TECHNIQUE TO MEASURE THE ATTITUDE OF RURAL YOUTH TOWARDS DIPLOMA IN AGRICULTURE COURSE

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ABSTRACT
State Agricultural Universities of India carry out education in agriculture through degree and diploma courses with an objective to turn out practical hands with technically sound knowledge and skill of improved methods. Understanding the importance of agricultural education, effort has been made to develop a reliable and valid scale to measure the attitude of rural youth towards diploma in agriculture course. The final scale contained 16 statements and it has been developed by adopting ‘Scale product method’ combining Thurstone’s technique of equal appearing interval scale and Likert’s technique of summed rating.

Key words: Attitude rural youth, Agricultural Education, Diploma Agriculture.

Agricultural education is a professional education. It is also an instrument for bringing out desirable changes in rural structures, the economy and standard of living. The main objective of diploma education is to turning out practical hands, which will go back to their lands with technically sound knowledge of improved methods and not to hanker after finding clerical jobs. Keeping this in view a scale was developed by adopting systematic methodology to measure the degree of positive or negative feelings of the diploma student towards the diploma in agriculture course.

Objective: To construct the scale to measure the attitude of diploma students towards diploma in agriculture course.

Among the techniques available, researcher had selected ‘Scale product method’ which combines the Thurstone’s technique of equal appearing interval scale (1928) for selection of items and Likert’s technique of summed rating (1932) for ascertaining the response of the scale.

Statement collection: At initial stage of developing the scale, 27 numbers of statements reflecting feelings of the diploma students about the diploma in agriculture course were collected from relevant literature, discussion with experts of extension educationist. The collected statements were edited according to the criteria laid down by Edward (1957).

Judges’ rating on attitudinal statements: In order to judge the degree of “Unfavourableness” to “Favorableness” of each statement on the five point equal appearing interval continuum a panel of judges was selected. Fifty slips of the selected statements were handed over to judges. The judges selected for the study comprised of extension experts, professors and teachers of four diploma agricultural schools. The response of the 27 judges who replied was considered for analysis.

Determining statement value: The response of judges was obtained on the five points of rating scale. The statements most favourable, favourable, undecided, unfavourable and most unfavourable responses were given weightage of 5, 4, 3, 2 and 1 respectively. For negative statement the scoring system was reversed.

If the median of the distribution of the judgment for each statement is taken as the scale value of the statement, than the scale values can be found from the following formula.

\[
S = L + \frac{0.50 \cdot \sum P_b}{P_w} \times i
\]
Thurstone and Chave (Edwards, 1957) used the inter-quartile range \( Q \) as a means of the variation of the distribution of the judgments for a given statement. To determine value of \( Q \), two other points were measured, the 75\(^{th} \) centile and 25\(^{th} \) centile. The 25\(^{th} \) centile was obtained by the following formula:

\[
C_{25} = L + \frac{0.25 - \Sigma Pb}{Pw} \times i
\]

Where,
- \( C_{25} \) = The 25\(^{th} \) centile value of the statement
- \( L \) = The Lower limit of the interval in which the 25\(^{th} \) centile falls
- \( Pb \) = The sum of the proportion below the interval in which the 25\(^{th} \) centile falls
- \( Pw \) = The proportion within the interval in which the 25\(^{th} \) centile falls
- \( i \) = The width of the interval and is assumed to be equal to 1.0 (one).

The 75\(^{th} \) centile was obtained by the following formula:

\[
C_{75} = L + \frac{0.75 - \Sigma Pb}{Pw} \times i
\]

Where,
- \( C_{75} \) = The 75\(^{th} \) centile value of the statement
- \( L \) = The Lower limit of the interval in which the 75\(^{th} \) centile falls
- \( Pb \) = The sum of the proportion below the interval in which the 75\(^{th} \) centile falls
- \( Pw \) = The proportion within the interval in which the 75\(^{th} \) centile falls
- \( i \) = The width of the interval and is assumed to be equal to 1.0 (one).

Then the interquartile range would be given by taking the difference between \( C_{75} \) and \( C_{25} \), thus,

\[
Q = C_{75} - C_{25}
\]

In this manner the interquartile range (\( Q \)) for each statement was worked out for determinations of ambiguity involved in the statements. Only those statements were selected whose median values were

<table>
<thead>
<tr>
<th>Statement Number</th>
<th>Statement</th>
<th>Scale Value</th>
<th>Inter quartile range Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I believe that diploma agriculture course is useful for modern farming.</td>
<td>1.3</td>
<td>0.67</td>
</tr>
<tr>
<td>5</td>
<td>Positive changes could be developed in farming through diploma agriculture course.</td>
<td>1.6</td>
<td>1.02</td>
</tr>
<tr>
<td>3</td>
<td>Diploma agriculture course develop scientific approach in farming which results profitable farming.</td>
<td>1.6</td>
<td>0.98</td>
</tr>
<tr>
<td>4</td>
<td>Due to diploma agriculture course, farming is accepted as a profitable business.</td>
<td>1.68</td>
<td>0.99</td>
</tr>
<tr>
<td>6</td>
<td>Diploma agriculture course is able to convert the youth into progressive farmers.</td>
<td>1.7</td>
<td>1.04</td>
</tr>
<tr>
<td>20</td>
<td>Due to diploma agriculture course, youth find more resources to get information.</td>
<td>1.8</td>
<td>1.08</td>
</tr>
<tr>
<td>24</td>
<td>Diploma agriculture course is helpful in implementing the concept of organic farming.</td>
<td>1.8</td>
<td>0.96</td>
</tr>
<tr>
<td>19</td>
<td>In my view, diploma agriculture course is able to increase the knowledge of youth about value addition that increase the return of agricultural production and ultimately increase the profit.</td>
<td>1.8</td>
<td>1.03</td>
</tr>
<tr>
<td>22</td>
<td>Diploma agriculture course increase the knowledge in youth about environmental safety.</td>
<td>1.8</td>
<td>0.97</td>
</tr>
<tr>
<td>21</td>
<td>Diploma agriculture course could develop entrepreneurship skill in youth.</td>
<td>1.9</td>
<td>0.91</td>
</tr>
<tr>
<td>12</td>
<td>Diploma agriculture course restrict the further study of youth.</td>
<td>1.9</td>
<td>0.87</td>
</tr>
<tr>
<td>2</td>
<td>Diploma agriculture course is helpful for getting government job.</td>
<td>1.9</td>
<td>0.96</td>
</tr>
<tr>
<td>17</td>
<td>According to my opinion, diploma agriculture course is not prestigious course for youth.</td>
<td>1.9</td>
<td>1.34</td>
</tr>
<tr>
<td>18</td>
<td>Students join the diploma agriculture course because they did not get admission anywhere else.</td>
<td>2.03</td>
<td>1.36</td>
</tr>
<tr>
<td>15</td>
<td>Syllabus of the diploma agriculture course emphasis more on theoretical knowledge than practical knowledge.</td>
<td>2.03</td>
<td>0.72</td>
</tr>
<tr>
<td>16</td>
<td>Diploma agriculture course is difficult as compared to other course.</td>
<td>2.07</td>
<td>0.72</td>
</tr>
</tbody>
</table>
greater than Q value. Thurstone and Chave (Edwards, 1957) described another criteria in addition to Q as a basis for rejecting statement in scales constructed by the method of the equal appearing interval. Accordingly when a few statements had the same scale values, the statement having lowest Q values were selected.

**Final statement for attitude scale:** When there was a good agreement among the judges, in judging the degree of agreement or disagreement of a statement, Q was smaller compared to the value obtained, when there was relatively little agreement among the judges. Only those statements were selected whose median (scale) values were greater than Q values. However, when a few statements had the same scale values, statements having lowest Q value were selected. Based on the median and Q values, 16 statements numbering 1, 5, 3, 4, 6, 20, 24, 19, 22, 21, 12, 2, 17, 18, 15 and 16 of the original list were finally selected to constitute attitude scale. The scale values range from 1.3 to 2.07 with 0.5 class intervals.

**Method of scoring:** The selected 16 statements for the final format of the attitude scale were randomly arranged to avoid response biases, which might contribute to low reliability and detraction from validity of the scale. Out of the 16 selected statements, five statements were the indicators of the unfavorable attitude and eleven statements were the indicators of favorable attitude. Against these 16 statements, there were five columns representing five points continuum of agreement and disagreement to the statements as followed by Likert (1932) in his summated rating technique of attitude measurement. The five points on continuum were strongly agree, agree, undecided, disagree and strongly disagree with respective weights of 5, 4, 3, 2, and 1 for the favorable statements and with the respective weights of 1, 2, 3, 4 and 5 for the unfavorable statements. The weights of Likert’s technique and the scale value of Thurstone’s technique were combined in the form of a product and the total score for an individual was the sum of the product.

**Reliability of the scale:** The split-half technique was used to measure the reliability of the scale. The 16 statements were divided into two halves with 8 odd numbered in one half and 8 even-numbered statements in the other. These were administered to 25 respondents. Each of the two sets of statements was treated as a separate scale and then these two sub-scales were correlated. The co-efficient of reliability was calculated by the Rulon’s formula (Guilford, 1954), which came to 0.7269. This value suggests that the scale is reliable so researcher can expect consistent and dependable results from the developed scale in different situations.

**Implication:** The constructed scale will be useful for measurement of the attitude of diploma students towards diploma in agriculture course.

**REFERENCES**