Available Online at http://www.recentscientific.com

ISSN: 0976-3031

International Journal of Recent Scientific Research
Vol. 4, Issue, 4, pp.340 - 346, April, 2013

International Journal of Recent Scientific Research

RESEARCH ARTICLE

IDENTIFYING THE RELATIONSHIP BETWEEN THE SKILLS OF STRATEGIC THINKING AND MULTIPLE INTELLIGENCES AMONG BUSINESS AND SALE MANAGERS

Soleyman Iranzadeh and Morteza Khodakhah Amlashi

Department of Management, Islamic Azad University, Tabriz, Iran
Department of Management, East Azarbaijan Science and Research Branch, Islamic Azad University, Tabriz, Iran

ARTICLE INFO

Article History:

Received 10th, February, 2013
Received in revised form 14th, March, 2013
Accepted 27th, March, 2013
Published online 30th April, 2013

Key words:

Strategic thinking ability, Gardner's theory, multiple intelligences

ABSTRACT

In the changing world of today, understanding the conditions and predicting their trends is the only way of the organizations for impowerment in order to exceed their rivals. This doesn't occur, unless the managers with high strategic abilities are used in the rganizations.Therefore, this study aims to use multiple intelligence theory due to its importance for measuring different human capabilities and personal differences. The results can help the organizations in selecting the managers with high abilities of the related intelligences with strategic thinking to provide a competitive advantage for their organizations. According to the findings, there was a significant correlation between 3 out of 7 intelligences of Gardner (visual/spatial, logical/mathematic, interpersonal) and strategic thinking ability.

INTRODUCTION

The previous century, since the appearance of scientific management until 1960s, interorganizational attitude was prevalent. Management scholars with internalist attitudes were involved with offereing theories and complicated techniques for managing financial, human, and technologic resources of the organization, neglecting the customers and their needs. Such attitude ignored other environmental factors such as rivals, social, economic and technologic revolutions of the world, as well as what was regarded as the environmental opportunities and threats. The managers were engaged with the profit/ losses estimations in their organization (Bonn, 2005). Dracer warns the managers to spend more time ouside the organization in each industry in the changing world of today. Externalist management of today takes the managers out of their organization, leading them to the market since the goal is survival in the competitive markets at the moment. Successful strategic managers concern the environment and opportunities, enjoying them (Bruce and Langdon, 2010).

Nowadays, creating effective strategies are necessary for the survival in competition cycle by the managers, putting their organizations in a higher position than their rivals (Ghaffarian and Kiani 2010). Having managers with strategic thinking is a basic need of the organizations in the competition for success and progress. Such a need leads us to asking ourselves about the ways of recognizing proper managers with open minds and strategic thinking. They can help passing a correct path of progress and success for the organizations. Every one of us may have entered interview sessions for vacancies at least once. An alternative for the managers to consider is intelligence evaluation. Placing intelligence tests in employment interviews is one demand of industry owners. Its importance lies in its simplicity, high speed, and low cost or the absence of the methods that can compete with it. One of the controversy-invoking topics entering psychology in recent years is the concept of intelligence, revealing itself in the new forms.

From the newest theories about intelligence is the theory of multiple- intelligence (verbal/linguistic, logical/mathematical, bodily/ kinesthetic, visual/spatial, musical, intrapersonal, interpersonal), suggested by Gardner.

Thus, the questions to be answered in this study are as follows: can this theory be used for helping organizational issues? Can examining the relationship between new intelligences and the needed abilities of the organization help them in selecting powerful people? Is there any correlation between the ability of strategic thinking as a basic need of the organizations and a feature of the managers and multiple- intelligences of the managers to select qualified managers for the organizations? Strategic analysis of this issue in the past and present doesn't necessarily lead you to the future path; but, the goal the organization is going to fulfil in the future depends on strategic thinking (Norton and Irving, 2002). Some experts like Hamel and Mintzberg have attempted to offer clear features of strategic thinking. What is concluded from all of these studies implies that the output of strategic planning process without thinking is just a program. In return, when there is strategic thinking, it is hoped that the output of strategic planning process is efficient and innovative strategy reveals the importance of strategic thinking byitself. When the discussions are about strategy, most people only see what their mind is trained to see (Abraham, 2005).

People return to traditional work methods even when they have not acted asuccessfully. In this respect, the main challenge is removing old habits and unfruitful believes, allowing the thoughts go beyond the limitations to find innovative fields.

* Corresponding author: + **Morteza Khodakhah Amlashi**
Email: morteza_khodakhah@yahoo.com

Some think that strategic thinking belongs to the top managers and CFOs. But, improving thinking quality is needed in every level and should be highly noticed (Clinton 2002). In the changing world of today with the huge body of information, the information appears in a short time and the environment around demands new requirements (Hernaus et al, 2012). Only the strategic thinking can help recognizing market changes and needs correctly and earlier than the rivals to keep market share of the companies with proper accountability to the customers; in the higher step, this can lead to higher customer profits by defining new paradigms for them.

According to mentioned points about the importance of strategic thinking, no doubt remains about its eminent role in the organizations and the managers who see the world differently and create the future. Due to such attempts for using people regarding their abilities for organizational needs, this study aimed to examine the relationship between strategic thinking and multiple –intelligences theory of Gardner to identify the correlation of each intelligence and strategic thinking ability. They can help the better fulfillment of organizational goals. According to Gardner, people's intelligences are not fixed in their lifetime and they can be improved by education; then, the organizations can identify these intelligences, hold educational periods based on them to improve strategic thinking correlated with those intelligences. The positive results of such thing can be improving competitive quality and understanding customer needs, pattern recognition, and prevalent market patterns, and in further step creating new patterns for the market. As a research in this field, the study of Graetz in Deakin University can be refered. This study examines the correlation between the levels of strategic thinking among organizational staff and emotional intelligence of top managers. The findings showed a positive correlation between these two variables, implying that in the organizations with the staff having high strategic level, the managers also own high levels of emotional intelligence (Graetz, 2002).

In another study in Tennesy University of America, the relationship between emotional, social and cognitive intelligence and transformational leadership was examined. The dimensions of transformational leadership included leaders' attraction, the ability of mental stimulation, and personal attentions of the leader. According to the findings, a significant correlation was found between cognitive intelligence and the ability of mental stimulation, social intelligence, as well as charismatic ability, the ability of cognitive intelligence and the ability of personal attentions of the leader (Hoffman and Forest, 2006).

According to the mentioned studies, the hypotheses of the study were identified in the following order:

1. There is a correlation between strategic thinking ability and verbal/linguistic intelligence.
2. There is a correlation between strategic thinking ability and logical/mathematical intelligence.
3. There is a correlation between strategic thinking ability and bodily/ kinesthetic intelligence.
4. There is a correlation between strategic thinking ability and visual/ spatial intelligence.
5. There is a correlation between strategic thinking ability and musical intelligence.
6. There is a correlation between strategic thinking ability and intrapersonal intelligence.
7. There is a correlation between strategic thinking ability and interpersonal intelligence.

Strategic thinking ability in this study was dependent variable and multiple-intelligence was independent variable.

Strategic thinking

Strategic thinking refers to the ability of creating innovative strategies that can rewrite the rules of competitive games and provide potential future perspectives, considerably different with the present status (Kask, 2011). Based on the above definitions, the concept of strategy is the product of strategic thinking. Different definitions of strategic concepts have been offered. Queen introduces the strategy as the program that integrates the main goals of the organization. Porter beleives that strategy means combining the activities as well as creating proportion in the organizational activities (Handen, 2004). According to Porter, strategy is the process of creating unique and valuable situations for the organization. A necessity of strategic positioning is selection and execution of different activities from competitors. However, a distinct situation is not a consistent competitive advantage since it can be imitated by the rivals every moment, creating danger (Gibcus 2003, 9).
Mintsberg offeres 5 definitions for strategy (Ade Feo & Janssen, 2001, 4):

1. Program
2. Preparation
3. Pattern
4. Situation
5. Attitude

Liedtka recognizes strategic thinking as a basis for creating new strategy, able to change competition rules and draw a different perspective from extant situation. Lidka recognizes strategic thinking as a tool for executing created strategy via strategic thinking and its facilitation. Strategic thinking does not merely imply problem solving. It is correlated with normal and current rules; it creates the issues and challenges that motivate the organization for new movements (Liedtka, 1998).

Two main features of strategic thinking

One important feature of strategic thinking is its holistic attitude to the business environment. Without summarizing business system in the framework of simplified analytic patterns, such attitude can provide a comprehensive image of a businesss in the mind. Although this image is inexact and in some cases unidentifiable, its concepts in the frame of a conceptual structure become a foundation for making organizational decisions, leading it in a correct path. Another important feature of strategic thinking is its double loop learning. In usual approaches, organizational learning uses feedback system within the framework of dominant rules. In strategic thinking, the rules themselves evolve in a learning cycle (second feedback loop). This feature of strategic thinking preserves its efficiency in deep environmental revolutions. With one loop, rules feedback and thought framework are maintained and the system goes toward optimization. For example, the methods and techniques of improving the pollution of petrol-consuming automobile engines follow this system.

But, learning with double feedback loops changes thinking mechanisms and the rules in which this issue is effectively

responded (by inventing hydroengines of the automobiles with zero pollution rate). This paradigm shift accompanies new opportunities and creates revolutionary and efficient strategies (Amirkabir, 2011).

Intelligence

Intelligence is one of the most controversial issues of contemprory psychology. For the centuries, philosophers have offered mental theories about the nature of intelligence. But, psychologists have attempted to measure it exactly and objectively. Intelligence tests have been provided in the early 20th century for the public. Disregarding the specific knowledge about the race, religion, family, physical status, social class, and educational level of a person such tests measure one's talents which are comparable with those of the others (Squiler 1996).

Multiple intelligences of Gardner- Despite past psychologists believing that the concept of intelligence is appreciable everywhere in a unit form, ignoring what was supposed to be valuable in specific cultures and times, Gardner introduced a new concept of intelligence. In his idea, intelligence is the information which can be activated in a cultural environment for solving a problem or creating the products which are valuable in a culture. Gardner is not the first psychologist supposing human talents independent from each other. But, he is the first who extended the meaning of intelligence, classifying human talents.

Verbal-Linguistic intelligence

Language usage is associated with verbal linguistic intelligence. Gardner emphasizes on four aspects of linguistic knowledge, from different candidates, that are remarkably consistent in human societies (Gardner, 1993). These four aspects are:

1. Eloquence techniques: The ability to use language to convince others to justify an action.
2. Verbal memory ability: This ability helps people to remember the information.
3. Comment and describing: Most learning processes take place through language.
4. The ability of describing activities.

Language as a Tool: In most societies, language is used as a tool for success in business. Scientists rely on language to transfer and deliver their findings to others, In addition, advances in science often is done through lectures and papers. In fact, it seems so necessary to use language that it can be said there is no means that can replace it. People who are particularly intelligent in this area can discuss, convince, entertain, or give advice with effective verbal words (Armstrong, 2004, 2006).

Musical intelligence

This intelligence is the ability to recognize tonal patterns and sensitivity to sounds in various environments, especially the human voice and musical instruments. This audio sensitivity (music and sound that is reminiscent of a clear memory or a song that seems penetrate the bone marrow) has significant effect on consciousness and emotion. The sensitivity to human voice is an important indicator and dimension of the relationship between individual and good listeners. Currently important fact that psychologists have studied it for years and commercial companies have found it: State a sentence or slogan with music or rhythm, it is almost impossible to forget it. Commercial companies have been able to enter our brains a lot of information through advertising but you can plan your brain based on knowledge that you choose by applying some of the same tricks. Music balances many psychological and mental tasks we do during the day and create new attitudes in the life path (Gardner, 2000).

Spatial intelligence

Spatial intelligence can be considered as the visual intelligence and the ability of thinking through eyes and mind. The main components of Gardner's spatial intelligence are: The ability to perceive the visual world accurately and the ability to change the human's primary perception. The one who has spatial intelligence, whether in the real world or in his/her mind, sees things that others may not be able to see them. Scholars still have little information of creating visual mental images but this ability is one of the most important way to create, remind and information processing, Therefor one of the great results of visual intelligence is to motivate creative abilities and nurturing mental methods. Eugene S. Ferguson, the master of Delaware University mentions that our university engineering programs have converted to digit analysis programs consumedly and nurturing the mind's eye has been forgotten. He says we can probably observe examples of ignoring spatial intelligence on the spacecraft disaster. Apparently poor design of the spaceship's O-Rings caused them unable to resist the cold weather and this problem caused fuel leak that led to the explosion and loss of the spacecraft. Technicians who have spatial intelligence had been aware of the defect but managers and staffs with analytical mind that is likely unable to conceptualize the problem, rejected their views. If you have spatial intelligence probably feel this cultural challenge in your life that when your teacher paid less attention to your good work, certainly you feel affliction for years.

Bodily-Kinesthetic intelligence

In past ages, body and mind were parts of a unit. Greeks respected the art of gymnastics as an important tool to develop the ability of brain. The Romans were the same, too and the term "healthy mind in a healthy body" is derived from their culture. Eastern cultures followed brain development during thousands of years through physical activities like yoga and Aikido. But in the West culture and among the Christian of middle ages, austerity was a way to feed the soul. As Rene Descartes, French philosopher, said: "I think, therefore I am" and noted the importance of mind vs. body. In multiple intelligences theory, targeted physical activity can be considered as an intelligent by itself to remove gap between the body and the brain. The main components of physical intelligence include the ability to subtle control of body movement and ability to manipulate objects. It seems that some people's body acts like the precise indicator of cognitive implications. Like individuals who have some "internal reaction" when replying a test or have "deep feelings" to the specific person, place or event (Hajihseineghad and Baleghizadeh, 2012). Apparently physical movement is the important factor in promotion of intellectual processes and several creative thinkers have reported that walking or running, have developed their cognitive abilities.

Logical-Mathematical intelligence

Unlike linguistic-verbal and musical talents, logical-mathematical intelligence does not originate from the field of

speech and auditory but grows in relation to the objects. This intelligence enables individuals to understand the reality and potential of their actions and the relationship between the sentences so they enjoy collecting data perform experiments and solving problems. They are good partners for cooperation with the Department of the calculations, measurements, and predictions and totally for analytic task. They can't accept any fact, unless which have been proven by the principles and universal steps.

Personal intelligence (Intrapersonal and Interpersonal intelligence)

Since the development of these two intelligences are intertwined and interlaced in all cultures, Gardner's put them together in his statements but they are completely independent. Intrapersonal intelligence is the ability to understand the feelings, emotions and excitements and have the talent for separation and identification of emotions as a means of understanding and guiding behaviors. This intelligence includes the ability of recognize pleasant feelings from unpleasant ones in the primary forms and at the highest level, one can identify a set of distinct emotions and notate them complexly. Interpersonal intelligence is concerned with other people. The center of this talent is to distinguish and separate individuals (in terms of motivation, purpose, nature, temperament, etc.). In the primary form, interpersonal intelligence deals with the separation and identification of individuals in terms of their individual temperament and characteristics and in advanced mode, helps us to become aware of the intentions and desires of others. Awareness of multiple intelligences theory has an important role in various commercial areas and among these; we can mention the role of the personal intelligences.

Gardner, who is the manager of some organizations states: "I tried to find people like myself the past two decades, but personal intelligences gave me a new perspective. I am now rarely searching people who have my skills; instead I design some questions such as: Which one of my employees has this skills or intelligences? Who can learn these skills at the lowest time? What skills or intelligence is needed for specific roles (especially for new roles)? Who can work the best with peoples who have special characteristics or individual intelligences? How could a project (with a mix of different people) be profitable? Perhaps these questions can help to create an effective group". Traditional commerce is set in a way that employees remain for a long time in responsibilities, the traditional business believes: "Peoples, who can do their jobs well, must become lifelong employees" but in recent 15 years, these ideas have been weakened or removed in the new economic approaches. Today, due to the high flexibility of jobs and their roles and styles, people should have accurate and updated information and the personal intelligences theory play an important and necessary role (Haji Hoseini and Baleghi Zade, 2001, 90).

RESEARCH METHOD

This study is a field study using survey approach with applied goals; since, it examines the relationship between the ability of strategic thinking and multiple intelligences. The research scope included Razavi Khorasan Province in the time span of second quarter of 2006. To gather data, the library method for the research literature and the field method for data gathering were used to test the hypotheses. The main data gathering method was using questionnaires and Descriptive statistics were used for setting data in the tables of frequency distribution, drawing charts, and calculating index.

Regression analysis, significance tests, and a math model were used for determining the correlation between the variables. Statistical population included sale or business managers of the companies, acting in Razavi Khorasan Province. For the large size of statistical population, sampling was used which included simple random sampling among a list of all companies of the province, yielding a sample size of 60 people. It is worth notifying that 70% of the sample was male and the rest was female.

The Results of Hypotheses Testing

Hypotheses test

For hypotheses test, let x be intelligence, y strategic thinking ability, β slope of regression line of y to x. If there is a correlation between X and y, then, $\beta \neq 0$; otherwise $\beta = 0$. Thus, the test of each hypothesis will be in the following form:

$$\begin{cases} H_0 : \beta = 0 \\ H_1 : \beta \neq 0 \end{cases}$$

For this purpose, regression analysis and significance tests of regression were used to test the hypothesis. In each of these hypotheses, if H_0 is accepted, no correlation exists between 2 variables; but, if it is rejected, the correlation between two vriables is offered in the form of a math equation (regression line equation).

Hypothesis (1)

$H_0 : \beta = 0$

There is no relationship between strategic thinking and verbal-linguistic intelligence.

$H_1 : \beta \neq 0$

There is relationship between strategic thinking and verbal-linguistic intelligence.

Regression analysis as follows:

Table 1 The relationship between strategic thinking and verbal-linguistic intelligence

Predictor: (Constant), verbal-linguistic.int Dependent Variable: Strategic Thinking		Model 1	
		(Constant)	verbal-linguistic.int
Unstandardized coefficients	B	64.04	.995
	Std. Error	2.917	.591
Standardized coefficients	Beta		.216
t		21.954	1.682
Sig.		.000	.098
95% Confidence interval for B	Lower Bound	58.201	-.189
	Upper Bound	69.879	2.178

To test the $\beta = 0$ in contrast with $\beta \neq 0$ we compare the value of this probability ($sig = 0.098$) with the level of significance ($\alpha = 0.05$) and because this value is more than $\alpha = 0.05$ we rejected $H_1 : \beta \neq 0$ and accepted $H_0 : \beta = 0$ .So there is no relationship between strategic thinking and verbal-linguistic intelligence.

Table 2 The relationship between strategic thinking and logical-mathematical intelligence

Predictor: (Constant), logical-mathematical.int Dependent Variable: Strategic Thinking		Model 2	
		(Constant)	logical-mathematical.int
Unstandardized coefficients	B	62.048	1.542
	Std. Error	2.782	.589
Standardized coefficients	Beta		.325
t		22.303	2.619
Sig.		.000	.011
95% Confidence interval for B	Lower Bound	56.479	.364
	Upper Bound	67.617	2.721

Hypothesis (2)

$H_0 : \beta = 0$

There is no relationship between strategic thinking and logical-mathematical intelligence.

$H_1 : \beta \neq 0$

There is relationship between strategic thinking and logical-mathematical intelligence.

Regression analysis as follows:

To test the $\beta = 0$ in contrast with $\beta \neq 0$ we compare the value of this probability ($sig = 0.011$) with the level of significance ($\alpha = 0.05$) and because this value is less than $\alpha = 0.05$ we accepted $H_1 : \beta \neq 0$ and rejected $H_0 : \beta = 0$ .So there is relationship between strategic thinking and logical-mathematical intelligence. If we assume y indicates strategic thinking and X indicates logical-mathematical intelligence, then the following relation exists between these two variables: $y = 62.048 + 1.542\,X$

The correlation between two variables and related R square consecutively are 0.325 and 0.106

Table 3 The relationship between strategic thinking and bodily-kinesthetic intelligence

Predictor: (Constant), bodily-kinesthetic.int Dependent Variable: Strategic Thinking		Model 3	
		(Constant)	bodily-kinesthetic.int
Unstandardized coefficients	B	64.430	.871
	Std. Error	3.027	.599
Standardized coefficients	Beta		.187
t		21.282	1.453
Sig.		.000	.152
95% Confidence interval for B	Lower Bound	58.370	-.329
	Upper Bound	70.490	2.070

Hypothesis (3)

$H_0 : \beta = 0$

There is no relationship between strategic thinking and bodily-kinesthetic intelligence.

$H_1 : \beta \neq 0$

There is relationship between strategic thinking and bodily-kinesthetic intelligence.

Regression analysis as follows:

To test the $\beta = 0$ in contrast with $\beta \neq 0$ we compare the value of this probability ($sig = 0.152$) with the level of significance ($\alpha = 0.05$) and because this value is more than $\alpha = 0.05$ we rejected $H_1 : \beta \neq 0$ and accepted $H_0 : \beta = 0$ .So there is no relationship between strategic thinking and bodily-kinesthetic intelligence.

Table 4 The relationship between strategic thinking and spatial intelligence

Predictor: (Constant), spatial.int Dependent Variable: Strategic Thinking		Model 4	
		(Constant)	spatial.int
Unstandardized coefficients	B	59.847	1.924
	Std. Error	2.861	.569
Standardized coefficients	Beta		.406
t		20.920	3.380
Sig.		.000	.001
95% Confidence interval for B	Lower Bound	54.121	.784
	Upper Bound	65.574	3.064

Hypothesis (4)

$H_0 : \beta = 0$

There is no relationship between strategic thinking and spatial intelligence.

$H_1 : \beta \neq 0$

There is relationship between strategic thinking and spatial intelligence.

Regression analysis as follows:

To test the $\beta = 0$ in contrast with $\beta \neq 0$ we compare the value of this probability ($sig = 0.001$) with the level of significance ($\alpha = 0.05$) and because this value is less than $\alpha = 0.05$ we accepted $H_1 : \beta \neq 0$ and rejected $H_0 : \beta = 0$ .So there is relationship between strategic thinking and spatial intelligence. If we assume y indicates strategic thinking and X indicates spatial intelligence, then the following relation exists between these two variables: $y = 59.847 + 1.924X$

The correlation between two variables and related R square consecutively are 0.406 and 0.165.

Hypothesis (5)

$H_0 : \beta = 0$

There is no relationship between strategic thinking and musical intelligence.

$H_1 : \beta \neq 0$

There is relationship between strategic thinking and musical intelligence.

Regression analysis as follows:

To test the $\beta = 0$ in contrast with $\beta \neq 0$ we compare the value of this probability ($sig = 0.152$) with the level of significance ($\alpha = 0.05$) and because this value is more than $\alpha = 0.05$ we rejected $H_1 : \beta \neq 0$ and accepted

$H_0 : \beta = 0$ .So there is no relationship between strategic thinking and musical intelligence.

Table 5 The relationship between strategic thinking and musical intelligence

Predictor: (Constant), musical.int Dependent Variable: Strategic Thinking		Model 5	
		(Constant)	musical.int
Unstandardized coefficients	B	64.284	.951
	Std. Error	2.880	.590
Standardized coefficients	Beta		.207
t		22.318	1.613
Sig.		.000	.112
95% Confidence interval for B	Lower Bound	58.518	-.230
	Upper Bound	70.050	2.132

Hypothesis (6)

$H_0 : \beta = 0$

There is no relationship between strategic thinking and intrapersonal intelligence.

$H_1 : \beta \neq 0$

There is relationship between strategic thinking and intrapersonal intelligence.

Regression analysis as follows:

To test the $\beta = 0$ in contrast with $\beta \neq 0$ we compare the value of this probability ($sig = 0.085$) with the level of significance ($\alpha = 0.05$) and because this value is more than $\alpha = 0.05$ we rejected $H_1 : \beta \neq 0$ and accepted $H_0 : \beta = 0$ .So there is no relationship between strategic thinking and intrapersonal intelligence.

Table 6 The relationship between strategic thinking and intrapersonal intelligence

Predictor: (Constant), intrapersonal.int Dependent Variable: Strategic Thinking		Model 6	
		(Constant)	intraper sonal.int
Unstandardized coefficients	B	64.307	1.066
	Std. Error	2.705	.609
Standardized coefficients	Beta		.224
t		23.776	1.751
Sig.		.000	.085
95% Confidence interval for B	Lower Bound	58.893	-.153
	Upper Bound	69.721	2.285

Hypothesis (7)

$H_0 : \beta = 0$

There is no relationship between strategic thinking and interpersonal intelligence.

$H_1 : \beta \neq 0$

There is relationship between strategic thinking and interpersonal intelligence.

Regression analysis as follows:

To test the $\beta = 0$ in contrast with $\beta \neq 0$ we compare the value of this probability ($sig = 0.003$) with the level of significance ($\alpha = 0.05$) and because this value is less than $\alpha = 0.05$ we accepted $H_1 : \beta \neq 0$ and rejected $H_0 : \beta = 0$ .So there is relationship between strategic thinking and interpersonal intelligence. If we assume y indicates strategic thinking and X indicates interpersonal intelligence, then the relation represented as follow: $y = 61.353 + 1.76X$

The correlation between two variables and related R square consecutively are 0.374 and 0.14.

Table 7 The relationship between strategic thinking and interpersonal intelligence

Predictor: (Constant), interpersonal.int Dependent Variable: Strategic Thinking		Model 7	
		(Constant)	interpersonal. int
Unstandardized coefficients	B	61.353	1.760
	Std. Error	2.667	.573
Standardized coefficients	Beta		.374
t		23.006	3.070
Sig.		.000	.003
95% Confidence interval for B	Lower Bound	56.015	.612
	Upper Bound	66.691	2.980

CONCLUSION AND SUGGESTIONS

Among multiple intelligences of Gardner (verbal/linguistic, logical/mathematical, bodily/ kinesthetic, visual/spatial, musical, intrapersonal, interpersonal), the correlation of 3 intelligences with strategic thinking was confirmed. As a result, the managers with high ability in visual/spatial, logical/mathematical, and interpersonal intelligences have higher strategic thinking ability. According to the findings, to equip the organization with the key advantage of 21 st century, strategic thinking ability, the managers should be employed who own higher levels of these 3 intelligences. Another important issue is that according to Gardner, the intelligences of the people don't remain fixed during their lifetime and they can be improved by education and practice. Thus, it is suggested that the companies hold proper workshops and training periods using the methods of Gardner to fortify the intelligences of the organizational staff for fulfilling organizational goals. However, it seems essential to mention that regarding the tests and clarifying the correlation between strategic thinking ability and multiple intelligences, employing the staff with high abilities of strategic thinking and its related intelligences is not enough; there are other conditions that should be concerned whose interactions can affect creating competitive advantages in the organization.

Suggestions for further studies

According to the findings of this study, the following suggestions were resulted that may help the further studies in this field:

1. Examining the relationship between strategic thinking ability and multiple intelligences of Sternberg among organizational managers.
2. Investigating the relationship between strategic thinking ability and emotional intelligence among business and sale managers in the organization.

References

Abraham, Stan (2005). "Stretching Strategic Thinking", Strategy & Leadership, Vol .33 No. 5.

Ade feo, Joseph. Janssen, Alexander (2001). "Implementing a Strategy successfully," Measuring Business Excellence, 4, 5. pp. 4-6.

Amirkabir, A. (2011). Strategic management, Negah Danesh Publication, Tehran, 1st Ed.

Armstrong, T. (2004). Multiple intelligences in class, Translated by Safari, M. Madrese Publication.

Armstrong, T. (2006). Seven intelligences, Translated by Sepehrpoor. N. Peikavin Publication, 1st Ed.

Bonn, Ingrid (2005). "Improving Strategic Thinking: a multilevel Approach", Leadership & Organization Development Journal, Vol. 26 No.5. pp. 336-354.

Bruce, Andy. Langdon, ken (2010). "Strategic Thinking", New York: Dorling Kindersley Publishing Inc, 4th Ed.

Clinton, S. (2002). How should we develop strategic skills of our team? Verdineghad, F; Dindari, V, Iran Institute Publication.

Gardner, Howard (1993). "Frame of minds The Theory of Multiple Intelligences", published by Basic Books.

Gardner, Howard (2000). "Intelligences Reframed: Multiple Intelligences for the 20 Century ", New York: Basic.

Ghaffarian, V; Kiani, Gh. (2010). 5 orders for strategic thinking, Fara Publication, Tehran, 1st Ed.

Graetz, Fiona (2002) "strategic Thinking Versuse Strategic Planning: Toward Understanding the Complementarities", Management Decision, Vol. 40 No. 5. pp. 456 – 462.

Hajihseineghad, Gh; Baleghizadeh, S. (2012). The theory of multiple intelligences of Gardner and its applications in education, Jahaddaneshgahi Publication, 1st Ed.

Handen, Gisle (2004). Intuition its role in strategic thinking. A dissertation submitted to BI Norwegian School of management.

Hernaus, Tomislav. Pejic Bach, Mirjana. Bosilj Vukšic, Vesna (2012). "Influence of strategic approach to BPM on financial and non-financial performance", Baltic Journal of Management, Vol. 7, Issue. 4.

Hoffman, Brian. Forest, Brian (2006). "Sample intelligencess of transformational leaders: an empirical examination" International journal of manpower, Vol, 27. No. 1.

Kask, Triin (2011). "Strategic decisions as drivers of innovation: the case of MicroLink", Baltic Journal of Management, Vol. 6, Issue. 3.

Liedtka, Jeanne (1998), "Strategic thinking: can it be taughy?" Long ra ng planning. Vol.31, No. 1.

Norton, B. Irving, R (2002). Knowledge of strategy in management, Translated by Asadian, M. Quality and Management Publication, Tehran, 1st Ed.

Squiler, N. (1996). Intelligence nature and structure. Jomhari, F; Tabatabai, A; Karimi, Y, Keyvan Publication.

****