



Research Article

SCALE TO MEASURE THE ATTITUDE OF AGRICULTURAL ENTERPRISE OWNERS TOWARDS PRIVATE EXTENSION SERVICES

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Abstract: The 21st century force the policy makers, planners and farming community to rethink regarding advancement took place in agricultural sector. Farmers have to move towards economic aspects of their agricultural. One has to engage in more profit-making occupation enterprise instead of traditional approach. Such enterprises required a latest technical information / knowledge. The limitations of public extension system have provided the reasons for private extension services in India. Hence to understand the feeling of agricultural enterprise owners, a scale was developed to measure the attitude of agricultural enterprise owners towards Private Extension Services. A 'Scale Product Method' technique was chosen to construct the attitude scale which is combination of the Thurstone's technique of equal appearing interval scale for selection of the statements and Likert's technique of summated rating for ascertaining the response. 74 statements were sent to 60 judges for its relevancy by assigning the score for each item in five continuums. Based on the scale value (S) and quartile value (Q), total 12 statements were finally selected to constitute the scale to measure attitude towards Private Extension Services. Reliability of the scale found to be 0.8205.

Keywords: Attitude, Private Extension Services, Scale, Enterprise, Privatization

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Introduction

Global scenario at the end of the 20th century indicates that we are in a great period of change and agriculture is no exception to this. Farmers are moving towards the economic approach from the traditional one. They are more likely to engage themselves in more profiting enterprises instead of traditional farming. While on other hand in present time, public as well as private organizations are involved with extension services. Worldwide, the private agricultural extension gives a turning point in late 1980s, which represents the end of a major phase in the growth of publicly funded extension in both developed and developing countries. In time, demand driven and flexibility of private extension agencies might be more convenient for the farmers have been motivated to pay for their better enterprise. Several literatures reported that the attitude of an individual plays a significant role in the adoption or rejection of an innovation. So, with this context, an attempt was carried out to construct a scale to measure the attitude of agricultural enterprise owners towards Private Extension Services.

Material and Methods

Psychologists define the attitude as a learned tendency to evaluate things in a certain way. Among the techniques available for the construction of the scales, the Thurstone's Equal Appearing Interval Scale (1928)[1] and the Likert's Summated Rating Scale (1932)[2] was found appropriate. Both the methods having such limitations, first have discriminating response and second has in the selection of items therefore, a 'Scale Product Method' technique was chosen to construct the attitude scale which is combination of the Thurstone's technique of equal appearing interval scale for selection of the statements and Likert's technique of summated rating for ascertaining the response on the scale. The steps followed in construction of scale to measure the attitude of agriculture enterprise owners towards private extension services are discussed below.

Item Collection

The items making up an attitude scale are known as statements. Initially in the procedure of developing the scale, 95 statements were collected from the relevant literatures and converted them in context to present requirement. The statements, thus selected, were edited on basis of the criteria suggested by Edward and Kilpatrick (1948) and at last, 74 statements were scrutinized as they were found to be non-ambiguous.

Item Analysis

The five points equal appearing interval continuum was used to judge each statement on the degree of unfavourableness to favourableness. The personnel working as extension educationist, sociologist and psychologist were identified from various universities of India and prepared schedule which contents 74 items was sent for judging the relevancy. The schedule was sent online through 'google forms' to 135 judges with request to analyze the relevancy of items. Out of the total, 85 judges had responded. The investigator has found that some of the judges have responded very carelessly, misunderstand the directions and not be aware of the judgments desired in scale construction hence, 25 schedules were eliminated. Lastly, 60 schedules were kept for the construction of scale.

Selection of item as final statement

The five points of the rating scale were assigned score ranking from 1 for most unfavourable and 5 for most favourable. The responses of 60 judges on 74 items were transferred into the master sheet. Scale value (S) and Quartile Value (Q) were calculated from by statistical methods. Thus, only those statements were selected whose S values were greater than Q values. However, when a few statements had similar scale values, statements having lowest Q value were selected.

Table-1 Selected attitude statements for present study

SN	Statement	Scale Value	Quartile Value
1	PES increases the income of enterprise owner. (+)	4.0	1.62
2	PES motivate the farmers to utilize the loan/credit for intended purpose. (+)	3.9	1.35
3	PES always act on circumstances of enterprise owners. (+)	3.8	1.58
4	PES use to contribute with high value inputs to enterprise owners. (+)	3.7	1.47
5	Money oriented approach of PES restrict the enterprise owners to make trust. (-)	3.6	1.47
6	PES arranges financing agency with reasonable terms and conditions. (+)	3.4	1.56
7	In the name of PES, we are blindly following western thoughts which are not suitable to our situation. (-)	3.3	1.75
8	PES is cost effective. (+)	3.2	2.04
9	It is difficult to get credit without external help of PES. (+)	3.1	2.08
10	PES agencies always try to sale products without heading charges. (+)	3.0	1.97
11	PES are failed to prove their aim to the extend to which they announced. (-)	2.9	2.13
12	PES is not a need of the farmers. (-)	2.8	2.63

Results

Based on the Scale Value (S) and Q values, 12 statements numbering 24, 38, 52, 50, 51, 37, 2, 31, 64, 61, 3 and 6 of schedule were finally selected to measure the attitude of the agricultural enterprise owners towards private extension services.

Reliability of the scale

A scale is reliable when it gives consistently same results when it applied to the same sample. The prepared attitude scale for measurement was tested for its reliability by using the split half method. It was introduced to 30 respondents of non-sample area. The coefficient of reliability between these two sets of score was calculated by Rulon's formula [3]. The coefficient of reliability between two sets of score was found to be 0.8205 which was significant at 1 percent level.

Validity of the scale

The content validity of the scale was tested. It is the representative or sampling adequacy of the content, the substance, the matter and the topics of a measuring instrument. This method was used in the present scale to determine the content validity of the scale. As the content of the attitude was thoroughly covered the subject matter under the study through literature and expert opinion, it was assumed that present scale satisfied the content validity.

Administering the scale

The selected 12 statements for the final format of the attitude scale were randomly arranged to avoid the response biases, which might contribute to low reliability and detract from validity of the scale. Out of the 12 selected statements, 4 statements were the indicators of the unfavourable attitude and 8 statements were the indicators of favourable attitude. Against these 12 statements, there were five columns representing five points continuums of agreement and disagreement to the statements as stated by Likert (1932)[2] in his summated rating technique to measure the attitude. The five points continuums were strongly agree, agree, undecided, disagree and strongly disagree with respective weights of 5, 4, 3, 2, and 1 for the favourable statements and with the respective weights of 1, 2, 3, 4 and 5 for the unfavourable statements.

Application of research: It is applicable to measure the attitude of agricultural enterprise owners towards private extension services. It helps to understand the behavior of farmers towards private extension services.

Research Category: Agricultural Extension, Privatization

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Cultivar / Variety / Breed name: Nil

Conflict of Interest: None declared

Ethical approval: This article does not contain any studies with human participants or animals performed by any of the authors.
Ethical Committee Approval Number: Nil

References

- [1] Thurstone L.L. and Chave E.G. (1928) *Journal of Abnormal Social Psychology*, 22, 415-430.
- [2] Likert R.A. (1932) *Archives of Psychology*, 140.
- [3] Guilford J.P. (1954) *Psychometric Methods*. Tata McGraw Hill Publishing Co., Bombay, 597
- [4] Thurstone L.L. (1946) *American Journal of Sociology*. Chicago University, Chicago Press, 39-40.
- [5] Kaur J., Shehrawat P.S. and Quadri J. (2014) *Agric. Sci. Digest.*, 34(2), 81-86.
- [6] Haseena Bibi, Patel J.B. and Patel P.C. (2017) *Gujarat Journal of Extension Education*, 28(1), 11-13.