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A SCALE TO MEASURE ATTITUDE OF YOUTH TOWARDS AGRISTARTUP PROGRAMS

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ABSTRACT

The Indian startup ecosystem has dynamically evolved over the last two decades. While some startups were founded in the 2000s, the ecosystem remained immature as only a few investors were active, and the number of support organizations such as incubators and accelerators was limited. Therefore, the study aims to develop and standardize a scale to measure youth attitudes toward startup programs. To understand the attitude of youth toward Agri-startup programs, a scale was developed to measure their perspective. In the initial stage, 27 statements reflecting the attitude of youth toward Agri-startup programs were collected from relevant literature and discussions with experts in agriculture and allied sectors. These collected statements were edited according to the criteria laid down by Edward (1957), resulting in 19 statements that were deemed unambiguous in reflecting the attitude of youth toward Agri-startup programs. Based on the median and Q values, 8 statements that best reflected the attitude of youth toward Agri-startup programs were finally selected to constitute the attitude scale. The test was found to be reliable (0.81) and valid

Keywords : *startup ecosystem, attitude scale, agri-startup programs*

INTRODUCTION

In many other parts of the world, startups in India have received increased attention in recent years. Their numbers are on the rise, and they are now widely recognized as important engines for growth and job generation. Through innovation and scalable technology, startups can generate impactful solutions and act as vehicles for socio-economic development and transformation.

The Indian startup ecosystem has evolved dynamically over the last two decades. While some startups were founded in the 2000s, the ecosystem was still immature, with only a few active investors and a limited number of support organizations such as incubators and accelerators. Hence, the study aims to develop and standardize a scale to measure the youth attitude towards startup programs. The study helps provide insights into issues and the qualitative behavior of youth towards startup programs. Therefore, it is necessary to study the attitude of youth towards Agri-startup programs. However, there is no tool available to measure the attitude of youth towards Agri-startup programs. With this backdrop, the present study has been conceptualized with the following objective.

OBJECTIVE

To develop a scale to measure attitude of youth towards Agri-startup programs

METHODOLOGY

In the present study, attitude is conceptualized as the positive or negative feelings of youth towards Agri-startup programs independently. Among the available techniques, the 'Scale product method,' which combines Thurstone's technique (1928) of equal-appearing interval scale for item selection 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 the reliability of the scale, and establishing the validity of the scale. The methods were followed as suggested by Patel and Chauhan (2010), Vinaya et al. (2018), Jagadeeswari et al. (2019), Chauhan and Patel (2020), Yeragorla et al. (2021), Patel et al. (2022a), Patel et al. (2022b), and Patel et al. (2022c).

RESULTS AND DISCUSSION

Steps in development of attitude scale

Item collection

The items of the attitude scale are referred to as

statements. In the initial stage, 27 statements reflecting the attitude of youth towards Agri-startup programs were collected from relevant literature and discussions with experts in agriculture and allied sectors. These collected statements were then edited according to the criteria laid down by Edward (1957). Subsequently, 19 statements reflecting the attitude of youth towards Agri-startup programs were selected, as they were found to be unambiguous.

Item analysis

To assess 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 containing the chosen statements were provided to experts affiliated with agriculture and allied sectors. The judges were tasked with evaluating each statement based on their level of agreement or disagreement, using a five-point equal-appearing interval continuum. All 50 experts returned the statements after recording their judgments, and their inputs 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 foreach of 19 statements was calculated with the help of following formula.

$$S = L + \frac{0.50 - \sum Pb}{Pw} \times i$$

Where,

S = Scale value

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

$\sum_{Pb}$ = 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.

$$\mathbf{C_{25} = L + \frac{0.25 - \sum Pb}{Pw} \times i}$$

Where,

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

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

$\sum_{Pb}$ = The sum of the proportion below the interval in which the 25thcentile 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.

$$\mathbf{C_{75} = L + \frac{0.75 - \sum Pb}{Pw} \times i}$$

Where,

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

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

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

Pw = 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,

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

The interquartile range (Q = Q3 - Q1) for each statement was calculated to determine the ambiguity involved in the statement. Only those items were selected whose median (scale) values were greater than the corresponding Q values. However, in cases where several items had the same scale values, the items with the lowest Q values were selected. Based on this criterion, 8 statements reflecting the attitude of youth towards Agri-startup programs were ultimately chosen to constitute the attitude scale. To prevent response bias, the selected 8 statements were randomly arranged. The final format of the scale is presented below.

Reliability of the scale

To assess the consistency of the scale, reliability was determined using the split-half technique. The selected 8 statements reflecting the attitude of youth towards Agri-

Table 1: Final selected statements to measure the attitude of youth towards Agristart up programs

Sr. No.	Statement	S Value	Q Value
1	I believe that the agri-startup initiative heips in addressing India's unemployment problems.(+)	2.26	0.97
2	It is complicated to obtain financial aid through agri-startup programmes.(-)	4.06	1.54
3	Agri-startup programs are helpful to give a contribution to the community by developing a successful business. (+)	2.46	1.07
4	Agri-startup programmes help to achieve a high standard of living. (+)	3.03	1.60
5	Agri-startup programs help in building self-reliance among youth. (+)	3.26	1.00
6	Agri-startup programs promote versatility in the business.(+)	2.76	1.29
7	Agri-startup programs face a lot of problems due to a lack of market access.(-)	3.89	1.66
8	Starting an Agristartup is not a practical approach for all the youth. (+).	3.41	2.24

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

startup programs were divided into two equal halves, with 4 odd and 4 even-numbered statements in each set. Each of the two sets was treated as a separate scale, and two scores were obtained for each of the 20 respondents. The coefficient of reliability between the two sets of scores was calculated using Rulon's formula (Guilford, 1954), resulting in a value of 0.81.

Validity of the scale

The validity of the content of the scale was assessed by consulting specialists in agriculture and allied sectors. These specialists thoroughly examined and assessed the appropriateness of each statement in measuring the attitude of youth towards Agri-startup programs.

Administration of the scale (Scoring technique)

To apply the scale, the researcher can collect information for each statement using a five-point continuum, including 'Strongly agree,' 'Agree,' 'Undecided,' 'Disagree,' and 'Strongly disagree.' Weighted scores of 5, 4, 3, 2, and 1 can be assigned for positive statements, and the reverse order for negative statements.

CONCLUSION

In summary, this study successfully developed an attitude scale aimed at measuring the perspectives of youth towards Agri-startup programs. The rigorous process involved item collection, editing, and selection, resulting in a final set of 8 statements that encapsulate the nuanced attitudes of the youth in this specific context. The reliability of the scale was established through the split-half technique, yielding a coefficient of reliability of 0.81, indicating strong internal consistency. Additionally, the content validity was ensured by subjecting the scale to scrutiny by specialists in agriculture and related fields.

For practical application, the scale provides a user-friendly five-point continuum, allowing respondents to express their sentiments from 'Strongly agree' to 'Strongly disagree.' The weighted scoring system further enhances the scale's utility by assigning values based on the direction of the statement. Overall, this developed attitude scale stands as a promising tool for researchers and policymakers seeking to comprehend and analyze the attitudes of youth towards Agri-startup programs, contributing valuable insights to the discourse on fostering entrepreneurship in the agricultural sector.

In conclusion, the meticulous development process, coupled with the scale's reliability and content validity, positions it as a valuable instrument for empirical research and decision-making in the realm of agricultural entrepreneurship among the youth.

CONFLICT OF INTEREST

All authors declare that they have no conflict of interest

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