RELATIONSHIP BETWEEN SELECTED PERSONAL, SOCIO ECONOMIC AND PSYCHOLOGICAL CHARACTERISTICS OF BROILER FARMERS AND THEIR KNOWLEDGE ABOUT BROILER MANAGEMENT PRACTICES

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ABSTRACT

A study was conducted to know the relationship between personal, socioeconomic and psychological characteristics of broiler farmers and their knowledge about broiler management practices. A sample of 120 respondents was selected by probability proportional to size for the study from four districts of South Gujarat. It could be observed that age, occupation, flock size, extension contact, organizational participation, mass media exposure and innovation proneness did not show any significant relationship with knowledge level of broiler farmers. Whereas, remaining characteristics such as education, annual income from poultry farming and economic motivation showed positive and significant relationship at 0.05 level of probability. However, poultry farming experience, training exposure and risk orientation showed positive and significant relation at 0.01 level of probability with their level of knowledge. The co-efficient of determination (R^2) of the independent variables was 0.39. It means that 39.10 per cent of total variation in knowledge of broiler farmers was explained by the 14 selected independent variables. The 'F' value was found to be significant at 0.01 level of probability due to significant relationship between the independent variables and knowledge level of broiler farmers.

Keywords: *broiler farmers, knowledge about broiler management practices*

INTRODUCTION

The total Poultry population is 729.21 million and egg production is around 74.75 billion in our country as per 19th Livestock survey. The current per capita availability of egg is around 61 per year. Poultry meat production is 2.69 million metric tonnes. India has one of the world's largest and fastest growing poultry industries, ranking sixth in broiler meat production (USDA/FAS). The total poultry population is showing increasing trend over 2003-2012. The structure of India's poultry industry is varied and small-scale producers account for the bulk of production while large-scale producers accounts for a growing share of output in some regions. The Poultry Business in India provides employment to an estimated over 2 million people among which around 80 percent are directly employed, while the rest 20 percent is engaged with its allied areas like feed, pharmaceuticals, equipment, and other services as required by the poultry industry. Moreover, this sector also involves an additional workforce of around 1.6 million, primarily engaged with marketing and sales of poultry products. Considering these facts, the present study was designed to analyze the relationship between personal, socioeconomic and psychological characteristics of broiler farmers and their knowledge about broiler management practices.

OBJECTIVE

To know the relationship between personal, socioeconomic and psychological characteristics of broiler farmers and their knowledge about broiler management practices.

METHODOLOGY

Expost facto research design was adopted to study the profile characteristics of commercial broiler farmers. Out of the 7 districts in South Gujarat, 4 districts namely Surat, Navsari, Valsad and Bharuch were selected for the study as they are having the highest number of broiler poultry farms. From the selected four districts, 120 registered broiler farmers were selected by probability proportional to size sampling method for data collection. By this sampling procedure 15

broiler farms were selected from Surat, 43 from Navsari, 26 from Valsad and 36 broiler farms were selected from Bharuch. Data was collected with the help of a well structured pretested interview schedule incorporating all the items pertaining to study relationship between selected personal, socio economic and psychological characteristics of broiler farmers and their knowledge about broiler management practices.

RESULTS AND DISCUSSION

Relationship between selected personal, socio economic and psychological characteristics of broiler farmers and their knowledge about broiler management practices is presented in Table 1

Table 1: Relationship between selected socio-economic characteristics of broiler farmers and their knowledge about scientific poultry management practices   n=120

Sr. No.	Characteristics	Coefficient of correlation 'r' value
X_1	Age	-0.1544[NS]
X_2	Education	0.2092*
X_3	Occupation	-0.0665[NS]
X_4	Poultry farming experience	0.2366**
X_5	Training exposure	0.2405**
X_6	Flock size	0.0707[NS]
X_7	Extension contact	0.0815[NS]
X_8	Organisational participation	0.1275[NS]
X_9	Annual income from poultry farming	0.2028*
X_{10}	Mass media exposure	0.0718[NS]
X_{11}	Risk orientation	0.2962**
X_{12}	Innovation proneness	0.0618[NS]
X_{13}	Economic motivation	0.2180*
X_{14}	Marketing orientation	0.1624[NS]

* Significant at 0.05 level of probability
** Significant at 0.01 level of probability
NS- Non-significant

It can be observed from the Table 1 that there was negative and non significant relationship between age and knowledge level of broiler farmers. Age did not have any influence on knowledge level of the respondents. Similar result was reported by Ithika *et al.* (2013) and Patel *et al.* (2013) who found that age had no relationship with knowledge level.

With respect to education of broiler farmers, there was positive and significant relationship (r = 0.2092) with their knowledge level. This might be because the educated broiler farmers had greater access to different information sources and better capacity to adopt new technologies. This finding is in accordance with the findings of Raju *et al.* (2005), Ithika *et al.* (2013) and Patel *et al.* (2013).

Occupation of broiler farmers did not show any significant relationship with their knowledge level. Majority of the farmers were engaged in agriculture along with broiler farming which might be the reason for non-significant relationship between occupation and knowledge level of the respondents in poultry farming. Similar results were reported by Raju *et al.* (2005) and Ithika *et al.* (2013).

Poultry farming experience showed positive and significant relationship with the knowledge level of the respondents. Higher experience in poultry enterprise helped broiler farmers to attend to different practices more efficiently. Thus, longer experience allowed for efficient management under different situations or contexts. Therefore, it is logical that there was significant relationship between length of experience in broiler farming and knowledge of broiler farmers. This finding is in accordance with the findings of Ithika *et al.* (2013).

There was positive and significant relationship (r=0.2405) between training exposure and knowledge level of the broiler farmers. Thus, results prove that training plays an important role in improving knowledge about farming. This might be due to the fact that training enhances the competency of farmers and keep them informed about latest developments. It improves knowledge and skill of farmers in managing the farm and also gives orientation to forth-coming practices. Similar result was reported by Thorat (2005).

Size of the poultry farms had non significant (r= 0.0707) relationship with knowledge level of broiler farmers. The result says that flock size did not have any influence on knowledge level of the respondents. Similar result was observed by Thorat (2005).

Extension contact showed positive and non significant (r=0.0815) correlation with knowledge level of broiler farmers. The result indicates that extension contact had no significant influence on knowledge level of broiler farmers. This finding is in accordance with the findings of Patel *et al.* (2013).

Organisational participation of broiler farmers had

positive and non significant relationship with their knowledge level. It was found that the respondents were involved in some of the organisation as a member or as an office bearer, which did not help them to improve their knowledge about poultry farming.

Annual income of the broiler farmers showed positive and significant (r=0.2028) relationship with their knowledge level. Better economic condition might have motivated broiler farmers to diversify their farming. For which they might have had frequent interactions with different agencies to acquire knowledge. This finding is in accordance with the findings of Raju *et al.* (2005) and Ithika *et al.* (2013).

Mass media exposure had positive and non significant (r= 0.0718) relationship with knowledge level of broiler farmers.

The data presented in Table 1 clearly indicated that risk orientation of the broiler farmers had positive and significant correlation (r=0.2962) with their knowledge level. The probable reason might be that, the broiler farmers with higher level of risk orientation would be ahead of others in exploring the potentialities of poultry farming. This finding is in accordance with the findings of Ithika *et al.* (2013).

The data presented in Table 1 reveals that, innovation proneness of the broiler farmers had positive and non significant relationship (r=0.0618) with their knowledge level. Similar result was reported by Raju *et al.* (2005)

Economic motivation of broiler farmers had positive and significant relationship (r=0.2180) with their knowledge level. Economically motivated farmers try to acquire knowledge about scientific and modern practices which would reduce the input cost and enhance the profit margin. This might be the reason why economic motivation of broiler farmers had positive and significant relationship with their knowledge level.This finding is in line with the finding of Raju *et al.* (2005), Vahora *et al.,* (2015) and Ithika *et al.* (2013).

Multiple regression analysis with knowledge level as the dependent variable and fourteen independent variable was carried out for determining the contribution of independent variables to the knowledge level of the broiler farmers. The results are shown in Table 2.

Table 2: Multiple regression analysis of independent variables with knowledge level of broiler farmers   n=120

Sr. No.	Characteristics	Regression Coefficient 'b' Value	't' Value
X_1	Age	-0.055	-2.130**
X_2	Education	0.039	0.529[NS]
X_3	Occupation	-0.198	-0.980[NS]
X_4	Poultry farming experience	0.109	1.987*
X_5	Training exposure	1.734	3.356**
X_6	Flock size	0.000	-3.436**
X_7	Extension contact	0.055	0.608[NS]
X_8	Organisational participation	0.469	1.637[NS]
X_9	Annual income from poultry farming	5.432	2.765**
X_{10}	Mass media exposure	-0.051	-0.425[NS]
X_{11}	Risk orientation	0.602	3.499**
X_{12}	Innovation proneness	-0.588	-1.042[NS]
X_{13}	Economic motivation	0.372	1.791[NS]
X_{14}	Market orientation	0.180	0.894[NS]
R^2 = 0.391			F = 4.136**

* Significant at 0.05 level of probability

** Significant at 0.01 level of probability

NS : Non-Significant

The data in Table 2 revealed that age (-2.130**), poultry farming experience (1.987*), training exposure (3.356**), flock size (3.436**), annual income from poultry farming (2.689**) and risk orientation (3.499**) were found significantly related with knowledge level of broiler farmers.

However, education (0.529[NS]), occupation (-0.980[NS]), extension contact (0.608[NS]), organisational participation (1.637[NS]), mass media exposure (-0.425), innovation proneness (-1.042[NS]) economic motivation (1.791[NS]) and market orientation (0.894[NS]) were found non significantly associated with knowledge level of broiler farmers.

The co-efficient of determination (R^2) of the independent variables was 0.391 It meant that 39.10 per cent of total variation in knowledge of broiler farmers was explained by the 14 selected independent variables. The 'F' value was found to be significant at 0.01 level of probability due to significant relationship between the independent variables and knowledge level of broiler farmers.

CONCLUSION

Education, annual income from poultry farming and economic motivation showed positive and significant relationship with knowledge level of broiler farmers at 0.05 level of probability. However, poultry farming experience, training exposure and risk orientation showed positive and significant relation at 0.01 level of probability with the knowledge level of broiler farmers

Multiple regression analysis of the selected characteristics of broiler farmers such as education, occupation, extension contact, organisational participation, mass media exposure, innovation proneness, economic motivation and marketing orientation did not show any significant relationship with knowledge level of broiler farmers. Whereas, remaining characteristics such as age, poultry farming experience, training exposure, flock size, annual income from poultry farming and risk orientation showed significant relationship with their level of knowledge.

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