4	22	7	..
2.0– 2.4	2	1	9	5	..
1.5– 1.9	..	1	3	3	..
1.0– 1.4	..	..	3	1	..
Total	164	161	161	162	177
Median	7.07	4.47	3.53	4.45	8.74
Q	1.96	1.38	0.70	1.47	0.35

The relative spread as shown by the quartile deviations (Q) is also a matter of interest. These high school boys are highly homogeneous with respect to their attitude toward chosen vocations, but they differ widely concerning all other vocations. The next most homogeneous manifestation is the distribution for day laborer for which there is fairly good agreement on its undesirability. Attitudes toward farmer and carpenter are about equally distributed, while the greatest spread comes for doctor. It is not to be understood that these data are presented as being typical of boys' attitudes toward these vocations. They probably are not. They are drawn from a university community in which the high school is fairly heavily weighted with the children of faculty members. But they do indicate the interesting things that may be learned by means of this scale.

Figure 1 shows graphically two distributions of attitude scores obtained from university students.[8] These results again are not typical of university students in general since they are heavily loaded with engineering student attitude scores. The data are presented merely by way of illustration.

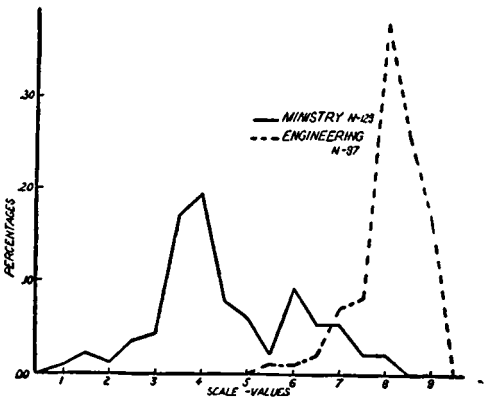

Figure 1
Comparison of Distributions of Attitudes of Engineering Students toward the Ministry and Engineering

There are, of course, certain obvious limitations to the measurement of attitude toward vocations with this type of scale. In the first place, if there is any reason, real or assumed, for the subject to dissemble his real attitude, he can of course represent himself as possessing an attitude which is quite different from the one he truly has. Any situation in which there would be a premium upon such dissimu-

[8] Remmers, H. H., *op. cit.*, p. 81.

lation would certainly invalidate the use of the scale. Nor, secondly, does the attitude score tell one anything about why the attitude is as it is. It is merely a reading from a sort of clinical thermometer, as it were, and the reasons for the temperature found must be sought by other means. On the other hand the scale is certainly superior to a rating device of a graphic or numerical sort in that it presents a true psychological scale with a unit at one part of the scale equal in value to a unit at any other part of the scale.

The more important practical applications of the scale may be summarized as follows: (1) surveys of existing attitudes toward any vocation with which the counselor may be concerned; (2) follow-up work with individuals on the job; (3) experimental evaluation of courses in vocations or similar curricular content, and guidance effort designed to change attitudes toward vocations; and (4) similar experimental evaluation of procedures designed to create more favorable attitude on the part of the worker in actual vocational situations.