

## **A scale to measure the attitude of rural youth towards rural development activities**

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*Received: 4.1.2017/Accepted: 22.2.2017*

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### **ABSTRACT**

Attitude of an individual determines one's knowledge gain about any technology and its acceptance, adoption, continuance and rejection as well. Attitude is the degree of positive or negative effect associated with some psychological object. This study was designed to develop a scale to measure the attitude of rural youth towards rural development activities. Edward's equally appearing interval scale was adopted to develop the scale. The final scale comprised ten statements. This scale was standardized for administration.

**Keywords:** Attitude; rural youth; development activities; scale

### **INTRODUCTION**

Youth are the most potent segment population of any country. They are the backbone of the country. Rural development activities are the prime solution for today's employment for the rural youth. There exist variations in the aspirations and expectations of rural youth. Their varying degrees of attitude decide their expectations and aspirations. The successful involvement of rural youth in any development activity rests on their attitudinal dispositions. Hence understanding their attitude is a prime factor. Thurstone (1946) defined attitude as the degree of positive or negative effect associated with some psychological object. Now a days state and central governments are taking up various rural development activities for the overall development of village people. Hence effective participation of rural youth is an important factor in deciding the success of all these development programmes. The attitude of rural youth plays a vital role in lubricating their effective participation.

Considering the above facts research was carried out with the prime objective to develop an attitude scale in order to understand the varying degrees of attitude of rural youth towards rural development activities.

### **METHODOLOGY**

**Computation of attitude scale:** The scale was constructed by following equal appearing interval scaling technique developed by Thurstone and Chave (1929). For the purpose of the study attitude was operationalised as psychological disposition of the youth about rural development activities in varying degrees of favorableness or unfavorableness. Possible statements concerning the psychological object ie rural development activities with respect to the psychological and economical domains were collected based on review of literature and discussions with scientists and extensionists. In total 100 statements were collected which were organized and structured in the form of attitude items.

The items were screened by following the informal criteria suggested by Edwards (1969) for editing the statements to be used in the construction of the attitude scale. Based on the screening 80 items were selected which formed the universe of content. The 80 statements were then subjected to judges' opinion on a five point continuum ranging from most unfavorable to most favorable. The list of statements was sent to 55 judges who comprised extension specialists of state agricultural universities of Tamil Nadu, Kerala, Andhra Pradesh, Karnataka and

Gandhigram Rural University. Of the 55 judges 30 judges responded by sending their judgments. Based on the judgments the scale and Q-values for each statement were calculated by applying the equal appearing interval scale formula as suggested by Thurstone and Chave (1929).

$$S = L + \left[ 0.50 - \frac{\sum pb}{\sum pw} \right] i$$

where S= The median or scale value of the statement, L= The lower limit of the interval in which the median falls, pb= The sum of the proportions below the interval in which the median falls, pw= The proportion within the interval in which the median falls, i= The width of the interval and is assumed to be equal to 1.0

$$Q = C_{75} - C_{25}$$

where Q= Inter-quartile range,  $C_{75}$  = 75<sup>th</sup> centile

$$C_{75} = l + \left[ 0.75 - \frac{\sum pb}{\sum pw} \right] i$$

$C_{25}$  = 25<sup>th</sup> centile

$$C_{25} = l + \left[ 0.25 - \frac{\sum pb}{\sum pw} \right] i$$

The computed scale and Q values are tabulated in Table 1.

**Selection of attitude items:** The attitude items to be included in the final attitude scale were selected based on the distribution of scale values uniformly along the psychological continuum and high scale values and smaller Q-values. The scale values were arranged in descending order of magnitude and the difference between the successive scale values and the cumulative total of the computed differences were worked out. Considering the time limitation from rural youth's point of view it was decided to select ten statements to constitute the attitude scale. Since the selected scale values should have equal appearing interval distributed uniformly along the psychological continuum it was necessary to form ten statements at one statement from each compartment so that each compartment is spaced in the continuum. For this purpose (Table 1) the difference between the highest (5.12) and the lowest scale value (3.6) was worked out. The difference value

(1.52) was divided by ten. This second interval was worked out by adding the value 1.52 with the width of the first class interval (3.6) adding the value 1.52 with the width interval of second class (0.30) that gave the third interval (0.45). Subsequently all the ten intervals were worked out. Each class interval represented a compartment for the selection of the attitude items.

To select the attitude items from the ten compartments the scale values and the corresponding Q-values were considered. Based on the criteria already mentioned items having high scale value at one item from each compartment were taken. Care was taken to ensure that the selected items represented the universe of content and covered the psychological and economical domains of rural development activities. Thereby ten items were selected with equal appearing interval and with a uniform distribution along the psychological continuum. The attitude scale thus constructed is given in Table 2.

**Reliability and validity of the scale:** The reliability of the scale was determined by split-half method. The nine selected attitude items were divided into two equal halves by odd-even method (Singh 2008). The two halves were administered separately to 30 rural youth in a non-sample area. The scores were subjected to product moment correlation test in order to find out the reliability of the half test. The half test reliability coefficient 'r' was 0.785 which was significant at one per cent level of probability. Further the reliability coefficient of the whole test was computed using the Spearman-Brown prophecy formula. The whole test reliability  $r_{tt}$  was 0.82.

According to Singh (2008) when the purpose of the test is to compare the mean scores of two groups of narrow range a reliability coefficient of 0.50 or 0.60 would suffice. Hence the constructed scale was reliable as the  $r_{tt}$  was >0.60.

Content validation was carried out by subjecting the selected ten items to judges' opinion. The responses were obtained on a four point continuum of most adequately, more adequately, less adequately and least adequately covers. Scores 4, 3, 2 and 1 were given for the points on the continuum respectively.

Totally 30 judges responded by sending their judgments. The mean score of 2.5 was fixed as the basis for deciding the content validity of the scale. If the overall mean score of the attitude items as rated by

Table 1. Computation of equal appearing intervals

| Statement # | Scale value | Q-value | Difference between successive scale values | Cumulative value of the differences | Equal appearing class interval | Compartments |
|-------------|-------------|---------|--------------------------------------------|-------------------------------------|--------------------------------|--------------|
| 50          | 5.12        | 0.93    | 0.18                                       | 0.05                                | 0.15                           | 1            |
| 6           | 4.94        | 0.99    | 0.22                                       | 0.27                                | 0.30                           | 2            |
| 27          | 4.72        | 1.16    | 0                                          | 0.27                                |                                |              |
| 35          | 4.72        | 0.96    | 0.05                                       | 0.33                                | 0.45                           | 3            |
| 18          | 4.66        | 1.08    | 0.02                                       | 0.35                                |                                |              |
| 23          | 4.64        | 3.18    | 0.03                                       | 0.38                                |                                |              |
| 51          | 4.61        | 2.25    | 0.01                                       | 0.40                                |                                |              |
| 41          | 4.59        | 1.18    | 0.00                                       | 0.41                                |                                |              |
| 17          | 4.59        | 1.12    | 0.07                                       | 0.41                                |                                |              |
| 40          | 4.58        | 1.98    | 0.08                                       | 0.50                                |                                |              |
| 3           | 4.5         | 1.18    | 0                                          | 0.50                                | 0.61                           | 4            |
| 9           | 4.5         | 1.12    | 0                                          | 0.50                                |                                |              |
| 44          | 4.5         | 1.07    | 0                                          | 0.50                                |                                |              |
| 52          | 4.5         | 1.25    | 0                                          | 0.50                                |                                |              |
| 80          | 4.5         | 2.39    | 0.07                                       | 0.57                                |                                |              |
| 56          | 4.42        | 1.07    | 0                                          | 0.57                                |                                |              |
| 61          | 4.42        | 1.07    | 0.05                                       | 0.57                                |                                |              |
| 59          | 4.42        | 1.11    | 0                                          | 0.57                                |                                |              |
| 62          | 4.42        | 1.11    | 0.06                                       | 0.58                                |                                |              |
| 37          | 4.41        | 1.17    | 0.01                                       | 0.60                                |                                |              |
| 28          | 4.40        | 1.31    | 0                                          | 0.60                                |                                |              |
| 65          | 4.40        | 1.31    | 0.02                                       | 0.62                                |                                |              |
| 69          | 4.37        | 1.90    | 0                                          | 0.62                                | 0.76                           | 5            |
| 75          | 4.37        | 0.65    | 0.01                                       | 0.64                                |                                |              |
| 64          | 4.35        | 2.10    | 1.05                                       | 0.64                                |                                |              |
| 15          | 4.35        | 1.10    | 0                                          | 0.64                                |                                |              |
| 29          | 4.35        | 1.10    | 0                                          | 0.64                                |                                |              |
| 30          | 4.35        | 1.10    | 0.01                                       | 0.65                                |                                |              |
| 8           | 4.34        | 1.15    | 0.01                                       | 0.66                                |                                |              |
| 11          | 4.33        | 1.21    | 0                                          | 0.66                                |                                |              |
| 34          | 4.33        | 1.21    | 0                                          | 0.66                                |                                |              |
| 50          | 4.33        | 2.21    | 0                                          | 0.66                                |                                |              |
| 55          | 4.33        | 1.21    | 0                                          | 0.67                                |                                |              |
| 63          | 4.33        | 1.21    | 0                                          | 0.66                                |                                |              |
| 76          | 4.33        | 2.21    | 0.01                                       | 0.68                                |                                |              |
| 5           | 4.31        | 1.28    | 0.03                                       | 0.71                                |                                |              |
| 10          | 4.28        | 1.12    | 0                                          | 0.71                                |                                |              |
| 31          | 4.28        | 1.12    | 0.07                                       | 0.72                                |                                |              |
| 49          | 4.27        | 1.92    | 0.01                                       | 0.73                                |                                |              |
| 60          | 4.26        | 0.99    | 0.01                                       | 0.75                                |                                |              |
| 53          | 4.25        | 1.25    | 0                                          | 0.75                                |                                |              |
| 54          | 4.25        | 1.25    | 0.06                                       | 0.75                                |                                |              |
| 12          | 4.24        | 1.61    | 0.02                                       | 0.77                                |                                |              |
| 7           | 4.22        | 1.55    | 0.03                                       | 0.80                                | 0.91                           | 6            |
| 4           | 4.19        | 1.20    | 0.04                                       | 0.81                                |                                |              |
| 2           | 4.18        | 0.89    | 0.02                                       | 0.83                                |                                |              |
| 57          | 4.16        | 2.27    | 0.03                                       | 0.86                                |                                |              |
| 32          | 4.13        | 1.72    | 0                                          | 0.86                                |                                |              |
| 43          | 4.13        | 2       | 0                                          | 0.86                                |                                |              |
| 74          | 4.13        | 1.63    | 0.01                                       | 0.87                                |                                |              |
| 42          | 4.12        | 1.68    | 0                                          | 0.87                                |                                |              |
| 48          | 4.12        | 1.56    | 0.06                                       | 0.87                                |                                |              |
| 72          | 4.12        | 1.01    | 0.02                                       | 0.90                                |                                |              |
| 16          | 4.10        | 1.46    | .006                                       | 0.90                                |                                |              |
| 21          | 4.1         | 1.06    | 0.01                                       | 0.91                                |                                |              |
| 1           | 4.08        | 0.90    | 0.05                                       | 0.96                                |                                |              |
| 77          | 4.03        | 1.02    | 0.03                                       | 1.00                                | 1.06                           | 7            |

|    |      |      |      |      |      |    |
|----|------|------|------|------|------|----|
| 33 | 4    | 1.70 | 0.05 | 1.00 |      |    |
| 68 | 3.99 | 1.71 | 0.05 | 1.05 |      |    |
| 78 | 3.94 | 1.97 | 0.01 | 1.07 |      |    |
| 79 | 3.92 | 1.84 | 0.02 | 1.10 | 1.22 | 8  |
| 25 | 3.89 | 1.81 | 0    | 1.10 |      |    |
| 36 | 3.89 | 1.91 | 0    | 1.10 |      |    |
| 71 | 3.89 | 2.01 | 0.02 | 1.12 |      |    |
| 24 | 3.87 | 0.81 | 0.02 | 1.14 |      |    |
| 19 | 3.85 | 3.46 | 0.01 | 1.16 |      |    |
| 20 | 3.83 | 0.77 | 0    | 1.16 |      |    |
| 70 | 3.83 | 1.88 | 0.03 | 1.20 |      |    |
| 14 | 3.80 | 1.61 | 0.01 | 1.21 |      |    |
| 45 | 3.78 | 2.03 | 0.01 | 1.22 |      |    |
| 26 | 3.77 | 2.09 | 0.02 | 1.25 |      |    |
| 38 | 3.75 | 1.85 | 0.02 | 1.27 | 1.37 | 9  |
| 73 | 3.72 | 1.67 | 0.15 | 1.27 |      |    |
| 46 | 3.72 | 1.78 | 0.02 | 1.30 |      |    |
| 47 | 3.69 | 1.61 | 0.05 | 1.35 |      |    |
| 13 | 3.64 | 1.23 | 0    | 1.35 |      |    |
| 66 | 3.64 | 1.52 | 0.01 | 1.37 |      |    |
| 39 | 3.62 | 1.50 | 0    | 1.37 |      |    |
| 67 | 3.62 | 1.37 | 0.02 | 1.40 |      |    |
| 22 | 3.6  | 2.16 | 3.6  | 5.00 | 1.52 | 10 |

Table 2. Final set of attitude items selected with corresponding scale and Q values

| Statement # | Scale value | Q value | Statement                                                                                                   | Nature of statement |
|-------------|-------------|---------|-------------------------------------------------------------------------------------------------------------|---------------------|
| 6           | 4.94        | 0.99    | Rural youth are to be trained properly to use the available rural resources for the development activities. | Favourable          |
| 17          | 4.59        | 1.12    | Participation of youth in rural development activities will bring rural prosperity.                         | Favourable          |
| 9           | 4.5         | 1.12    | Any development programme for rural youth must have its base on their social and economic needs.            | Favourable          |
| 31          | 4.28        | 1.12    | Agriculture is the best venture for rural youth so as to make them self-employed.                           | Favourable          |
| 4           | 4.19        | 1.20    | Promotion of youth clubs paves ways for the systematic execution of rural development activities.           | Favourable          |
| 76          | 4.33        | 2.21    | Youth participation is not required for the rural development activities.                                   | Unfavourable        |
| 78          | 3.94        | 1.97    | Youth can't get remunerative income from the village/agriculture-based activities.                          | Unfavourable        |
| 24          | 3.87        | 0.81    | Vocational training programmes for youth are simply a means of wastage of time.                             | Unfavourable        |
| 20          | 3.83        | 0.77    | We have not seen any self-employment programme for rural youth now a days.                                  | Unfavourable        |
| 73          | 3.72        | 1.67    | Support from rural development programmes is not available in time for rural youth.                         | Unfavourable        |

the judges was above 2.5 the scale was declared as valid and if not it was otherwise. In the present case the overall mean score was worked out as 3.26 hence the constructed attitude scale was said to be valid.

**Administration of the scale:** The ten attitude items selected were arranged randomly in order to avoid biased response. The scale could be built on a five point continuum as strongly agree, agree, undecided, strongly

disagree and disagree. The scores for favorable statements may be given the scores as strongly agree –5, agree –4 undecided –3, disagree –2 and strongly disagree –1.

For unfavorable statements the scoring procedure can be reversed. The score obtained for each statement is summed up to arrive at the attitude score for the respondents. The scores range from 50 (maximum) to 10 (minimum). The responses are grouped as less favorable, moderately and highly favorable by employing the cumulative frequency method.

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