

DEVELOPMENT OF SCALE TO MEASURE ATTITUDE OF POULTRY FARMERS TOWARDS POULTRY MANAGEMENT PRACTICES

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ABSTRACT

The study was conducted to develop and standardize the reliable and valid scale, to measure attitude of poultry owners towards poultry management practices. Appropriate statistical methods 'Scale product method' was used, which combines Thurston and Likert techniques. A panel of 50 judges was requested to assign the score for each selected statement for judgment on five point continuum. Based on the scale (median) and Q values, 19 statements were finally selected to constitute attitude of poultry farmers towards poultry management practices.

Keywords: attitude, poultry farmer, poultry and management

INTRODUCTION

India's population has largely crossed one billion and by 2035 India will overtake China as the world's most populous country. In India poultry plays a crucial role in the rural economy by way of generating self employment and is the easy means of earning livelihood for economically backward rural people, which counts about 70.00 per cent of total population, living below poverty line. The eggs and chicken meat are important and rich sources of animal protein, vitamins and minerals. Poultry business is rich source of organic manure, income and employment to millions of farmers and other persons engaged in allied activities. However, poultry farmers feel unusual to start poultry farming. It is universally accepted fact that an attitude of an individual affects his behavior with respect to a particular object. Realizing this, researchers have developed a scale to measure attitude of the poultry farmers towards poultry management practices.

METHODOLOGY

Attitude refers to the "degree of positive or negative affect associated with some psychological object" (Thurstone, 1946). In the present study attitude is conceptualized as positive or negative reaction of beneficiary poultry owner towards improved poultry management practices. Among the techniques available, researcher has used. 'Scale product

method' which combines the Thurstone's technique of equal appearing interval scale (1929) for selection of items and Likert's technique of summated rating (1932) for ascertaining the response on the scale.

Item collection

The items of attitude scale called as statements. In initial stage of developing the scale large number of statements about improved poultry management practices were collected from relevant literature, discussion with experts of poultry, staff of extension education institute, A.A.U., Anand and Extension workers of the area. The statements, thus selected were edited according to the criteria laid down by Edward (1957). In all 75 statements were selected as they were found to be non-ambiguous and non factual.

Item Analysis

Seventy five slips of the selected statements were handed over to the professors and extension educationists of Anand Agricultural University, Anand, poultry scientists and extension officers of Gujarat State. The judges were requested to judge each statement in terms of their agreement or disagreement with the statements with the five point equal appearing interval continuum. Out of these experts, only 50 experts had returned the statements after dully recording their judgments and were considered for the analysis.

Determination of scale and values

The five points of the rating scale were assigned scores ranging from 1 score (for strongly disagree) to 5 score (for strongly agree). For positive statement, 5, 4, 3, 2 and 1 score was given to strongly agree, agree, undecided, disagree and strongly disagree response respectively, while for negative statements scoring system was reversed. Frequency distribution of the scores of judges was than prepared. Based on the judgment, scale (median) value and ‘Q’ value for each of 48 statements were calculated by using following formula

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

Where,

S = The median or scale value of the statement

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

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).

The inter-quartile range (Q = Q₃ - Q₁) for each statement was also worked out for determination of ambiguity involve in the statement.

When there was a good agreement among the judges, in judging the degree of agreement or disagreement of a statement, Q was small compared to the value obtained, when there was relatively little agreement among the judges. Only those items were selected whose median (scale) value were greater than Q values. However, when a few items had the same scale values, items having lowest Q value were selected. Based on the median and Q values 19 statements were finally selected to constitute attitude scale.

Reliability of the scale

The reliability of the test was examined by employing test-retest method. In this method, the developed attitude scale with 19 items was administered twice to the 20 poultry owners at 15 days interval, who were neither previously

interviewed nor had a chance to come in the final sample of study. Thus, two sets of attitude scores were obtained for 20 respondents. Co-efficient of reliability between the two sets of score was calculated by Rulon’s formula (Guliford 1954), which was 0.832.

$$r_{tt} = 1 - \frac{\sigma^2_d}{\sigma^2_t}$$

Where,

r_{tt} = Co-efficient of reliability.

Administering the scale

The selected 19 statements for the final format of the attitude scale presented in Table- 1, are randomly arranged to avoid response biases, which might contribute to low reliability and detract from validity of the scale. The responses can be collected on five point continuums viz., 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. With this same manner, attitude scale of farmers towards dehorning in cattle and attitude of tribal’s towards cross breed cattle rearing were developed and standardized statistically by Chauhan et al.(2015) and Panjabi et al. (2001), respectively.

Table 1: Final statements of the scale to measure attitude of farmers towards poultry management practices

Sr. No.	Statements	SU	MU	N	MF	SF
1	Improved poultry production technology is adopted extensively by most of poultry farmers.					
2	Adoption of new techniques in poultry production is a risky.					
3	Adopting improved poultry production technology one should get higher production of poultry produce.					
4	Improved poultry production technology is an instrument for social and economic change.					
5	There is no risk in adoption of Improved poultry production technology.					

6	Only progressive and big farmers can adopt Improved poultry production technology.					
7	Poultry production is not economically viable because it requires more investment.					
8	Adoption of new Improved poultry production technology affects the participation in social activities.					
9	Hybrid poultry strain is not given better result than the desi poultry strain.					
10	There is no matter a poultry ownershould be used either case system or deep letter system.					
11	No matter what poultry farmers may try, poultry production will be improved only when god will it.					
12	Expenditure on feeding is compensated by more production.					
13	Only educated farmers can cultivate the poultry production efficiently.					
14	Improved poultry production is difficult as it requires more technical skill.					
15	I would like to advise my son to continue improved poultry production technology.					
16	No matter, however new technology of poultry production may be tried, poultry production will not increase.					
17	Improved poultry production is not relevant to the need of most of the poultry farmers.					
18	I preferred improved poultry production due to low diseases attack.					
19	Improved poultry production increases the employment opportunity in rural area.					

SU:Strongly unfavourable, **MU:** Moderately unfavourable, **N:** Neutral, **MF:** Moderately favourable **SF:** Strongly favorable

CONCLUSION

The scale developed to measure attitude of poultry farmers towards poultry management practices is reliable and valid, hence it may be used in future studies with due modifications.

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