

Measuring Scales in Research

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Abstract- In the research work for the measurement of attitude scales are used. Scales consists of number of questions or statements which are related to the scores. Each question or item is so chosen that the respondent with respect to different point of view. On each item or questions react to it in a different way.

Key words: Scale, Job Satisfaction

INTRODUCTION

According to Sarandakos, there are four different ways or reasons for using the scale as follows

Coverage is high: Concept related all points are covered and which is significant.

High Reliability and Precision: Each scale is highly reliable and precision with respect to items or question.

Comparability is higher: Between two or more sets of data comparison is higher.

Simplicity: It is the important things about measuring scales.

TYPES OF SCALE

1) Bogardus scales:

Bogardus scale is developed for the measurement of social distance or association or close ness of contact with respect to different groups. Researcher used for social distance scale for the purpose of study association between Americans and Albanians as living in the same country, living in the same community, living in the same neighborhood, living in next door and living as marriage partners. for Bogardus considerations was willing to accept fifth type of relationship which is willing to have the first four types of relations. In India, for the improvement of research work in social status of Tribal and Dalits they have been changed their occupations and achieved some higher social status and positions to what extent people of higher caste would like to

associate with them. Researcher can be asking questions on having different types of association with them as office colleagues, neighbor's, friends and marriage partners. There is a logical structure of intensity and Dalit as a marriage partner. He must be willing to association of lesser intensity as friend, as office colleagues, therefore knowing how many relationships are the higher costs respondent will accept the Dalits. Researcher can know which relationship must have been accepted

2) Thurstone scales:

Thurstone scale developed in USA in the 1920 which generates group of indicators of given variables which is a empirically used. The general procedure of this type of scaling is that researchers select number of relevant statements with respect to set up categories means agree or disagree. The statements or items given to the number of judges to order them on continent from 1 to 11 to form the scale. This type of item selected from each of the order category giving preference to items or whose ranking is judges agreed. This procedure involves the following five steps

Step 1:

Composing large number of statements by the researcher with respect to attitude to be measure. The statement should be covered favorable and unfavorable and neutral items. Each statement should be express only one an ambiguous Idea and be in a form that permits is to be endorsed or rejected statement is written on a separate piece of paper.

Step 2:

Ranking item by the number of judges to order then on a list favorable item is given score one and most favorable item is given for score 4 or 5 and so on. This type of the scale is called value to statement into a number of categories. According to how favorable or unfavorable items are to be attitude being investigated each judge rank each item on the scale. Usually in 11 categories therefore one item might be rank in third

category by one judge and in eleventh category by another judge, therefore these items are then combined into one master set of 11 categories.

Step 3:

Computing the average scale value means median for each item. This is done by regrouping the slips by items. Consider a given item had slips in sets to 2,6,8,11. All the slips for this item is collected and put aside. Each item therefore a set of slip whose number corresponding to the number of judges for each item the median value is calculated.

Step 4:

Selecting the specific scale of item or statements and computing community percentage values.

Step 5:

Testing the relevance of items or statements by the researchers and reducing their numbers is statement said identified through its scale value.

However, Thurstone scale is not often used today in research because of time and energy. It also not easy to get judges with the required professional skills and experience on the given variable.

3) Likert Scales:

Likert Scaling was developed in 1932 for the measurement of relative intensity of different statements or Items. In the summated rate scale answer to questions are to be ascertained only as agree or disagree, one can sure that the measuring of the same concept but in the scale, problem arises when one cannot sure that all questions measure the same concept. Therefore, Likert developed the technique by increasing the variation in the possible scores by coding strongly agree to strongly disagree instead of agree or disagree. Advantages of Likert scaling is to eliminates ambiguity definitely agree, agree with very much and so on. The researcher would find it impossible to judge the relative strength of agreement intended by the various respondent Likert format resolve this problem

3.1) Impotent Considerations in Likert's Scaling:

Objective of an item is to spread the respondent for response category, no purpose is served by including such items to which nearly every respondent is likely to respond in the same way.

Neutral items do not work well in Likert scaling questions which are likely to be and served as uncertain or undecided should be avoided.

The Likert scaling is advisable to have roughly equal number of positively and negatively word items in the scale. Likert scale is much simpler than Thurstone scale. Likert scaling do not rely on judge's opinions and is widely used in professional literature.

3.2) Construction of Likert's Scale:

Construction of scale items: The researcher constructs a series of items that express wide range of attitudes from extremely positive to extremely negative. Generally, 80 to 120 items are sufficient but four times of many items as needed are considered. Each item calls for checking one of the five answers it should be daily, frequently, occasionally, rarely, never.

Administrating items to a random sample of respondents in a piolet study: This is to check their attitudes of the list of items

Total Score Computing:for example, in the respondent check agree in item agree in item (A score-3), disagree in item (B score 4), disagree in item (C score 2), strongly agree item(E score -4), strongly disagree item (D score 1) his total score would be 16. This is wrong method of computing the score. In Likert's scale some items are positive and some items are negative and each item in itself is a rating scale. All items should be analyzed individually.

Determining discriminating power:By correlating each item with the total score and retaining those with the highest correlation or with item analysis separating high from the low is called discriminative power of the item.

Reliability of the test:Reliability can be tested in order other measuring procedures.

4) Guttman scales:

Louis Guttman developed scaling of Scalogram analysis in 1944 to find out there is only one combination of responses for each scale score. Therefore, there may be 10 or more different ways to make score of 2 with Likert's scaling there is only one way to make score of 2 on community

5) Standardize Test and their description –

Selection of test is the most things in this study. Following standard test will be used for the data collection

Teacher's Job Satisfaction Scale by YudhvirendraMudgil,I.S. Muber and PrabhaBhatiya

INTRODUCTION

The expected feelings of a teacher educator towards their job Satisfaction. Psychological feeling with both emotional and rational elements included in it. ideal teacher will contribute to our society. In the social, economic, political, cultural as well as other fields of the Nations whereas low job satisfaction teacher educator as may be effect in our education standards.

DEVELOPMENT OF SCALE

The final copy of job satisfaction scale has been 75 items based on the Likerts scaling techniques. With the help of 5-point scale primary items were prepared with the help of interview of college and university teachers as well as office bearers. With the help of this result discussions and review of literature 100 items were fixed. With the help of likerts format after critical review of evaluation 70 questions were selected and included in a primary copy and it is sent to 8 members five new items were added in the scale related to the importance. So that finally 75 items were fixed for the pilot study.

OBJECTIVES OF THE SCALE

The main purposeof scale was to identify degree of job satisfaction by teacher educators. This Scale consists of 75 items related to teacher's Job Satisfaction. Each of these statements having five options. Strongly Agree (SA), Agree (A), Indifferent (I), Disagree (D), Strongly Disagree (SD) Respondent are required to select only one option. There is no limit of time and there is no correct or wrong answers.

Scoring: The final questionnaire consists of 75 questions with five responses options given to the respondents

Strongly Agree	Agree	Indifferent	Disagree	Strongly Disagree
5	4	3	2	1

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