

Attitude towards Application of Distance Education in Agriculture and Allied Field - A Scale Development

Meena C. Patel¹ and N.B. Chauhan²

1. Asstt. Prof., Food Sc. and Home Eco., 2. Prof. and Head, Deptt. of Ext. Edu. BACA, AAU. Anand

Corresponding author e-mail: dminacpatel@yahoo.com

ABSTRACT

The study was conducted to develop and standardize the reliable and valid scale, to measure attitude towards application of Distance Education in Agriculture and allied Field. Appropriate statistical methods. 'Scale product method' was used, which combines Thurston and Likert techniques. Twenty four (24) statements were selected for judgment; a panel of 50 judges was requested to assign the score for each statement on five point continuum. Based on the scale (median) and Q values, eight (8) statements were finally selected to constitute attitude scale to measure application of Distance Education in Agriculture and allied Field.

Key words: *Reliable and valid scale; Distance Education; Scale product method;*

It is an undeniable fact that majority of the people in the third world are illiterate. If we add to these the number of those who cannot continue their studies due to lack of money or distance from the educational institutions, the number of underprivileged would touch alarming figures. Conventional education system cannot cater to the needs of these people because of its limitations. Due to this, the governments of different countries have felt the need of a distance education as a substitute for formal education. In the field of agriculture and rural development also, there is wide gap between actual requirement and availability of able human resources for agricultural research, education, extension, occupation and management. Realizing this, application of distance education has been advocated by the planners and administrators. Thus, before implementation of distance education in agricultural higher education, one should understand feeling of academicians and others towards application of distance education in agricultural higher education. Keeping this in view, an attempt was made to develop a scale to measure the attitude of academicians and others towards application of distance education in agriculture and allied field.

METHODOLOGY

In the present study attitude is conceptualized as positive or negative feelings towards application of

Distance Education in Agriculture and allied Field. Scale product method' which combines the *Thurstone's* (1928) technique of equal appearing interval scale, for selection of items and Likert's technique of summated rating (1932) for ascertaining the response on the scale as proposed by *Eysenck and Crown* (1949) was used. **Statement Collection:** In initial stage of developing the scale, 31 statements reflecting feelings of Distance Education in Agriculture and allied Field were collected. The collected statements were edited according to the criteria laid down by *Edward* (1957). From the 31 statements, 24 statements were selected for judgment. **Statement Analysis :** In order to judge the degree of "Unfavorableness" to "Favorableness" of each statement on five point equal appearing interval continuum i.e. strongly agree, agree, undecided, disagree, strongly disagree, a panel of 30 judges of social science group was selected.

Determination of scale values : Based on judgment, the median value of the distribution and the Q value for the statement concerned were calculated with the help of

$$S=L+\frac{0.50-\sum P_b}{P_w} \times i$$

The inter-quartile range ($Q = Q_3 - Q_1$) for each statement was also worked out. Only those statements were selected whose median values were greater than

Table 1. Based on the scale (median) and Q values out of 24 statements 8 statements were finally selected to constitute attitude scale (DEAAF: Distance Education in Agriculture and allied Field)

S.No.	Final format of selected Statement	SA	A	UD	DA	SDA
1	I feel that DEAAF is need of hour to fill gap between actual need of able human recourses for agril. development and their availability. (+)					
2	I believe that there is need to implement DEAAF programme because of its flexibility.(+)					
3	I don't think offering masters and doctorate programme on agriculture through DE is possible. (-)					
4	I dislike DEAAF because it does not follow formal way of learning. (-)					
5	I like to learn through DEAAF as it provides opportunity to learn at any time. (+)					
6	I feel that DEAAF creates educational opportunity to those who want to learn while earning.(+)					
7	I feel that DEAAF is relevant to the ever increasing higher agricultural educational needs of India. (+)					
8	I believe that DEAAF has the potential to bring out innovation. (+)					

Q value. When a few statements had the same scale values, the statements having lowest Q Values were selected. 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 items had the same scale values, the item having lowest Q Values were selected. In the same manner, Scale to measure agricultural risk orientation was developed and standardized statistically by *Patel and Chauhan (2010)*.

Reliability of the scale : The split-half technique was used to measure the reliability of the scale. The 8 statements were divided into two equal halves with 4 odd numbered and 4 even numbered. These were administered to 30 students of Agriculture College. Each of the two sets was treated as separate scales having obtained two score, for each of the 30 respondents. Co-efficient of reliability between the two sets of scores was calculated by Rulon's formula (*Guilford 1954*).

This was found to be 0.78. It means that the developed scale was found reliable.

Validity of the scale : The validity of the scale was examined for content validity by determining how well content were selected by discussing it with specialists, of extension and statisticians. Thus, the present scale satisfied the content validity.

Scoring technique: Against each of 8 statements there were five columns, representing a five point continuum of agreement or disagreement to the statements as followed by *Likert (1932)*. The points on continuum were strongly agree, agree, undecided, disagree and strongly disagree with a weightage score of 5, 4, 3, 2 and 1, respectively and scores are reversed for unfavorable or negative statement. To know level of attitude towards application of Distance Education in Agriculture and allied field, scores of each statement will be summed up.

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