

# **Influence entrepreneurship in vocational & technical training**

## **(A case study: Isfahan-Kashan)**

**Mohammad Reza Asgari**

**Faculty member of Shahre Ray Islamic Azad University  
IRAN  
M\_r\_a@yahoo.com**

**Maryam Firouzi Arani**

**M.Sc. student of Management, Naragh Islamic Azad University  
IRAN  
Maryam.firouzi@gmail.com**

**Ali Sabaghian**

**Faculty member of Naragh Islamic Azad University  
IRAN  
ali\_sabaghian@yahoo.com**

**Abstract:** - Today, natural resources time has been replaced by knowledge, technology, entrepreneurship and innovation time. On this basis, employment of opportunities and potentials, resulted from mentioned factors are of the preliminary plans and strategies in developing and developed countries so that. One of the bases and fundamentals of development in entrepreneurship is entrepreneurs. People who provide growth of quick economy and permanent development of their countries, by employing innovation with accepting reasonable risks, bravery, authority and responsibility. The main purpose of this study is to survey the role of vocational & technical trainings in development of entrepreneurship in KASHAN. This goal has been tested by some variables such as entrepreneurs personality traits, their behavior properties, vocational & technical trainings, vocational & technical skills and new occupations. As the questions of the study, results show that behavioral characteristics of entrepreneurs of vocational & technical organization had the maximum degree of importance or highest average and after that personality properties of them, vocational & technical training, new occupations and vocational and technical skills were the next preferences, respectively.

**Key-Words:** - entrepreneurship, creativity, innovation, entrepreneur training, Entrepreneur skills, Vocational & technical trainings.

## **1 Introduction**

In the past recent years, role of entrepreneurs has been considered in simplifying the economical development of the world. Entrepreneurship has been developed as a

revolution all over the world. At present, global events path has put the entrepreneur in the initiative line of technical and economical development. Successful experience of most developed countries and some developing ones, to pass economical crisis, by progressing

entrepreneurship in them, caused other countries to pay special attention to entrepreneurship, entrepreneurs and establishment and creation of new and innovative works and occupations. Development of entrepreneurship in a country needs all aspects of primary works and a harmony in all political, economical, social, cultural, familial, and even individual aspects.

## 2 Expression of the Subject

In this world which is changing continuously, successfulness will belong to those societies and organizations which make a meaningful relation among their rare resources, their management and entrepreneurship capacities. In other words, societies and organizations can have a forward improvement and can equip their human resources with knowledge and skills of creative entrepreneurship by providing necessary structures, so that they can conduct other society resources & organizations to create, grow, develop and manage properly. Hence, entrepreneurship skill training is essential to improve any society.<sup>[1]</sup>

Since some parts of entrepreneurship skills are acquisitive, they may be trainable. Many aspects of entrepreneurship can be trained but to be risk taking and to be brave is a prerequisite for succeed. However, entrepreneurship training plays an important role in improvement of its level. Entrepreneurship training with enhancement of creativity, innovation, flexibility, responsibility indifferent conditions, self-management, will result in behaviors and conclusions. Unsuccessfulness in entrepreneurship is one part of training process which points out that entrepreneurship can be matched by training and education. Every person must acquire skills to become an entrepreneur.

---

<sup>[1]</sup>. H.Aghazadeh, H.Rezazadeh, (2004), pp.14

Generally, entrepreneurship skills can be categorized in to three parts: individual skills, management skills and technical skills.<sup>[2]</sup>

Entrepreneur and entrepreneurship first were considered by economists, all economical isms from 16th century until now, have explained entrepreneurship in their theories. In economist's view point, entrepreneur is a person who combines resources, labor forces, material & other properties together to raise their values rather than before, as well as somebody who establishes new techniques, principles and variations.<sup>[3]</sup>

Entrepreneurship is a process in which opportunities are followed by persons for themselves or for the organizations they work for, regardless the resources controlled by them.<sup>[4]</sup> Joseph Schumpeter was the only famous economist who separated the classic economical principles by focusing on economical analysis of reliability of economical life and mobility imbalance which was against stationary balance. He introduced entrepreneurship as the key point of his theory about economical development and the implement of economical alterations.<sup>[5]</sup>

## 3 Importance and Essentiality of the Research

Today, global variations iteration has put the entrepreneurs in the mainline of technical

---

<sup>[2]</sup>. S.K.Ebrahimi, A.Zareei, (2008), pp.22-23

<sup>[3]</sup>. K.Vesper, (1993) , pp.13

<sup>[4]</sup>. A.Hurley, (1999), pp. 2 – 7

<sup>[5]</sup> J.Prokopenko, I.Pavlin,(1991), pp.15 – 17

development and economical progress. Successful experiences of many developed countries and also some developing countries to pass economical crisis because of development of entrepreneurship in their countries, made other countries pay special attention to entrepreneurship and entrepreneurs. On this basis, entrepreneurship development was considered from different aspects. Training is one of the important aspects to develop entrepreneurship. According to the most studies, entrepreneurship properties or skills are most acquisitive not genic, so training has become one of the most important and wide spread activities in universities.

In other words, alterations and variation of social- economical systems, now is derived from development and variation in science and technology, which led to changes in interests and tastes. Without a doubt, present time organizations and systems are encountered with different and extensive changes and international threats. Therefore to guarantee and continue the organizations' life need to find solutions and new methods to fight the problems much depending on innovation, creativity, new products, processes and new approaches.

In our county, in spite of intelligent and responsible people and also having lots of natural raw materials, gross national product (GNP) is in low level.

A great number of young or even educated people are disadvantaged of vocational creating facilities. It is emphasized on the preference creating occupations in other government activities in different levels. In addition, many companies are close to prorogation ,because of low efficiency, lack of demand and etc, or they are prorogated. Also lack of competitive conditions in global market is another problem. Hence, development of entrepreneurship is very important & essential.<sup>[6]</sup>

---

<sup>[6]</sup> . J.Hemmati, (2008), pp. 38-46

Formation of a nation & government depends on development of human resources and organizations which educate human resources. UNESCO describes the importance of this subject that vocational and technical training is an essential factor to maintain the complex structure of social, economical and modern civil development. Hence, it is necessary to create fundamental changes not only in training system structure but also in economical and social theories, and concepts, on the basis of development of human resources in vocational & technical training.<sup>[7]</sup>

## 4 Research purposes

### 4-1 Main Purpose

Role of vocational & technical training in development of entrepreneurship in Isfahan province .(A case study: City of Kashan).

### 4-2 Other Purposes

1. Recognition of concepts, theoretical and practical patterns of entrepreneurship through vocational and technical trainings.
2. Studying potential and actual positions of vocational & technical training organization of Kashan in development of entrepreneurship.
3. Studying the other countries' experiences in development and propagation of entrepreneurship process.
4. Identifying the current problems in entrepreneurship development and propagation process.
5. Studying the organizational supports & helps in development and propagation of entrepreneurship.

---

<sup>[7]</sup> . M.Marsi, (1994)

6. Designing appropriate models and providing scientific and practical suggestions.

## 5 Research hypothesis obtained from research questions are as follow

1. There is a meaningful relation between personality of individual and development of entrepreneurship.
2. There is a meaningful relation between behavioral characteristics of individuals and development of entrepreneurship.
3. There is a meaningful relation between vocational and technical trainings and development of entrepreneurship.
4. There is meaningful relation between vocational and technical trainings and entrepreneurship skills.
5. There is a meaningful relation among vocational and technical trainings and entrepreneurship skills and new occupations.

## 6 Research Method

According to the purpose, scientific research can be categorized into three fundamental, applicable and scientific groups.

Applicable research which has been provided by a background and a bed of knowledge and comprehension through fundamental research are being used to overcome needs of human and improve and optimize the tools, methods, objects and patterns.

Regarding to this subject that the purpose of this study is to explain the role of vocational & technical trainings in development of entrepreneurship in Kashan, it can be noted that this study is applicable in terms of purpose, as librarian study methods has been used in this study to collect information about research such as: literature like books, scientific magazines, Persian & English papers, thesis, websites, information media systems like internet and

also scope methods like questionnaire in gathering data about confirm or rejection of research questions. The purpose is to recognize the properties, preferences, characteristics and behavior of the society individuals by referring to them, so this study is an integration study according to its descriptive- metrical nature and method.<sup>[8]</sup>

### 6-1 Statistical population and sampling method

Statistical population is a whole set of available quantities or registered information of a qualitative factor about whole sum of units which we want to do recognition about them. Society is the target of research and gathering data is to extract result about the population.<sup>[9]</sup>

Statistical population of this study includes three trained probationer from three vocational and technical centers and 145 private institutions of vocational & technical organization, according to the documents available in technical & vocational center of Kashan. And the statistical sample includes a group of mentioned population, which are 536 trained probationers.

### 6-2 Method of sampling and the sample volume

In order to determine the volume of sample, researcher can use previous studies if the population variance and measured parameters were specified. Otherwise, the researcher should estimate the population variance by doing initial studies, and uses it. In this survey, an initial study was done by distributing questionnaires among 536 individuals in order to determine the volume of the sample. This study has been done in a descriptive- metric

[8]. M.R.Hafeznia, (2000), pp.40

[9]. H.Danayifard, S.M.Alvani, A.Azar,(2004),p.391

method and 536 individuals were surveyed, from the probationer students studied the majors: Information Technology, finance and business, electrician, mechanic, argon-welding ,sewing, drawing, carpentry, electric-welding ,automotive electricity, agriculture, home appliance, turnery – artificial hand made industry and arts, food industry, hotel keeping ,tourism & civil. These were selected on a randomly sampling, among probationers of 148 vocational & technical private centers & the vocational & technical center of Kashan.

To obtain required information for this study some questionnaires were used. The sample volume was computed through KOOKRAN formula.

### **6-3 Research territory**

#### **6-3-1 Research topical territory**

This study is generally about entrepreneurship, in terms of subject, and is specially about role of vocational & technical trainings in development of entrepreneurship.

#### **6-3-2 Research place territory**

Place territory in this study is the vocational & technical training center & private institutions of Kashan.

#### **6-3-3 Research time territory**

Time territory of this study is summer & autumn of 2010, and interval of gathering data is autumn of 2010.

### **6-4 Research variables**

Variable is a property or a feature or a factor which is common among the population

individuals and can have different values & quantities. <sup>[10]</sup>

In this study, the personality traits of entrepreneurship, behavioral characteristics of entrepreneurs, vocational & technical training, vocational and technical skills and new occupations, are independent variables and entrepreneurship development is dependent variable.

### **6-5 Validity & Reliability of the questionnaire**

Validity means a measurement tool can really determine the desired feature not other variables.

Research validity shows the adaptability of the questionnaire with the purposes. In this study, to survey the validity of questionnaire, researcher's questionnaire has been used. So that the questionnaire was provided to a number of authorities & professors of management and entrepreneurship such as guide masters & consultant masters and they were asked about each question and survey of related hypothesis finally ,all confirmed the questionnaire.

Reliability confidence capacity is one of the technical properties of a measurement tool. Which shows how much the measurement tool provides same results in the same conditions. To compute reliability capacity coefficient of measurement tools, KROUNBACK- coefficient method was used.

The more obtained percent closes to %100, the more reliability capacity of the questionnaire is Since the questionnaire used in this study was a researcher one, its amount in this thesis is 0.9 which is very close to 1 so the reliability is confirmed. <sup>[11]</sup>

---

<sup>[10]</sup>. M.R.Hafeznia, (2004), pp.101

<sup>[11]</sup>. Z.Sarmad, A.Bazargan ,pp.166

## 7 Results And Discussion

### 7-1 Descriptive statistics of demographic variables of repliers based on age, sexuality and education

In this part, personal information of repliers including sexuality, age and educational major is provided

Table1: Abundance distribution of demographic variables of repliers

Percent of abundance	education	Percent of abundance	age	Percent of abundance	sexuality
%60.3	diploma	%69.8	13-25	37.1	Male
%11.4	Associate degree	%25.9	25-35	62.9	Female
%27.6	B.A(B.S)	%3.7	35-45	0.0	No Reply
%7	M.A(M.)	%6	45-55		

### 7-2 Research hypothesis testing

In this part analysis of data will be studied to confirm or reject the research questions, using recognition statistics. In this study, statistical hypothesis used for all research questions are as follows:

$$\left\{ \begin{array}{l} H_0: \mu \leq 3 \\ H_1: \mu > 3 \end{array} \right.$$

Is there a meaningful relation among personality traits of individuals, behavioral properties, vocational & technical trainings, vocational & technical skills, new occupations and entrepreneurship development? Following table shows these information:

Table2: Research hypothesis

Meaningful ness level	Degree of freedom	t	Studied Variable	Research Hypo
0.000	535	31.28	Personality properties	First Hypo
0.000	535	33.28	Behavioral properties	Second Hypo
0.000	535	22.36	Vocational & technical training	Third Hypo
0.000	535	19.83	Vocational & technical Skills	Forth Hypo
0.000	535	13.005	New Occupation	Fifth Hypo

According to table2, since the statistical amount of the observed test was in a meaningful level of %95. it can be concluded that in this meaningfulness level, ho is rejected and h1 is confirmed (meaningfulness number 0.000, in allcases is less than standard amount (0.05) and  $t > 3$ ). In the other word, there is a meaningful relation between personality traits of people, their behavioral properties, Vocational & technical trainings, vocational & technical skills, New occupations, and entrepreneurship development.

### 7-3 Side findings according to demographic properties

In this section, using statistical educible methods (t independent test , this test is used when 2 independent groups are existed) , meaningfulness survey of difference between research questions is done according to demographic properties (sexuality, age, education) of entrepreneurs which is as follow:

### 7-3-1 Sexuality

In order to survey whether there is a meaningful difference among trained people in terms of vocational and technical skills, regarding to their sexuality, and entrepreneurship development?

To do this, one – factor variance analysis test was used to couple compare the studied variables. According to demographic properties, TOKKI test used: statistical hypo is defined as:

$$\left. \begin{array}{l} H_0: \mu_1 = \mu_2 \\ H_1: \mu_1 \neq \mu_2 \end{array} \right\}$$

H<sub>0</sub>: role of vocational & technical training in entrepreneurship development, based on sexuality is the same.

H<sub>1</sub>: role of vocational & technical training in entrepreneurship development, based on sexuality is not the same.

Table3: survey of meaningfulness of average difference among the search questions ,based on sexuality

Meaning fullness level	Independent t	Average score of female ideas	Average score of male ideas	Surveyed variable
0.123	-1.54	3.85	3.77	Personality properties
0.113	-1.58	3.95	3.86	Behavioral properties
0.034	2.12	3.61	3.74	Vocational & technical training
0.799	-0.254	3.09	3.08	Vocational & technical skills
0.006	2.76	3.39	3.59	New Occupation

According to the results of table 3, in a meaningfulness level of %95 based on sexuality (meaningfulness number in vocational & technical training and new occupations was less than %05), vocational & technical training level

in male was more effective in two training variables in comparison to women , but in other variables, no difference observed.

Therefore, there is a meaningful difference in average difference among research questions, based on sexuality and H<sub>0</sub> will be failed and H<sub>1</sub> will be confirmed, consequently.

### 7-3-2 Age

To survey this issue whether there is a meaningful difference among trained people of vocational and technical courses, based on age, and the entrepreneurship development, or not? One factor variance analysis (ANOVA) test was used in order to couple compare the studied variables, and based on demographic properties TOKKI test used.

Statistical hypos used in this test were as follow:

$$\left. \begin{array}{l} H_0: \mu_1 = \mu_2 = \mu_3 = \mu_4 \\ H_1: \mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \end{array} \right\}$$

H<sub>0</sub>: Role of vocational & technical trainings in entrepreneurship development of KASHAN, for different ages was the same.

H<sub>1</sub>: Role of vocational & technical trainings in entrepreneurship development of KASHAN, for different ages was not the same

Table 4: survey of meaningfulness of average difference among the research question based on age:

Meaningfulness level	f	Surveyed variable
0.677	0.508	Personality properties
0.587	0.644	Behavioral properties
0.134	1.867	Vocational & technical training
0.604	0.619	Vocational & technical skills
0.021	3.274	New Occupation

According to table 4 results, in a meaningfulness level at 95% , based on age, (regarding to the meaningfulness number of new occupation of less than 0.05), age was only effective in new occupations and had no effect on other factors. In case of new occupation, it was resulted that the more age increased, the more importance of occupation decreased. Therefore, there was a meaningful difference in the average difference among research questions based on age, so  $H_0$  failed and  $H_1$  confirmed

**7-3-3 Education**

To survey whether there is a meaningful difference among trained people of vocational & technical training courses, based on their education, and entrepreneurship development one – factor variance analysis (ANOVA) was used to compare studied couple variables, according to demographic properties. Tokki test was used.

Statistical hypos used in this test were as follow:

$$\left\{ \begin{array}{l} H_0: \mu_1 = \mu_2 = \mu_3 = \mu_4 \\ H_1: \mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \end{array} \right.$$

$H_0$ : role of vocation & technical training in entrepreneurship development in Kashan, for different educational levels was the same.

$H_1$ : role of vocation & technical training in entrepreneurship development in Kashan, for different educational levels was not the same.

Table 5: survey of meaningfulness of average difference a among research questions , based on education

Meaningfulness level	f	Surveyed variable
0.995	0.024	Personality properties
0.783	0.358	Behavioral properties
0.230	1.442	Vocational & technical training
0.141	1.829	Vocational & technical skills
0.233	1.429	New Occupation

According to table5, in a meaningfulness of %95, based on education (regarding to the meaningfulness number of more than 0.05) , level of vocational & technical training organization in entrepreneurship development in terms of education , was the same for all factors and there was no meaningful difference therefor,  $h_1$  is failed &  $h_0$  is confirmed.

**7-3-4 Research question ranking (performance of applied variable to develop entrepreneurship)**

To determine the importance degree of research questions, depending on hypos about role of vocational & technical training. In entrepreneurship development, freedman test was used. The results were as follow:



Table6 : research questions ranking

average	Surveyed variable
3.86	Behavioral properties
3.57	Personality properties
3.22	Vocational & technical training
2.85	New Occupation
1.49	Vocational & technical skills

According to table 6 results, behavioral properties of entrepreneurs of vocational & technical organization had the maximum average or the highest degree of importance. After that, personality traits , vocational and technical training , new occupation and vocational & technical skill , were the next importance's, respectively

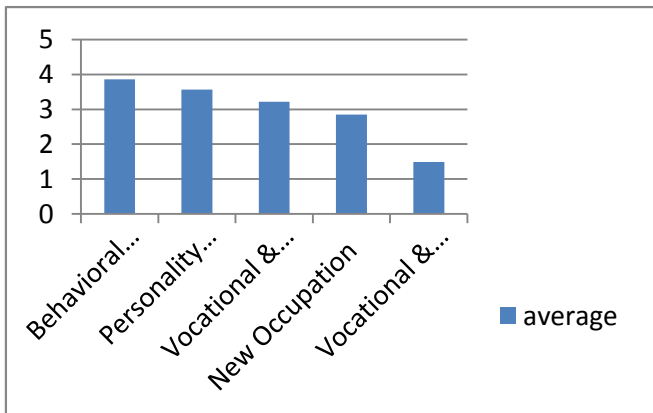


figure 1 : research questions ranking

**7-3-5 Final model of research**

After testing the research questions and testing relation, final illustrative model of the research could be obtained, this model is shown in the following figure:

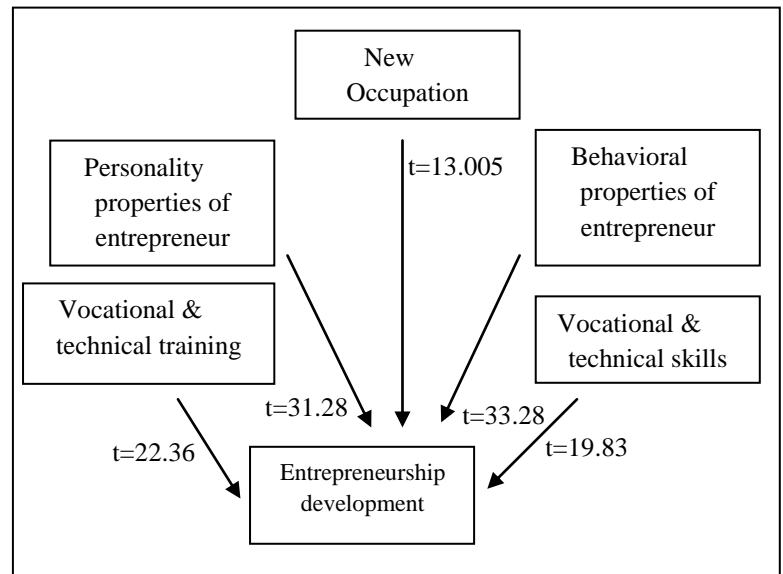


figure2 : Final model of research

**8 Conclusion**

1. Personality traits play role in entrepreneurship development of entrepreneurs in vocational & technical organization, Furthermore, indices of personality factor including high self-confidence ,success questing and accepting competition, good performance and responsibility, creativity and innovation, effective communication with others, ability to manage and risk taking have been effective in entrepreneurship development.
2. Behavioral properties play role in entrepreneurship development of entrepreneurs in vocational and technical organization. Furthermore, indices of behavioral factors including experience, age and educational level, occupation and life conditions, work conscience, morality and behavior, were effective on entrepreneurship development.
3. Regarding to considered variables and factors, behavioral properties of entrepreneurs of vocational & technical training organization had the maximum average or highest degree of importance and offer that, personality traits, vocational & technical skill had the next degrees of importance, respectively.

## 9 Main suggestions

1. During lifetime of management knowledge, researchers have tried to help organizations to select the best option for employment, by creating deferent tests. It is offered that. These managers consider these properties in their employment process.
2. Providing facilities and principal allowance to the people who intend to begin new enterpreneuring accusations.
3. Specifying the probationers capable of entrepreneurship , familiarity and training of them to begin enterpreneuring occupations , also decreasing the young's vacancy, improving morale of happiness and innovation among educated young's and capable trained probationers.
4. Propagating the creative games in kindergartens and elementary schools, paying attentions to innovation and creativity at high schools, colleges, identifying of trained people, capable for entrepreneurship and appearance of their abilities and capabilities.
5. Receiving facilities and credits from related organizations and preventing to refer entrepreneurs to other related organizations.
6. Holding seminars and training courses of entrepreneurship for managers, according to their needs in differat levels, entrepreneurs lectures and thanking for them, creating motivation of entrepreneurship and the background to improve entrepreneurship
7. Producing videos and programs in mass media to establish entrepreneurship in society and propagation creativity and innovation, calling 2008 as year of creativity and innovation which provided encouragement of innovation in society, a generation at the society involve with these concepts and will apply it.

## 10 Suggestions for future investigations

1. Study of vocational & technical training, proportioned to society needs.
2. Study of social economical and cultural factors and policies on entrepreneurs succeed.
3. Study of level of applicability of vocational & technical trainings in order to make a good relation between educational majors and occupations.
4. Study of the needs of occupation conditions for trained people in different technical and vocational major, in area level, according to the current facilities.

## 11 The research limits

1. This research might not be extensible to other cultures because of cultural difference of various regions.
2. Time restrictions resulted from limit time of project completion and no responsible cooperation of some managers and trained people from vocational and technical centers.

## References

- Aghazadeh, H., Rezazadeh, H. (2004). *Organizational entrepreneur, Tadbir magazine*, 15(152), pp. 14.
- Danayifard, H., Alvani, S. M. and Azar, A. (2004). *of Quantitative research methodology in management*. Tehran: Saffar Eshraghi Press, pp. 391.
- Ebrahimi, S. K., Zareei, A. (2008). *entrepreneurial skills education*, monthly business and society, (100), pp. 22-23.
- Hafeznia, M. R. (2004). *Creativity growth psychology and relation with personality and intelligence*. Tehran: Rahyaft Press, (26), pp. 101.

Hafeznia, M. R. (2000). *An Introduction to research methodology in human sciences*, Tehran: Samt Press, 2nd ed, pp. 40.

Hemmati, J. (2008). *principle and foundations of entrepreneurship*, Tehran: Avaye nor Press, pp. 38-46.

Hurley, A. (1999). *Incorporating Feminist theories in to Sociological theories of entrepreneurship*, *Woman in Management review*, vol:14(2), pp. 2 – 7.

Marsi, M. W. (1994). *Vocational education: The way ahead*. Macmillan LTD. London and Basingstoke.

Prokopenko,J., Pavlin, I. (1991). *Entrepreneurship Development in Public enterprises*, *International Labor Organization*, pp. 15 – 17.

Sarmad, Z., Bazargan, A. and Hejazi, E. (2004). *Research Method of behavior science*, 10nd ed. Tehran: Agah Press, pp. 166.

Vesper, K. (1993). *Entrepreneurship education Los Angeles: Entrepreneurial studies Centre*, (4), pp.13