MEASUREMENT OF ATTITUDES

B.A. I (Hon.), Lecture Series-5

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Measurement of attitudes

In 1928, Louis Thurstone published an article entitled "Attitudes Can Be Measured." What Thurstone failed to anticipate, however, is that attitude measurement is tricky business. One review of research uncovered more than 500 different methods of determining an individual's attitudes (Fishbein & Ajzen, 1972).

In order to measure attitudes, scales have been constructed consisting of short statements dealing with several aspects of some issue or institution under consideration. The statements involve favourable or unfavourable estimations, acceptance or rejection.

Consequently, the central problem of the measurement of attitude is the scaling of test items. It is presumed that a series of statements can be made which serve as the marks of a yardstick for the measurement of attitudes. Each statement will represent a specified degree of acceptance or rejection of a belief. Further these statements have to be equally spaced throughout the entire range of attitude continuum from complete acceptance of a belief to its complete rejection.

1. Thurstone's Method

The theory underlying Thurstone's method of equal appearing intervals is that if a person indicates the statements he accepts and rejects him can be located at a definite position on the attitude continuum. Consequently, the problem is to select an appropriate series of statements and to determine what positions on the attitude continuum each statement represents. In order to solve this problem Thurstone collected a list of statements from several sources like newspaper articles, legislature proceedings on issues, pamphlets, opinions of colleagues etc.

The important thing is that these statements should represent all the various stand-points from complete acceptance to complete rejection. Generally about 200-300 statements will have to be collected in order to prepare an attitude scale according to this method. The next step is to edit these statements.

Several statements, which are not very pertinent to the issue under consideration or which are ambiguous could be eliminated. Similarly statements, which are duplicating could also be eliminated and the statements could be re-worded so that they are more effective.

It is important to see that each statement is a reflection of opinion and not a fact. The statements should be simple, short, complete, definite and direct so that they could be accepted or rejected. The investigator must avoid his prejudices when he is collecting and editing these statements. The next step is to arrange these statements from extremely favourable to extremely unfavourable continuum.

They should also be arranged in equal appearing intervals so that a scale resembling a foot rule could be constructed. In order to do this Thurstone followed the procedure of getting each statement typed on a slip of paper. He got several people to serve as judges and each was asked to sort the slips of paper in 9 to 11 groups. For example, if we take up statements expressing our attitude towards prohibition or language issue we can collect hundreds of statements involving definite opinions all the way from complete acceptance to complete rejection.

The judges could be asked to sort the statements in such a way that all those which express the greatest appreciation of prohibition are put into one pile and at the other end all those statements expressing the strongest disapproval of prohibition could be piled up as the 9th or 11th pile, as the case may be. Then the other statements could be classified in between these two depending on the degree of appreciation or deprecation of prohibition judge is now trying to sort these statements purely on the basis of whether the statement is favourable or unfavourable regarding the issue. The judge is not thinking about his own preference now.

After getting the judges to classify the statements into the various piles, the next step is to find out the median value of each statement. There is the problem whether the personal attitude of the judges will not affect their evaluation. Thurstone assumed that when a man is asked to evaluate the statements he, will not be influenced by his own attitude towards the issue. Studies have been made to find out if Thurstone's assumption is correct. In America, Hinckley asked a group of Negro students, a group of white students from the north and a group of white students from the south to evaluate 114 statements in order to build up a scale of attitude towards Negroes.

He constructed 3 scales on the basis of the evaluation of the 3 groups. He found that these 3 scales were identical in content. Only one statement was found not to occupy the same relative position in all the three scales. Thus the Negroes who were involved in the problem as well as the whites who' were un favourable to the Negroes, and the whites who were favourable to the Negroes, all these three different groups gave the same evaluation for the various statements when they were asked to sit in judgment over each statement.

Ferguson tried to find out if the evaluation of the statements by different groups with status differences will affect the evaluation. He tried to construct an Assistant Managerial evaluation form and he obtained judgments from a group of Managers, Assistant Managers and Agents. It is clear that among these three groups, the Assistant Managers are ego-involved as the statements relate to them directly while the Managers are a superior status group and the Agents are an inferior status group. But Ferguson found that all the three groups rated in the same way. Thus, this technique of using judges in preparing the equal appearing interval scales is satisfactory.

Another problem with respect to this procedure of establishing the scale values is the influence of different time periods and changing cultural trends. Farnsworth found a high degree of correlation (.97) between the evaluations of items with respect to Peterson's scale for the measurement of attitude towards war prepared in 1930 with the values obtained in 1940.

After determining the median value for each statement the next problem is to select a small number of statements representing each value position along the attitude continuum. Roughly about 20-25 items will have to be selected. All the statements, which are judged to be ambiguous or irrelevant to the continuum are eliminated. Finally, the 'Scaled attitude test is administered and the respondent is asked to check those statements with which he is in agreement.

His score is the median of the scale values of the items that he has checked. Thus the subject is required to indicate his agreement or disagreement with each statement. Before concluding, we may give some illustrations of the way in which Thurstone's scale to measure the attitude towards Church works.

It was found that the mean value for Catholics was 2.90 while that for Protestants was 3.97 and for Jews 5.44. In this scale, the lower the score the more favourable is the attitude towards the Church. It was found that the mean value for those who attend the Church was 3.06 while for those who are not attending the Church was 5.93.

Steps in Thurston Scale Development

- i. (i) The first step is to write out a large number of statements, each of which expresses a viewpoint of some kind towards the company.
- (ii) Each of these statements is typed on a separate slip of paper and the judge is asked to place each statement in one of several piles ranging from statement judged to express the least favourable view points to statements judged to express the most favourable viewpoints.
- iii. (iii) Statement judged to express varying degrees of favourableness between these extremes are placed
 in the piles that are judged best to characterise their relative degree of favourableness.
- iv. (iv) Many judges are used in the process, sometimes as many as 100 or more. These judges are assisting the construction of the scale. They are not having their attitudes measured. The allocation of statements to the several piles is a part of the process of constructing the scale.

The purpose of allocation is to determine the scale value statements. If all judges tend to place a statement in piles towards the favourable then we can conclude that the statement expresses a favourable attitude towards the company.

If the statement is placed by the judges in piles towards unfavourable end of the series, then we may conclude that an unfavourable attitude is expressed by that particular statement, so we can determine the average location of the statement by the judge. Statements that are scattered by the judge over several categories are eliminated.

2. Likert's Method of Summated Rating

This method is much simpler than that of Thurstone. In this method also, a number of statements regarding the issue have to be collected. The subject is asked to indicate the degree or the strength of his attitude towards each statement on a 5-point scale: **strongly agree**, **agree**, **undecided**, **disagree**, **and strongly disagree**. These answers are assigned numerical values ranging from 5-1 or from 1-5 according; as the response is favourable or unfavourable. Thus high scores indicate a favourable attitude.

The individual score on a particular attitude scale is the sum of all his ratings on each of the items in the scale. It is obvious that this scale does not have any absolute system of units such as Thurstone's scale. The scores of this scale have to be interpreted merely on a relative basis, that is, on the basis of whether the score is higher or lower indicating 'whether the attitude of the individual is more favourable or more unfavourable. In this method also elaborate steps are followed in order to eliminate all the weak items by finding out the correlation of each item with the total test. This is how the internal consistency is established.

Studies have been made to compare the results obtained by Likert's technique with the results obtained by the more complicated method of preparing the scale following Thurstone's technique. It has been found that there is a high correlation between the measurements of the two different scales.

But it must be realised that Thurstone's scale has an absolute system of units and also shows higher reliability. Thus, even though Likert's method does not make use of evaluation by judges we find that it is quite useful. Another advantage of Likert's technique is that it indicates the intensity of opinion as well as the direction of opinion.

3. Method of Social Distance

This method has been developed by Bogardus. It is a familiar fact that there are various degrees of social intimacy. For example, when strangers come to our house we may speak to them for a few minutes. Further, we may not take them inside our house. On the other hand, if close friends come to meet us we take them into our room and probably we may give them a cup of coffee, or invite them for dinner.

There are also degrees of intimacy or social distance when we are dealing with people of different religions or people of different castes or people of different classes; we tend to have various degrees of social intimacy with them. It is the usual practice in several homes not to admit the servants, other than cooks, into the kitchen. Similarly it is the usual practice not to admit people of other castes or groups into the kitchen, or even into the dining room. Even with respect to the offering of seats we find that differences are made on the basis of class, caste and other considerations. A man of lower caste or class may be asked to sit on the floor whereas a mat or a chair may be provided for a person of superior caste or class.

Thus in various degrees in our personal relationships with other individuals as well as in our social relationships with members belonging to other groups we tend to maintain a certain social distance. The most obvious illustration of the operation of this principle of social distance is the old practice in ancient India where, in the cities, and even more so in the villages, the members of the Harijan group are made to live in the outskirts of the town or the village. It is only recently, with the changes in the attitude of people towards this problem that members of the Harijan groups are allowed to live in houses in any area of the city.

THANK YOU