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Research Article

ANALYSIS ORGANIZATIONAL ENTREPRENEURSHIP OF AGRICULTURE EXPERTS

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ABSTRACT
The purpose of this research was analyzing organizational entrepreneurship of agricultural experts from the Imam Khomeini Relief Foundation (IKRF). This study was a survey research which has been done by correlation and regression analysis. Descriptive statistics were used to describe the data, including measures of dispersion (variance and standard deviation) and central indexes (mean and frequency). In the analytical statistics we used Spearman correlation and stepwise multiple regression analysis. The population is consisted of 110 agricultural experts from the Imam Khomeini Relief Foundation (IKRF). Through census method all of them considered as statistical sample. The data were collected through a questionnaire. Face validity of questionnaire was obtained through an expert's panel and reliability was obtained through pilot testing 30 students out of research sample by using Cronbach alpha test. Alpha coefficient in all items were upper than 0.70 which indicates the high reliability of items in the questionnaire. According to Spearman's correlation coefficient the relationship between the organizational entrepreneurship and organizational learning, social participation, organizational culture, job satisfaction, creativity, risk taken and level of education were significant. Based on the results for regression analysis by stepwise method, 51.2% of the variances in the organizational entrepreneurship could be explained by the organizational culture, job satisfaction, risk taken and level of education.

Keywords: *Organizational Entrepreneurship, Agricultural Experts, Organizational Learning*

INTRODUCTION
Entrepreneurship plays vital role in social and economical development of different societies (Ommani, 2015). Entrepreneurship is a powerful tool for identifying opportunities, acquiring benefits, and removing such problems as unemployment, the lack of dynamic human resources, low efficiency, quality reduction of products and services, and economic stagnancy (Maclin and Richard, 2004). Economists look at the entrepreneurship from the prospective of profitability, investment, risk, and insight supporting the economical development but it seems that, in modern societies, entrepreneurship`s function is beyond the economical bounds (Hekmat, 2011). Kuratko and Richard (2001) in their research on entrepreneurship stated that it is the dynamic process of creating incremental wealth. This wealth is created by individuals who take the major risks in terms of equity, time and career commitment of providing value to some product or services the product or service itself may or may not be new or unique but value must somehow be infused by the entrepreneur by securing and allocating the necessary skill and resources.
Fazeli *et al.,* (2015) identified the six factors that affecting on development of entrepreneurship which have been named economical and structural factor, psychological and managerial factor, cultural factor, skill factor, supportive factor and investment factor.
The obtained results from the factor analysis revealed that the six mentioned factors explained 73.34% of the variation of affecting factors on development of entrepreneurship. Based on the researchers there is relationship between social factors and development of entrepreneurship (Dodd and Gotsis, 2007; Pages and Markley, 2004). Another variable that may be associated with entrepreneurship is culture. Culture is the values and beliefs of an organization that influence employee's experience, behavior and interaction with others (Pettigrew, 1979; Schein, 2004). And as an organization's culture shapes behavior, it is vital that the culture facilitates entrepreneurial behaviors (Schneider *et al.*, 2013). Also, organizational structure plays critical role in the development of entrepreneurship. An organizational structure is important because it defines how jobs are formally divided, grouped and coordinated (Robbins *et al.*,

2010). An entrepreneurial organization needs to structure itself in a way that maximizes the exploitation of new opportunities.

MATERIALS AND METHODS

This study was a survey research which has been done by correlation and regression analysis. Descriptive statistics were used to describe the data, including measures of dispersion (variance and standard deviation) and central indexes (mean and frequency). In the analytical statistics we used Spearman correlation and stepwise multiple regression analysis. The population is consisted of 110 agricultural experts from the Imam Khomeini Relief Foundation (IKRF). Through census method all of them considered as statistical sample.

The data were collected through a questionnaire. Face validity of questionnaire was obtained through an expert's panel and reliability was obtained through pilot testing 30 students out of research sample by using Cronbach alpha test. Alpha coefficient in all items were upper than 0.70 which indicates the high reliability of items in the questionnaire.

RESULTS AND DISCUSSION

Personal Characteristics of the Agricultural Experts

Demographic characteristics statistics of the study showed that there were 108 male (98.2%) and 2 female (1.8%) in this study. The average age was 36.43 years and the minimum age was 24 years and the maximum age was 48 years old. 73.6 percent of population (n= 81) had Bachelor of Science degree.

Table 1: The personal characteristics of experts (n=110)

Variable	Variable level	Frequency	Percent
Gender	male	108	98.2%
	female	2	1.8%
Age	24-30	22	20
	30-36	37	33.6
	36-42	29	26.4
	42-48	22	20
Educational level	Upper than diploma	7	6.4
	Bachelor students	81	73.6
	master students	22	20

Organizational Entrepreneurship of Agricultural Experts

In order to measure organizational entrepreneurship of agricultural experts was used 30 items in Likert scale in six sections, including: control and monitoring, human resources system, motivation of workforce, organizational structure, financial and budgetary system, wage and salary systems. Value 5 used for strongly agree and a value of 1 for strongly disagrees and the others were in this range. Coefficients of variation (CV) were used for prioritizing the items properly.

1.Control and Monitoring

To measure control and monitoring of agricultural experts was used 5 items in Likert scale (Table 2). For example about first item; the success of the organization for the promotion of administrative and financial health, 2.7% of agricultural experts selected the low option, 27.3% moderate, 55.5% high and 14.5% very high. Coefficients of variation (CV) were used for prioritizing the items properly. According to the table 2, it is clear that in the control and monitoring, item the success of the organization for the promotion of administrative and financial health, had the highest priority (CV= 0.184) and the item of attention and sensitivity, the maintenance and use of state property had the lowest priority (CV= 0.198). For grouping of experts based on control and monitoring item, responses valued from 1 to 5 and then converted to the range of 5 to 25, then divided by 5. Subjects who scored 1 to 1.8 were in very low group, from 1.8 to 2.6 at the low, from 2.6 to 3.4 in moderate, from 3.4 to 4.2 in high and from 4.2 to 5 were in very high group

based on control and monitoring item. Based on the results 3.6% of experts were in low group, 20.9% in moderate, 60.9% in high and 13.5% in very high group.

Table 2: Frequency of Agricultural Experts Regarding Situation of Control and Monitoring (n=110)

Items of Control and Monitoring	1		2		3		4		5		Mean	sd	CV
	f	%	*f*	%	*f*	%	*f*	%	*f*	%			
the success of the organization for the promotion of administrative and financial health	0	0	3	2.7	30	27.3	61	55.5	16	14.5	3.818	0.706	0.184
The success of the organization, for the design and deployment of inspection	0	0	4	3.6	48	43.6	52	47.3	6	5.5	3.545	0.658	0.185
Measures taken to to promote accountability	0	0	3	2.7	40	36.4	49	44.5	18	16.4	3.745	0.759	0.202
Observance the conditions of use of equipment and facilities	1	0.9	4	3.6	28	25.5	57	51.8	20	18.2	3.827	0.799	0.208
attention and sensitivity, the maintenance and use of state property	0	0	3	2.7	25	22.7	25	45.6	32	29.1	4.009	0.795	0.198

Table 3: Level of Overall Control and Monitoring

Level of Control and Monitoring	Frequency	Percent	Cumulative percent
Very low	0	0	0
Low	4	3.6	3.6
Moderate	23	20.9	24.5
High	67	60.9	85.5
Very high	16	13.5	100
Total	110	100	

2. Human Resources System

To measure human resources system of agricultural experts was used 5 items in Likert scale (Table 4). For example about first item; the absence of various channels to enter the public service, 13.6% of agricultural experts selected the low option, 53.6% moderate, 24.5% high and 8.2% very high. Coefficients of variation (CV) were used for prioritizing the items properly. According to the table 4, it is clear that in human resources system, item absence of various channels to enter the public service, had the highest priority (CV= 0.2445) and the item of determine and implement criteria for selection and appointment of directors had the lowest priority (CV= 0.307). For grouping of experts based on human resources system item, responses valued from 1 to 5 and then converted to the range of 5 to 25, then divided by 5. Subjects who scored 1 to 1.8 were in very low group, from 1.8 to 2.6 at the low, from 2.6 to 3.4 in moderate, from 3.4 to 4.2 in high and from 4.2 to 5 was in very high group based on control and monitoring item. Based on the results 20.9% of experts were in low group, 50.9% in moderate, 21.8% in high and 5.5% in very high group.

Table 4: Frequency of Agricultural Experts Regarding Situation of Human Resources System (n=110)

Items of Human Resources System	1		2		3		4		5		Mean	sd	CV
	f	%	*f*	%	*f*	%	*f*	%	*f*	%			
The absence of various channels to enter the public service	0	0	15	13.6	59	53.6	27	24.5	9	8.2	3.272	0.800	0.244
Establishment of a competitive system for manpower recruitment and selection	0	0	19	17.3	47	42.7	37	33.6	7	6.4	3.290	0.827	0.251
There is efficient performance appraisal system	0	0	33	30	46	41.8	27	24.5	4	3.6	3.018	0.834	0.276
Compliance education and expertise of employees with jobs	2	1.8	21	19.1	52	47.3	22	20	13	11.8	3.209	0.949	0.295
Determine and implement criteria for selection and appointment of directors	6	5.5	17	15.5	49	44.5	29	26.4	9	8.2	3.163	0.972	0.307

Table 5: Level of Overall Human Resources System

Level of Human Resources System	Frequency	Percent	Cumulative percent
Very low	1	0.9	0.9
Low	23	20.9	21.8
Moderate	56	50.9	72.7
High	24	21.8	94.5
Very high	6	5.5	100
Total	110	100	

3. Motivation of Workforce

To measure motivation of workforce was used 5 items in Likert scale (Table 6). For example about first item; commitment and work ethic of staff, 4.5% of agricultural experts selected the low option, 39.1% moderate, 42.7% high and 13.6% very high. Coefficients of variation (CV) were used for prioritizing the items properly.

According to the table 6, it is clear that in motivation of workforce, item commitment and work ethic of staff, had the highest priority (CV= 0.211) and the item of morale and motivation of staff in the performance of tasks had the lowest priority (CV= 0.261). For grouping of experts based on motivation of workforce item, responses valued from 1 to 5 and then converted to the range of 5 to 25, then divided by 5. Subjects who scored 1 to 1.8 were in very low group, from 1.8 to 2.6 at the low, from 2.6 to 3.4 in moderate, from 3.4 to 4.2 in high and from 4.2 to 5 was in very high group based on motivation of workforce item. Based on the results 13.6% of experts were in low group, 47.3% in moderate, 34.5% in high and 4.5% in very high group.

Table 6: Frequency of Agricultural Experts Regarding Situation of Motivation of Workforce (n=110)

Items of motivation of workforce	1		2		3		4		5		Mean	sd	CV
	f	%	*f*	%	*f*	%	*f*	%	*f*	%			
Commitment and work ethic of staff	0	0	5	4.5	43	39.1	47	42.7	15	13.6	3.654	0.771	0.211
Levels of job satisfaction	0	0	21	19.1	58	52.7	28	25.5	3	2.7	3.118	0.738	0.236
The company's ability to attract and maintenance staff	0	0	17	15.5	51	46.4	35	31.8	7	6.4	3.290	0.805	0.244
Managers to staff needs	2	1.8	13	11.8	50	45.5	37	33.6	8	7.3	3.327	0.847	0.254
Morale and motivation of staff in the performance of tasks	0	0	19	17.3	49	44.5	32	29.1	10	9.1	3.300	0.862	0.261

Table 7: Level of Overall Motivation of Workforce

Level of motivation of workforce	Frequency	Percent	Cumulative percent
Very low	0	0	0
Low	15	13.6	13.6
Moderate	52	47.3	60.9
High	38	34.5	95.5
Very high	5	4.5	100
Total	110	100	

4. Organizational Structure

To measure organizational structure, was used 5 items in Likert scale (Table 8).

For example about first item; emphasis on tasks and goals of the organization, 1.8% of agricultural experts selected the low option, 40% moderate, 50.9% high and 7.3% very high. Coefficients of variation (CV) were used for prioritizing the items properly.

According to the table 8, it is clear that in organizational structure, item emphasis on tasks and goals of the organization, had the highest priority (CV= 0.177) and the item of work through team building had the lowest priority (CV= 0.266). For grouping of experts based on organizational structure item, responses valued from 1 to 5 and then converted to the range of 5 to 25, then divided by 5.

Subjects who scored 1 to 1.8 were in very low group, from 1.8 to 2.6 at the low, from 2.6 to 3.4 in moderate, from 3.4 to 4.2 in high and from 4.2 to 5 was in very high group based on organizational structure item. Based on the results 5.5% of experts were in low group, 47.3% in moderate, 34.5% in high and 10.9% in very high group.

Table 8: Frequency of Agricultural Experts Regarding Situation of Organizational Structure (n=110)

Items of organizational structure	1		2		3		4		5		Mean	sd	CV
	f	%	*f*	%	*f*	%	*f*	%	*f*	%			
Emphasis on tasks and goals of the organization	0	0	2	1.8	44	40	56	50.9	8	7.3	3.636	0.645	0.177
Fit between the authority and responsibilities assigned managers	1	0.9	3	2.7	44	40	49	44.5	13	11.8	3.636	0.762	0.209
Lack of emphasis on strict observance of the organizational hierarchy	1	0.9	7	6.4	52	47.3	39	35.5	11	10	3.472	0.798	0.229
Formal relations are defined, risk-taking incentives is	1	0.9	6	5.5	62	56.4	26	23.6	15	13.6	3.436	0.829	0.241
Work through team building	1	0.9	13	11.8	50	45.5	30	27.3	16	14.5	3.427	0.913	0.266

Table 9: Level of Overall organizational structure

Level of organizational structure	Frequency	Percent	Cumulative percent
Very low	0	0	0
Low	6	5.5	5.5
Moderate	52	47.3	52.7
High	40	36.4	89.1
Very high	12	10.9	100
Total	110	100	

*5. **Financial and Budgetary System***

To measure financial and budgetary system, was used 6 items in Likert scale (Table 10). For example about first item; speed rate in the budget allocation process, 7.3% of agricultural experts selected the low option, 45.5% moderate, 43.6% high and 3.6% very high. Coefficients of variation (CV) were used for prioritizing the items properly. According to the table 10, it is clear that in financial and budgetary system, item speed rate in the budget allocation process, had the highest priority (CV= 0.199) and the item of the use of advanced techniques and appropriate had the lowest priority (CV= 0.230). For grouping of experts based on financial and budgetary system item, responses valued from 1 to 5 and then converted to the range of 6 to 30, then divided by 6. Subjects who scored 1 to 1.8 were in very low group, from 1.8

to 2.6 at the low, from 2.6 to 3.4 in moderate, from 3.4 to 4.2 in high and from 4.2 to 5 was in very high group based on financial and budgetary system item. Based on the results 5.5% of experts were in low group, 38.2% in moderate, 51.8% in high and 4.5% in very high group.

Table 10: Frequency of Agricultural Experts Regarding Situation of financial and budgetary system (n=110)

Items of financial and budgetary system	**1**		**2**		**3**		**4**		**5**		**Mean**	**sd**	**CV**
	f	%	*f*	%	*f*	%	*f*	%	*f*	%			
Speed rate in the budget allocation process	0	0	8	7.3	50	45.5	48	43.6	4	3.6	3.436	0.684	0.199
Budgeting on the basis of modern methods	0	0	7	6.4	56	50.9	41	37.3	6	5.5	3.418	0.695	0.203
Low rate of mistakes and negligence	1	0.9	5	4.5	40	36.4	50	45.5	14	12.7	3.645	0.796	0.218
Concordance accountability measures, with managers	0	0	8	7.3	50	45.5	39	35.5	13	11.8	3.518	0.798	0.226
Distribution of funds among different organizational units	0	0	10	9.1	40	36.4	47	42.7	13	11.8	3.572	0.817	0.228
The use of advanced techniques and appropriate	0	0	14	12.7	51	46.4	39	35.5	6	5.5	3.336	0.769	0.230

Table 11: Level of Overall financial and budgetary system

Level of financial and budgetary system	**Frequency**	**Percent**	**Cumulative percent**
Very low	0	0	0
Low	6	5.5	5.5
Moderate	42	38.2	43.6
High	57	51.8	95.5
Very high	5	4.5	100
Total	110	100	

*6. **Wage and Salary Systems***

To measure wage and salary systems, was used 4 items in Likert scale (Table 12). For example about first item; pay the salaries of employees and managers, according to their performance, 20.9% of agricultural experts selected the low option, 39.1% moderate, 33.6% high and 6.4% very high. Coefficients of variation (CV) were used for prioritizing the items properly. According to the table 10, it is clear that in financial and budgetary system, item pay the salaries of employees and managers, according to their performance, had the highest priority (CV= 0.264) and the item of the flexibility in pay and bonuses had the lowest priority (CV= 0.292). For grouping of experts based on wage and salary systems item, responses valued from 1 to 5 and then converted to the range of 4 to 20, then divided by 4. Subjects who scored 1 to 1.8 were in very low group, from 1.8 to 2.6 at the low, from 2.6 to 3.4 in moderate, from 3.4 to 4.2 in high and from 4.2 to 5 was in very high group based on wage and salary systems item. Based on

the results 20.9% of experts were in low group, 43.6% in moderate, 29.2% in high and 5.5% in very high group.

Table 12: Frequency of Agricultural Experts Regarding Situation of wage and salary systems (n=110)

Items of wage and salary systems	1		2		3		4		5		Mean	sd	CV
	f	%	*f*	%	*f*	%	*f*	%	*f*	%			
Pay the salaries of employees and managers, according to their performance	0	0	23	20.9	43	39.1	37	33.6	7	6.4	3.254	0.861	0.264
The salary and bonus payments associated with risk	2	1.8	31	28.2	44	40	32	29.1	1	0.9	2.990	0.829	0.277
Motivated employees due to financial rewards	1	0.9	26	23.6	46	41.8	28	25.5	9	8.2	3.163	0.913	0.288
The flexibility in pay and bonuses	1	0.9	30	27.3	44	40	28	25.5	7	6.4	3.090	0.904	0.292

Table 13: Level of Overall wage and salary systems

Level of wage and salary systems	Frequency	Percent	Cumulative percent
Very low	1	0.9	0.9
Low	23	20.9	21.8
Moderate	48	43.6	65.5
High	32	29.2	94.5
Very high	6	5.5	100
Total	110	100	

Correlation Study

According to Spearman's correlation coefficient in table 14, the relationship between the organizational entrepreneurship and organizational learning, social participation, organizational culture, job satisfaction, creativity, risk taken and level of education were significant.

Table 14: Results of correlation (n= 110)

Independent variable	Dependent variable	correlation coefficient	Significant level
Organizational learning	Organizational Entrepreneurship	0.237	0.013
Social participation		0.375	0.000
Organizational culture		0.485	0.000
Job satisfaction		0.593	0.000
Creativity		0.522	0.000
Risk taken		0.560	0.000
Age		0.066	0.495
Level of education		0.966	0.000

Regression Analysis

Table 15 shows the result for regression analysis by stepwise method. Predicator variables that were significantly related to the organizational entrepreneurship were entered. The result indicates that 51.2% of the variances in the organizational entrepreneurship could be explained by the organizational culture, job satisfaction, risk taken and level of education.

Table 5: Multivariate regression analysis

Multivariate regression analysis	B	SE B	Beta	T	Sig
Constant	1.543		0.453	3.535	0.000
Job saticfaction	0.435	0.035	0.345	5.554	0.000
Risk taken	0.325	0.046	0.335	5.535	0.000
The organizational culture	0.524	0.646	0.553	3.355	0.000
Level of education	0.454	0.453	0.354	3.359	0.000

$R^2=0.513$, $F=21.235$, $Sig=0.000$

Conclusion

In order to measure organizational entrepreneurship of agricultural experts was used 30 items in Likert scale in six sections, including: control and monitoring, human resources system, motivation of workforce, organizational structure, financial and budgetary system, wage and salary systems. Value 5 used for strongly agree and a value of 1 for strongly disagrees and the others were in this range. Coefficients of variation (CV) were used for prioritizing the items properly. For grouping of experts based on control and monitoring item, responses valued from 1 to 5 and then converted to the range of 5 to 25, then divided by 5. Subjects who scored 1 to 1.8 were in very low group, from 1.8 to 2.6 at the low, from 2.6 to 3.4 in moderate, from 3.4 to 4.2 in high and from 4.2 to 5 were in very high group based on control and monitoring item. Based on the results 3.6% of experts were in low group, 20.9% in moderate, 60.9% in high and 13.5% in very high group. Based on human resources system item, 20.9% of experts were in low group, 50.9% in moderate, 21.8% in high and 5.5% in very high group. Also for grouping of experts based on motivation of workforce item, responses valued from 1 to 5 and then converted to the range of 5 to 25, then divided by 5. Based on the results 13.6% of experts were in low group, 47.3% in moderate, 34.5% in high and 4.5% in very high group. In addition based on organizational structure item, 5.5% of experts were in low group, 47.3% in moderate, 34.5% in high and 10.9% in very high group. Also, based on financial and budgetary system item, 5.5% of experts were in low group, 38.2% in moderate, 51.8% in high and 4.5% in very high group. Based on wage and salary systems item, 20.9% of experts were in low group, 43.6% in moderate, 29.2% in high and 5.5% in very high group.

According to Spearman's correlation coefficient the relationship between the organizational entrepreneurship and organizational learning, social participation, organizational culture, job satisfaction, creativity, risk taken and level of education were significant.

Based on the results for regression analysis by stepwise method. Predicator variables that were significantly related to the organizational entrepreneurship were entered. The result indicates that 51.2% of the variances in the organizational entrepreneurship could be explained by the organizational culture, job satisfaction, risk taken and level of education.

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REFERENCES

Dodd SD and Gotsis G (2007). The Interrelationship between Entrepreneurship and Religion. *Entrepreneurship and Innovation* **8**(2) 93-104.

Fazeli MJ, Ommani AR and Maghsoodi T (2015). Factor Analysis of Entrepreneurship Development among Rural Women. *Biological Forum – An International Journal* **7**(1) 59-63.
Hekmat M (2011). Entrepreneurship approaches in agricultural cooperatives. *International Journal of Agricultural Science, Research and Technology* **1**(1) 39-45.
Kuratko DF and Richard MH (2001). *Entrepreneurship - A Contemporary Approach* (U.S.A: Harecourt College Publishers) New York.
Mccline Richard L (2004). Opportunity recognition: An exploratory investigation of a component of the entrepreneurial process in the context of the health care industry: Theory and Practice. *Tertiary Education Management* **25**(2) 81-94.
Ommani AR (2014). Development of Entrepreneurship in Complementary and Processing Industries in Khouzestan Province, Iran. *International Journal of Agricultural Management and Development* **4**(2) 117-122.
Pages ER and Markley DM (2004). Understanding the environment for rural North Carolina. Center for Rural Entrepreneurship, Available: http:\\www.ruraleship.org.
Pettigrew AM (1979). On studying organizational cultures. *Administrative Science Quarterly* **24** 570–581.
Robbins SP, Judge TA and Campbell TT (2010). *Organizational Behavior* (Pearson) United Kingdom.
Schneider B, Ehrhart MG and Macey WH (2013). Organizational climate and culture. *Annual Review of Psychology* **64** 361-388.