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Study on achievement motivation and risk orientation among dairy entrepreneurs and collates with their socio-economic and psychological characteristics

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Abstract
The study was conducted in Udaipur district of Rajasthan state selected purposely keeping in view the fact that the district has highest population of livestock in southern Rajasthan. A sample of 120 respondents was selected for present study. The results indicated that a majority of farmer had medium level of achievement motivation. 64.29% of small dairy farmers were found to have medium level of risk orientation while majority of medium category of dairy farmers had medium level of risk orientation whereas in case of large farmer's category, 82.35% of them exhibited high level of risk of dairy farming enterprise. The correlation analysis revealed the independent variables Likewise training, occupation, scientific orientation, extension, mass media were positively and significantly correlated with farmer's achievement motivation. However, annual income, economic motivation, scientific orientation, mass media the respondents were found to have positively and significant correlation with risk orientation. The determinant of training, occupation, extension, annual income, mass media, economic motivation and scientific orientation were important variables which influenced achievement motivation and risk orientation of dairy entrepreneurs.

Keywords: Achievement motivation, dairy entrepreneurs, risk orientation, psychological characteristics, dairy farmers

Introduction
Dairy plays a significant part in numerous aspects of Indian society, including cuisine, religion, culture, and the economy. India has the world's largest dairy herd with over 300 million bovines, producing over 187 million tonnes of milk. India is first among all countries in both production and consumption of milk. Most of the milk is domestically consumed, though a small fraction is also exported. Indian cuisine, in particular North Indian cuisine, features a number of dairy products like paneer, while South Indian cuisine uses more yogurts and milk. Milk and dairy products play a part in Hindu religious practice and legend. Dairy production in the Indian subcontinent has historical roots that go back 8,000 years to the domestication of zebu cattle. Dairy products, especially milk, were consumed on the subcontinent at least from the Vedic period. In the mid- to late 20th century, Operation Flood transformed the Indian dairy industry into the world's largest. Previously, milk production in India occurred mainly on household farms. The economic impact of the dairy industry in India is substantial. Most of the milk produced comes from buffalo; cow milk is a close second, and goat milk a distant third. A large variety of dairy products are produced in India. Dairy imports into India are negligible and subject to tariffs. India has been the leading producer and consumer of dairy products worldwide since 1998 with a sustained growth in the availability of milk and milk products. Dairy activities form an essential part of the rural Indian economy, serving as an important source of employment and income. India also has the largest bovine population in the world. However, the milk production per animal is significantly low as compared to the other major dairy producers. Moreover, nearly all of the dairy produce in India is consumed domestically, with the majority of it being sold as fluid milk. On account of this, the Indian dairy industry holds tremendous potential for value-addition and overall development. Rajasthan is located in the north-western part of the Indian subcontinent and has a geographical area of about 3,42,239 square km, which is 10.4% of the country's geographical area. Rajasthan contributes about 11% to the total milk production. The state currently represents the 6th largest dairy market in India. The milk production in Rajasthan generally consists of cow and buffalo milk.

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So, it is evident that the use of cattle for dairy purposes is increasing and this is one industry that is flourishing in the state despite the economic recession in other spheres. Milk is the main source of nutritious food for millions of people and an acceptable source of animal protein for the population in Rajasthan. Rajasthan is an agricultural state with a good potential for milk production. Dairy farming is one of the biggest farming industries in India. Make the dairy sector proper and organized to improve the quality of dairy products, and many dairy farming loans are available in India. Dairy cooperatives have provided an organized network of milk marketing to the rural households, and also provided the provision of health services and feed inputs. Cost plays an important role in portraying the economic viability of a dairy farming system. It is a critical economic indicator for milk producers, consumers, and policymakers to provide an effective linkage for fixing the price of milk. In Rajasthan, per capita availability of milk is highest in the Jaisalmer district. Approximately, 50% of the milk produced is sold in the market and only 25% is consumed at home as liquid milk. The remaining 25% of the milk produced is converted into milk products. In this climatic scenario, the dairy farming sector provides sustainable year-round income to a large number of farmers. The dairy sector in Rajasthan plays a major role in improving socio-economic status. The state is 2nd highest in milk production in the country. Of the total milk produced, 53% is buffalo milk, 36% is cattle milk and 11% is goat milk. Rajasthan has a vast animal genetic resource with a different variety of indigenous cattle breeds. Thus conservation of indigenous cattle breeds is essential due to their potentiality for production of milk or draught capability or high resistance to diseases and heat tolerance ability. Farmers in Rajasthan realize 60 to 70% of the consumer price from dairy products. Livestock breeds originating in Rajasthan like Tharparkar, Kankrej, and Gir cattle. (Annual Report). Keeping in view the above facts, the present study was conducted in southern Rajasthan, with the specific objective of identifying the psychological characteristics by the dairy farmers and to formulate the specific strategies against them to improve their productions.

Material and Methods
The study was conducted in Udaipur district of Rajasthan state selected purposely keeping in view the fact that the district has highest population of livestock in southern Rajasthan. Udaipur district has about 15.25 lacs livestock population (19th livestock census Rajasthan-2012). Udaipur district comprises of 11 tehsils namely Girwa, Vallabhnagar, Mavli, Jhadol, Kherwara, Salumbar, Rishabhdeo, Lasadiya, Gogunda, Sarada and Kotra. Out of 11 tehsils four tehsils namely Girwa, Salumbar, Kotra and Vallabhnagar were selected purposely for the present study on the basis of highest dairy animals' population in these four tehsils of the Udaipur district. Six villages were selected purposely from the each selected tehsil. Thus, a total of twenty four villages were selected in all. Twelve farmers who possess at least 5 milch (dairy) animals either cattle or buffalo and both practicing dairy farming were selected randomly from each village as respondents for the study. Therefore, the total sample size for this study was 120 dairy farmers. The data were collected with the help of pre- tested structured

interview schedule by holding personal interview with dairy farmers by the researcher. McClelland (1961) defined achievement motivation as a social value that emphasizes desire for the excellence in order for an individual to attain a sense of personal accomplishment. It is operationally defined as the desire for excellence of dairy farmers to attain a sense of his personal accomplishment. The instrument consisted of ten statements. Each statement had two options and out of these, one was concerned with achievement motivation and 1 score was assigned accordingly. Thus, the total score for each dairy farmer on his achievement motivation would range from zero to ten. The respondents were grouped into three categories based on mean and standard deviation of the total score. It was operationalized as the degree to which the dairy farmer is oriented towards risk and uncertainty in facing problems in dairy enterprise. The instrument consisted of eleven statements and responses obtained on three-point continuum *viz.*, 'strongly agree', 'agree', and 'disagree'. It was scored with 2, 1 and 0, respectively. The respondents were grouped into three categories namely low, medium and high level of achievement motivation and risk orientation using mean and standard deviation. The data were collected through pre-tested structured interview schedule by holding personal interview with the dairy entrepreneurs.

Results and Discussion
The entrepreneurial behaviour of dairy farmers comprised eight components *viz.* innovativeness, achievement motivation, decision making ability, risk orientation, coordinating ability, planning ability, cosmopolite outlook and self-confidence. All the selected components of entrepreneurial behaviour were carried out in relation to three categories of respondents i.e. small, medium and large dairy farmers. Entrepreneurs' profile on these eight dimensions were analyzed by pooling the scores obtained.

Level of achievement motivation: The data presented in Table 1 revealed that motivation is inner will, impulse of intention that causes a person to do something. The data on this parameter revealed that on overall basis, majority (68.33%) of the dairy farmers had medium level of achievement motivation, while relatively much smaller number of respondents had low (16.67%) and high (15%) level of achievement motivation in the study area. Contrary to this, in case of medium farmers, order of distribution was different as majority (70.79%) of medium farmers were found to have medium level of achievement motivation while remaining of them possessed low and high level of achievement motivation with 13.48 and 15.73%, respectively. Large farmers in study area were found to have medium, high and low level of achievement motivation with 52.94, 29.41and 17.65 per cent, respectively. Majority (71.43%) of the small dairy entrepreneurs had medium level achievement motivation whereas 21.43 and approximately 7.14 of total small contrary farmers were having high and low level of achievement motivation, respectively.
The findings are in line with the findings of Porchezhiyan *et al*. (2016), Chaurasiya *et al*. (2016) and Kayensuza (2012) [10, 5, 8] who found that majority of the respondents were having medium level of achievement motivation.

Table 1: Distribution of dairy entrepreneurs on the basis of components of achievement motivation

Level	Small dairy farmers		Medium dairy farmers		Large dairy farmers		Overall	
	f	%	F	%	f	%	f	%
Low (up to 6)	3	21.43	12	13.48	5	29.41	20	16.67
Medium (7-9)	10	71.43	63	70.79	9	52.94	82	68.33
High (>9)	1	7.14	14	15.73	3	17.65	18	15
Mean							7.69	
S.D.							1.35	

Level of Risk Orientation: It is evident from the information given in Table 2 that majority (64.29%) of small dairy farmers had medium level of risk orientation while only 28.57 and 7.14% of dairy entrepreneurs had low and high level of risk orientation, respectively. In case of medium category of dairy entrepreneurs, majority (65.17%) of them possessed majority level of risk orientation. The low and high level of risk orientation was 15.73 and 19.10 per cent by dairy entrepreneurs. In case of large farmers, 82.35% of them were found to be in medium category whereas 5.88 and 11.77 per cent age of dairy farmers had low and high level of risk orientation.

It is apparent from data presented in reveal that on overall basis, more than two-third of the respondents (67.5%) had medium level of risk orientation followed by 16.67 and 15.83 per cent had high and low level of risk orientation, respectively.

The findings are in line with the findings of Porchezhiyan et al. (2016), Raina et al. (2016), Chaurasiya et al. (2016), Gamit et al. (2015), Jeelani et al. (2014), Kayensuza (2012) [8] and Lawrence and Ganguli (2012) [10, 11, 5, 6, 7, 8, 9] who found that majority of the respondents were belonged to medium category of risk orientation.

Table 2: Distribution of dairy entrepreneurs on the basis of components of achievement motivation

Level	Small dairy farmers		Medium dairy farmers		Large dairy farmers		Overall	
	f	%	F	%	f	%	f	%
Low (up to 13)	4	28.57	14	15.73	1	5.88	19	15.83
Medium (14-15)	9	64.29	58	65.17	14	82.35	81	67.5
High (>6)	1	7.14	17	19.10	2	11.77	20	16.67
Mean							14.57	
S.D.							1.14	

Relationship Between Socio-economic and Psychological Characteristics and achievement motivation of Farmers A minute examination of the data contained in Table 3 revealed that among overall category of farmers, the variables namely, extension contact and mass media were found to have positive and highly significant values of correlation coefficient with achievement motivation (P<0.01) While training, occupation and scientific orientation was positively and significantly correlated with achievement motivation (P<0.05). The similar findings were reported by Ahuja et al. (2016), Raina et al. (2016) [11], Bhosale et al. (2014) [4], Avhad et al. (2015), Lawrence and Ganguli (2012) [9] and Rathod et al. (2012) [2, 11, 4, 3, 9].

Relationship Between Socio-economic and Psychological Characteristics and Risk Orientation of Farmers: It is evident from the data in Table 4 that among overall category of farmers mass media and scientific orientation were found to have positive and highly significant correlation with risk orientation (P<0.01). Furthermore, it was found that annual income and economic motivation had positive and significant relationship with risk orientation (P<0.05). The finding is in line with the findings of Ahuja et al. (2016), Raina et al. (2016) and Lawrence and Ganguli (2012) [2, 11, 9].

Table 4: Correlation between Socio-economic and Psychological Characteristics and Risk Orientation of Farmers

S. No.	Antecedent characteristics	Coefficient of correlation 'r' value
1.	Age	.638 NS
2.	Education	.368 NS
3.	Family size	.220 NS
4.	Experience in dairying	.640 NS
5.	Training attended	.126 NS
6.	Social participation	.349 NS
7.	Land holding	.157 NS
8.	Occupation	.495 NS
9.	Herd size	.199 NS
10.	Milk production	.293 NS
11.	Annual income	.034*
12.	Economic motivation	.024*
13.	Scientific orientation	.002**
14.	Market orientation	.668 NS
15.	Extension contact	.069 NS
16.	Mass media	.003**

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

Table 3: Correlation between Socio-economic and Psychological Characteristics and achievement motivation of Farmers

S. No.	Antecedent characteristics	Coefficient of correlation 'r' value
1.	Age	.949 NS
2.	Education	.685 NS
3.	Family size	.224 NS
4.	Experience in dairying	.207 NS
5.	Training attended	.011*
6.	Social participation	.398 NS
7.	Land holding	.382 NS
8.	Occupation	.011*
9.	Herd size	.558 NS
10.	Milk production	.712 NS
11.	Annual income	.174 NS
12.	Economic motivation	.212 NS
13.	Scientific orientation	.046*
14.	Market orientation	.412 NS
15.	Extension contact	.004**
16.	Mass media	.000**

It can be concluded that majority of the dairy farmers had medium level of achievement motivation and risk orientation. Evidently, five independent variables had positive and significant relationship with achievement motivation and it revealed that four independent variables had positive and significant relationship with risk orientation, respectively. The reason for non-significant relationship might be due to the relation may vary from variable to variable depending upon the conditions and circumstances prevailing in the study area. Therefore, it is recommended that the independent variables had positive and significant correlation should be considered primarily by the concern agency to promote the entrepreneurship and inculcated the entrepreneurial skills among the respondents of the study area.

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