

## **A Study on the Role of Skill Training in Entrepreneurship of Entrepreneurs and Non-Entrepreneurs of Vocational Training Centers in Ardebil, Iran**

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### **Abstract**

This study was conducted to investigate the role of skill training in entrepreneurship of entrepreneurs and non-entrepreneurs through a descriptive correlational method. Population included all trainers from vocational training centers in Ardebil province, Iran. To determine the sample content Cochran formula was used, and 400 individuals were selected via classified random sampling method. To collect data, a researcher-made questionnaire was developed. Reliability of the questionnaire was found to be 89% by Cronbach's alpha. Data were analyzed SPSS and through Mann-Whitney test. Findings showed that the role of skill training was not significantly different in entrepreneurship of entrepreneurs and non-entrepreneurs. But the role of skill training of graduate entrepreneurs and non-entrepreneurs was found to be different.

**Keywords:** creativity, entrepreneurship, innovation, risk taking, skill training.

### **Introduction**

Studies show that countries with skillful labor force relied on the development policy, while their investment in skill development has contributed to employment. Evidence illustrates that increasing authentic training can decrease unemployment. Jonz and English (2005) stated in their study that by entrepreneurship training we can increase students' self-confidence, knowledge and skill, making them powerful for starting business.

Accordingly, Iran's vocational and technical training centers try to enhance people's knowledge and create necessary skills, and actualize their latent skills. To do this, they make trainees qualified for jobs, occupation and business and increase their ability to do works assigned to them at a desirable level. Researches have shown that entrepreneurs have a key role specially in making small and average economic units which leads to high employment. For example, we can point to employment status in 1980s in USA. In this decade in the country, only 5 percent of small newly established companies created 77 percent jobs. While 50 large companies destroyed 3.5 million jobs (Neshaseriz, 2009, p8)

This study aims to clarify the role of skill training entrepreneurship of entrepreneurs and non-entrepreneurs in vocational training centers for making business in Ardebil province. In current condition Iran, international changing processes, and economic globalization phenomena, considering the three reasons just mentioned, it is necessary to address the issue of entrepreneurship development as a strategic plan.

On the other hand, saturation of governmental recruitment capacities and inability of the private sector in employing people who are jobseekers have resulted in unemployment in university

graduates, although no is sufficiently paid to this issue. Not forecasting important and suitable solutions for this problem that makes economic, social, cultural and political problems, these issues will face Iran with great challenges and crisis. Regarding these issues, establishing vocational centers and assessing skill training is urgent and accordingly doing some research in this field seems to be necessary. So this study aims to analyze the relation of skill training in entrepreneurship of entrepreneurs and non-entrepreneurs of vocational training centers in Ardebil province, Iran.

It is assumed that the results of this study can help maintain and increase skill training in entrepreneurship of entrepreneurs by providing new ideas and by systematic and scientific investigation, field surveys, and skill training activities, and programs of vocational training centers. The study more specifically tries to discover to what extent skill training has been effective in making entrepreneurship business and by precise recognizing of the issue, in addition to guiding training programs which fits with regional needs, the study provides a suitable base for improving, enhancing productivity and development and growth of necessary sources.

Considering these issues, the main purpose of this study is to compare the role of skill training in entrepreneurship between entrepreneur graduates and non-entrepreneurs; so the dependent variable of this study is skill training and dependent variable is entrepreneurship of entrepreneurs and non-entrepreneurs which will be analyzed.

-Initiative: Entrepreneur takes initiative in order to provide all economic sources for offering a product or a service in hope of a profitable business (Abbeszadegan, 2005).

-Decision-making power: Entrepreneur adopts decisions about vital policies for work in which work flow is determined (Abbaszadegan, 2005).

-Creativity: Entrepreneur is a creative person who makes efforts to produce new products (Abbaszadegan, 2005).

-Risk taking: Entrepreneur risks his time, effort and job credit and invests his monetary sources in a risky job. Also, entrepreneurs desire to learn risk management and tolerate uncertainty for themselves and others and consider the failure of a project a learning experience rather than an individual tragedy (Abbaszadegan, 2005).

-Involvement in continuous innovation process: Adaption and learning, entrepreneurs are not limited to existing sources: entrepreneurs do not allow limited sources to prevent them from searching their purposes and are powerful in doing their activities by fewer facilities while attracting sources from others; so they use limited sources in an effective way (Abbaszadegan, 2005).

-Leading ability: Entrepreneurs are effective leaders and, contrary the assumption that entrepreneurs are dependent and maverick persons, they just prefer to work alone. They are effective people who can lead their colleagues (Abbaszadegan, 2005).

-Entrepreneurship: Entrepreneurship is the process through which a product or new service is introduced to market based on innovation and creativity, and this ongoing business gets promoted continuously

-Skill training: is applicable scientific and practical training which is provided in order to qualify jobs and leads to a skill certificate.

According to the importance of this subject, several researches have been done on the role of skill training in entrepreneurship between graduates entrepreneurs and non-entrepreneurs in different countries

Azizi (2004) in the study of nurturing entrepreneurship in the last year students of B.A and M.A in Shahid Beheshti University, concluded that there was a significant relationship between the variables of internal control, achievement motivation, risk taking, autonomy and students' creativity to their entrepreneurship.

Hezarjaib (2004) showed that there was a significant relationship between entrepreneurs and training courses of individual skills, achievement motivation, risk taking, need of success and creativity. Varma's studies (2000) illustrated that countries with skillful labor force have relied on the development policy, and their investment in skill development has increased employment. Evidence suggests that increasing accurate training can decrease unemployment. Also applied-scientific training decreases the risk of women and young people unemployment, full-time unemployment of people with low skill and disables.

Howard (2004) in a research on the effect of entrepreneurship capabilities (autonomy, risk taking, achievement motivation, internal control and development of self-confidence and courage of creativity), on entrepreneurship of 450 people and concluded that there was a direct relation between these specifications and people's capability of entrepreneurship.

Reviewing these researches, it becomes clear that the role of entrepreneurship skill training between graduates entrepreneurs and non-entrepreneurs is different. So in the study, attempt was made to study the role of skill training entrepreneurship of graduates entrepreneurs and non-entrepreneurs via some hypotheses.

The main hypothesis of this study is that the role of skill trainings entrepreneurship of entrepreneurs and non-entrepreneurs is different.

The secondary hypotheses of this study are:

- There is a difference between the role of skill training in initiatives of graduate entrepreneurs and those of non-entrepreneurs.

- There is a difference between the role of skill training in decision-making of graduate entrepreneurs and those of non-entrepreneurs.

- There is a difference between the role of skill training in creativity of entrepreneurs and those of non-entrepreneurs.

- There is a difference between the role of skill training in risk taking of graduate entrepreneurs and non-entrepreneurs.

- There is a difference between the role of skill training in involvement in continuous innovative processes of graduate entrepreneurs and that of non-entrepreneurs.

- There is a difference between the role of skill training in resource-limitedness of graduate entrepreneurs and that of non-entrepreneurs.

- There is a difference between the role of skill training in the leading ability of graduate entrepreneurs and that of non-entrepreneurs.

### Materials and Methods

The present study is a descriptive applied survey. Statistical population of this study included all graduates in Ardebil province totally 85000 individuals, out of whom 15000 are thought to have the potential to be entrepreneurs: 9000 were males and 6000 were females. Statistical population included all the graduates in Ardebil, but 375 individuals were selected through Cochran formula.

- Statistical population:  $N=15000$

- Possibility of observing no shared quality,  $q=0.5$

- Possibility of observing shared quality,  $p=0.5$

- Range of certainty at the level of %95 ( $z=1.96$ ); acceptable error %5 =d

$$n = \frac{NZ^2 pq}{Nd^2 + Z^2 pq} = \frac{15000 \times 3.84 \times 0.5 \times 0.5}{0.025 + 3.84 \times 0.5 \times 0.5} = 375$$

= 375

In this study, sample size was calculated based on Cochran formula was found to be 375, but to increase the validity of the research, 400 persons were selected by classified random sampling. Then, statistical population was categorized into two categories of male and female graduate entrepreneurs and non-entrepreneurs. It is important to note that the existing statistics in vocational training office in Ardebil is 30% of the total entrepreneurs graduated. Other pieces of information are presented in Table 1:

**Table 1: Statistical society and statistical sample of vocational graduates in Ardebil Province**

Gender	Statistical society	Entrepreneur	Non-entrepreneur	Total sampling
Male	9000	70	160	230
Female	6000	50	120	170
Total	15000	120	280	400

In this study the instrument of data collection was a questionnaire with 34 questions according to a 5-option scale. To assess the validity of the questions, the questionnaire was reviewed by some professors, and considering their views, this questionnaire was edited and made ready for the study in practice. To determine the reliability of this questionnaire, it was completed by 30 subjects and reliability was found to be 0.89% though Crobach's Alpha.

To describe qualitative traits, percentage, distribution and cumulative percentage were calculated, and to describing describe traits, control and measures of central tendency and distribution were calculated (mean, standard deviation, standard error of mean, changing range of skewedness and elongation). SPSS was used and for normal determination of data distribution, Mann-Whitney test was applied.

## Results

In this part of study results of analyzing the hypotheses are presented. First we studied normality of skill training ad entrepreneurship with their components (initiative, decision-making ability, creativity, risk-taking, involvement in continuous innovation process, not limiting to existing sources, leading ability). To do this, Kolmogorov-Smirnov test was used. As it is obvious in Table 2 the significance level of all variables is 0.000 and less than %5. So, by 95% certainty we can say that variables do not have a normal distribution.

To test the hypotheses, due to type and scale of variables, Mann-Whitney test was used. In Table 3 means of ranks are provided separately.

The result of main hypothesis test is illustrated in Table 4. According to the significance level 0.166, null hypothesis of this test is confirmed. In other words, the main hypothesis is rejected, meaning that the role of skill training in entrepreneurship between graduate entrepreneurs and non-entrepreneurs is not different.

The result of first hypothesis test is provided in Table 4. Considering the significance level 0.570, null hypothesis of this test is confirmed; in other words, the first hypothesis is rejected, indicating that the role of skill training in initiatives between graduate entrepreneurs and non-entrepreneurs is not different.

The result of second hypothesis test is presented in Table 4. Based on the significance level 0.849, null hypothesis is not rejected but the second hypothesis is not confirmed, suggesting that the role of skill training in the decision-making ability between graduate entrepreneurs and non-entrepreneurs is not different.

**Table 2: Results of Kolmogorov-Smirnov for propriety of normal distribution**

Graduates non-entrepreneurs	Number	Kolmogorov -Smirnov statistics	Bilateral significance level
Entrepreneurship	278	2.450	0.000
Initiativity	278	2.321	0.000
Decision making	278	3.381	0.000
Creativity	278	4.527	0.000
Risk taking	278	2.855	0.000
Involvement	278	2.392	0.000
Not limiting to	278	3.827	0.000
Leading ability	278	3.137	0.000
Graduates entrepreneurs	Number	Kolmogorov -Smirnov statistics	Bilateral significance level
Entrepreneurship	120	2.063	0.000
Initiativity	120	2.660	0.000
Decision making	120	2.489	0.000
Creativity	120	1.398	0.040
Risk taking	120	2.031	0.001
Involvement	120	2.681	0.000
Not limiting to	120	1.884	0.002
Leading ability	120	1.422	0.035

**Table 3: Means of ranks for doing Mann-Whitney non-parametric test**

Hypothesis	Component	Number	Means of ranks	Sum of ranks
Main hypothesis	Entrepreneur	278	204.77	56722.50
	Non-entrepreneur	120	187.43	22678.50
First	Entrepreneur	278	197.36	54669
	Non-entrepreneur	120	204.40	24732
Second	Entrepreneur	278	200.21	55458
	Non-entrepreneur	120	197.88	23943
Third	Entrepreneur	278	208.20	57671
	Non-entrepreneur	120	179.59	21730
Fourth	Entrepreneur	278	205.52	59630
	Non-entrepreneur	120	185.71	21730
Fifth	Entrepreneur	278	200.22	55460
	Non-entrepreneur	120	197.86	23941
Sixth	Entrepreneur	278	196.31	54379
	Non-entrepreneur	120	206.79	25021
Seventh	Entrepreneur	278	200.25	55470
	Non-entrepreneur	120	197.78	23931

Result of third hypothesis test is illustrated in table 4. Because of the significance level 1.20, null hypothesis of this test is rejected, hence the third hypothesis is accepted. So the role of skill trainings in creativity between graduates entrepreneurs and non-entrepreneurs is different

**Table 4: Results of Mann-withney test for comparing the role of skill trainings and entrepreneurship dimensions**

Hypothesis	Component	Mann-whitney statistics	Z statistics	Significance level
Main hypothesis	Entrepreneurship	15279.50	-1.385	0.166
First	Initiativity	16166	-0.568	0.570
Second	Decision making	16562	-0.190	0.849
Third	Creativity	14349	-2.325	0.020
Fourth	Risk taking	15090	-1.588	0.112
Fifth	Innovative process	160560	-0.190	0.850
Sixth	Not limiting	15876	-0.852	0.394
Seventh	Leading ability	16550	-0.202	0.840

Result of the test of fourth hypothesis is presented in Table 4. Considering the significance level 0.112, null hypothesis of this test is accepted; therefore, the role of skill training in risk-taking between graduate entrepreneurs and non-entrepreneurs is not different.

Result of fifth hypothesis test is illustrated in table 4. Based on the significance level 0.850, the null hypothesis is not rejected, so the fifth hypothesis is rejected, indicating that the role of skill trainings in involvement in continuous innovative process between graduate entrepreneurs and non-entrepreneurs is not different.

The result of sixth hypothesis test is displayed in table 4. Due to significance level 0.394, null hypothesis is accepted, so the sixth hypothesis is rejected. So the role of skill training in resource limitedness between graduate entrepreneurs and non-entrepreneurs is not different.

Result of seventh hypothesis test is displayed in Table 4. According to significance level 0.840, null hypothesis is accepted, so the seventh hypothesis is not accepted; in other words, the role of skill training in the leading ability between graduate entrepreneurs and non-entrepreneurs is not different.

### **Discussion and Recommendations**

Findings of this study showed that the role of skill training in entrepreneurship of graduate entrepreneurs and non-entrepreneurs is not different. In this respect Gibb (2004) believes that to attract labor market, in addition to professional and skill training, other trainings are necessary too. The complex of these required training which can meet the needs of labor market are named differently: competency standards, core competencies, employability, basic skills. The findings are not in line with previous researches (see Mack Bannnatyre & Hall, 2003; Ali Beigi et al., 2009; Mohseni, 2009; Sadra Beige & Bitaraf Sani; 2009; Azizi & Hosseini,

The role of skill training in taking initiatives between graduate entrepreneurs and non-entrepreneurs was found to be the same. Presumably, a person who passed skill training in accurate and applicable way reacts quickly and positively to events and make opportunities for himself. Findings are inconsistent with James' theory (2005) which argues that the basic merits of applied-scientific training induces expertise skills related to the job, which can show that the person is more competent than before in the job in question.



The role of skill training in the decision-making ability between graduate entrepreneurs and non-entrepreneurs is not different. Findings are not in line with previous researches. In this field some of the experts of entrepreneurship believed that personal characteristics are effective factors in decision making in entrepreneurship. In other words, if these characteristics exist in a person, that person succeeds in entrepreneurship (Moriani & Gorgievski, 2007).

The role of skill training in creativity between graduate entrepreneurs and non-entrepreneurs is distinct. We believe that findings are reasonable and that vocational educations based on flexibility originates from labor market specifications and social-economic conditions governing Iran, considering training and skill developing in people for job fulfillment, has a great role in graduates' creativity and employment. Also, Rissal (1992) in a study stated that creativity and innovation are the most effective morale in entrepreneurs.

The role of skill training in risk-taking between graduate entrepreneurs and non-entrepreneurs is the same. We believe that entrepreneurs can learn risk management and uncertainty tolerance for themselves and others and consider failure in a project a learning experience not an individual tragedy. Based on Sitkin and Pablo's study (1992), we can conclude that risk taking of entrepreneurs, business features, contextual effect and personal characteristics, play key roles in entrepreneur's decisions for the entrance of a risky decision.

The role of skill training in involvement in continuous innovative process between graduate entrepreneurs and non-entrepreneurs is not different. We believe that the reason for this is the concern in entrepreneurs for trainings because they always react immediately to changings and prevent damages.

The role of skill training resources limitedness between graduate entrepreneurs and non-entrepreneurs is the same. Abbaszadegan (2005) believes that entrepreneurs do not allow limited sources to prevent them from searching for their purposes and have skills in doing more works with fewer facilities, attracting sources from others, using limited sources effectively.

The role of skill trainings in the leading ability between graduate entrepreneurs and non-entrepreneurs is not different. Jones (2005), in a study was done in 22 universities, found that entrepreneurship training necessary in agricultural higher education centers for increasing students' ability and job knowledge and also achieving agricultural educational aims.

According to the finding of study following suggestions are presented:

- Training for entrepreneurship should be based on global standards in vocational education centers.
- In skill training courses in vocational education centers, experts of related job should be employed.
- In improving educational standards, needs of market should be considered.
- In skill training courses in vocational education centers, general skills of business should be discussed.

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