

A SCALE TO MEASURE SELF-CONFIDENCE OF RURAL YOUTH ABOUT FLORICULTURE FARMING

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ABSTRACT

Floriculture farming is the fastest growing sector in India and contributes immensely to poverty eradication and nutritional security. Floriculture crops play a unique role in the Indian economy by improving the income of the farmers. For understanding the floriculture farming adopting self-confidence of rural youth, the scale to measure the floriculture farming adopting self-confidence of rural youth was developed. In initial stage, 34 statements reflecting self-confidence of rural youth about floriculture farming were collected from relevant literature and discussion with experts of extension and horticulture disciplines. The collected statements were edited according to the criteria laid down by Edward (1957) and then 22 statements reflecting self-confidence of rural youth about floriculture farming were selected as they were found to be unambiguous. Based on the median and Q values, 12 statements reflecting self-confidence of rural youth about floriculture farming were finally selected to constitute self-confidence scale. The test was found to be reliable (0.79) and valid.

Keywords : floriculture farming, self-confidence, rural youth, horticulture. scale, cultivators

INTRODUCTION

Cultivators are said to be very important citizens on this earth because they feed the world. India is an agricultural country with 143 million hectares of land as net sown area, the highest percentage of land under cultivation in the world. Horticulture sector encompasses a wide range of crops such as fruit crops, vegetable crops, ornamental crops, spices, medicinal and aromatic crops etc. Floriculture farming is the fastest growing sector in India and contributes immensely to poverty eradication and nutritional security. This sector has immense scope in India to increase the income and employment for the population. Floriculture crops play a unique role in the Indian economy by improving the income of the farmers. With this backdrop, the present research study on 'Development and standardization of a scale to measure the self-confidence of rural youth about floriculture farming is undertaken with the following objective.

OBJECTIVE

To develop scale to measure the self-confidence of rural youth about floriculture farming

METHODOLOGY

In the present study self-confidence is conceptualized as the abilities and belief on oneself to be a part of floriculture farming independently. Among the

techniques available, 'Scale product method' which combines the Thurstone's technique (1928) of equal appearing interval scale for selection of items and Likert's technique (1932) of summated rating for ascertaining the response on the scale as proposed by Eysenck and Crown (1949) was used. The steps followed to develop the scale in sequence were item collection, item analysis, determination of scale and 'Q' values, finding reliability of the scale and validity of the scale. The methods are followed as suggested by Vinaya et al. (2018), Jagadeeswari, et al. (2019), and Yeragorla et al. (2021).

Item collection

The items of self-confidence scale are called as statements. In initial stage, 34 statements reflecting self-confidence of rural youth about floriculture farming were collected from relevant literature and discussion with experts of extension and horticulture disciplines. The collected statements were edited according to the criteria laid down by Edward (1957) and then 22 statements reflecting self-confidence of rural youth about floriculture farming were selected as they were found to be unambiguous.

Item analysis

In order to judge the degree of 'Unfavorableness' 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 the experts connected with extension educational and floriculture farming work. The judges were requested to judge each statement in terms of their most agreement to most disagreement with the statements with the five equal appearing interval continuums. All 50 experts returned the statements after duly recording their judgments and were considered for the analysis.

Determination of scale and 'Q' values

Frequency distribution of the judges based on responses in five continuums was prepared. On the bases of judgment, the median value of the distribution and the Quartile (Q) value for for each of 34 statements was calculated with the help of following formula.

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

Where,

S = Scale value

L = The Lower limit of the interval in which the median falls

\sum_{P_b} = The sum of the proportion below the interval in which the median falls

P_w = 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 (one).

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 point were measured, the 75th centile and 25th centile.

The 25th centile was obtained by the formula.

$$C_{25} = L + \frac{0.25 - \sum P_b}{P_w} \times i$$

Where,

C_{25} = The median or scale value of the statement

L = The Lower limit of the interval in which the 25th centile falls

\sum_{P_b} = The sum of the proportion below the interval in which the 25th centile falls

P_w = The proportion within the interval in which the 25th centile falls

i = The width of the interval and is assumed to be equal to 1.0 (one).

The 75th centile was obtained by the following formula.

$$C_{75} = L + \frac{0.75 - \sum P_b}{P_w} \times i$$

Where,

C_{75} = The median or scale value of the statement

L = The Lower limit of the interval in which the 75th centile falls

\sum_{P_b} = The sum of the proportion below the interval in which the 75th centile falls

P_w = The proportion within the interval in which the 75th 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,

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

The inter-quartile range ($Q = Q_3 - Q_1$) for each statement was worked out for determination of ambiguity involve in the statement. Only those items were selected whose median (scale) values were greater than Q values. However, when a few items had the same scale values, items having lowest Q value were selected. Based on this, 12 statements reflecting self-confidence of rural youth about floriculture farming were finally selected to constitute self-confidence scale. The selected 12 statements reflecting self-confidence of rural youth about floriculture farming for final format of the self-confidence scale were randomly arranged to avoid response bias. The final format of the scale is presented in Table: 1.

Reliability of the scale

To know the consistency of the scale, reliability was worked out. The split-half technique was used to measure the reliability of the scale. Selected 12 statements reflecting self-confidence of rural youth about floriculture farming were divided into two equal halves with 6 odd and 6 even numbered statements. Each of the two sets was treated as separate scales having obtained two score, for each of the 20 respondents. Co-efficient of reliability between two sets of score was recalculated by Rulon's formula (Guilford 1954), which was found 0.79.

Validity of the scale

The validity of content of scale was examined by discussing with specialists of the extension, horticulture and statistics. Specialists examined and realized appropriateness of the each statement to measure the floriculture farming adopting self-confidence of rural youth.

Administration of the scale (Scoring technique)

For application of the scale, the researcher can collect information against each statement in five point continuum viz. 'Strongly agree', 'Agree', 'Undecided', 'Disagree' and 'Strongly disagree' with weighted score of 5,4,3,2 and 1 for positive and reverse to negative statements (Table 1).

Table 1: Final format of selected statements to measure the **self-confidence of rural youth for adopting floriculture farming**

Sr. No.	Statement	SA	A	UD	DA	SDA
1	I have enough confidence to establish a floriculture farm on my own.					
2	I have the practical ability to carry out exercises associated with quality flower productions.					
3	I am self-confident to produce flowers in different seasons.					
4	I am self-confident to handle irrigation management associated with flower cultivations.					
5	I have expertise to handle the harvesting of flowers as per the demand of the market.					
6	I am confident in producing quality flowers under controlled conditions.					
7	I am confident to handle post-harvest management practices of flower cultivations.					
8	I am confident in handling labours to manage a floriculture farm.					
9	I am not confident in the marketing of flowers successfully.					
10	I have the confidence to manage risks associated with the cultivation of flower crops.					
11	I am self-reliant in adopting floriculture farming as a profession permanently.					
12	I am not good at the maintenance of tools and implements used in my floriculture farms.					

SA = Strongly Agree, A = Agree, UD = Undecided, D = Disagree, SDA = Strongly Disagree

CONCLUSION

Looking to the value of reliability and validity of the scale it is advised to use/apply this scale for further research.

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CONFLICT OF INTEREST

No conflict of interest among researchers.

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