

### J. Basic. Appl. Sci. Res., 2(4)4085-4091, 2012 © 2012, TextRoad Publication

ISSN 2090-4304

Journal of Basic and Applied

Scientific Research

www.textroad.com

# A Study on the Relationships between Managers' Critical Thinking with Organizational Health Scale in Islamic Azad University Branches in Locale 13 Considering Three Scales: Supervisors, Managers and Employees

<sup>1</sup>Gholam Reza Rahimi\*, <sup>2</sup>Farhad Nezhad haji Ali Irani and <sup>3</sup>Mohammad Reza Noruzi,

<sup>1</sup>PhD, Public Administration, Islamic Azad University of International Jolfa Branch, Iran <sup>2</sup>PhD, Public Administration, Islamic Azad University, Bonab Branch, Iran <sup>3</sup>EMBA, PhD candidate, Public Administration, Policy making in Public Sector, Islamic Azad University, Bonab Branch, Iran

#### **ABSTRACT**

This paper aims to review the relationship between Managers' critical thinking with organizational health Scale in Islamic Azad University branches in Locale 13 considering three scales Supervisors, Managers and Employees. For evaluating critical thinking Watson-Glaser's critical thinking questionnaire which contains of 80 questions and for evaluating organizational health, a research own developed questionnaire with 37 questions after the reliability and validity testing have been distributed among the participants. And sample of this study is among the staff (Supervisers, managers and employees) of Islamic Azad University branches in local 13 that are 194 people selected by cluster sampling as sample of this study.

To analyze the data collected through questionnaires and summarization (tables, charts), classification, and interpretation of statistical data, descriptive statistics and inferential statistical methods used. And to test the research hypotheses Kolmogrov Smirnov test for examining the necessary conditions and T-test for parametric statistical methods for independent groups, one-way ANOVA and LSD were conducted. Result of this study shows that critical thinking is associated with the organization health in local 13.

**KEYWORDS:** critical thinking, organizational health, Islamic Azad Universities in local 13.

#### INTRODUCTION

Universities, higher education institutions and complexes are as a basis of cultural, social, economical and political community development in every country.

Today in most countries, universities and higher education institutions after the defense industry is considered as the largest state budget allocated departments. Therefore universities and higher education institutions are as a critical social system with a special impact on all society sectors.

Critical Thinking scale is different among the people and it is not the same among all. And it is not just depend on the education or the age, city, country and also the region of the people. For example it is not true we consider those who live in a capital of the country always will have high critical thinking because we can find very different cases that are not true in our case although lives in the capital but have not good and high critical thinking. So the quality of critical thinking and its accuracy is very important and should be considered. Also there are a lot of factors that have influences on critical thinking of staff. For example in a job work experience is among the most important factors.

Also today, the importance and necessity of having managers, students and universities with higher critical thinking skills have not covered to others. On the other hand, traditional methods of teaching in the universities cause people with incapable knowledge for solving problems in the future society and now. In other words, they cannot able to recall and use previous knowledge in the areas of practical and real life. However, the old concept of learning referred to transfer of information and new concepts based on behavioral and cognitive learning by teachers to students and their ability in applying learned knowledge in new positions and real world.

Having a strong connection between critical thinking and organizational health is another concern,

<sup>\*</sup>Corresponding Author: Gholam Reza Rahimi, PhD, Public Administration, Islamic Azad University of International Jolfa Branch, Iran. Email: rahimi8911@yahoo.com

especially among managers in the universities and higher education complexes and expected that managers with high critical thinking ability will cause to enhance organizational health.

#### **Definition of Critical thinking**

For many years, critical thinking has been one of the most controversial concepts [5]. This concepts, like many other concepts in psychology, is not well defined.

Psychologists have not reached an agreement on what critical thinking is [22].

Although, critical thinking is a possession prized by most people, the term has no objective, agreed-upon referent either among the general public or contemporary psychologists.

Characteristics such as age, weight, or height in individuals have proper referents, but we cannot point to a single observable characteristic of a person to indicate his or her critical thinking [10]. The problem resides in the fact that critical thinking is an abstract concept. It does not have any tangible, exact and physical basis. Critical thinking is a general concept for a group of processes which are inferred from people's explicit behaviors and responses. For example, we can observe the problem solving strategies and measure the result of using such strategies precisely, but critical thinking which is supposed to create such techniques is not observable [12].

However, there have been lots of attempts to define critical thinking. According to Kline (1991)" critical thinking is popularly defined as the ability to analyze, understand and deal with novel situations critically. The person with high critical thinking is seen as quick-witted, acute, keen, sharp, canny, astute, bright and brilliant. At the other end of the scale the person with no critical thinking is described as dim, dull, thick, half-witted or stupid"[11].

According to the Critical Thinking Community, (2012), Critical thinking has gone to very past about 2500 years ago so it has a good and long last background that it shows that shows its importance this long back ground and its consideration in very long past revealed that it was not new for nowadays research and our ancients worked on it to rich concept that has been developing throughout the past 2500 years. But the main role of our mid-late 20th century about the term "critical thinking" is its roots. Here comes a critical thinking definition.

Critical thinking goes to some characteristics that entails reasoning, grounding examining, assumptions, working on purposes, has a very solid biological basis thinking on problems but all in critically manners i.e. every question think on another different alternative and not accept all the statement without thinking critically and without making challenging, [7-8-14].

#### **Organizational Health definition**

Organizational Health was defined as an organizations' belief in their capability to successfully perform a particular task. Organizational Health judgments also determine how much effort organizations will spend on a task and how long they will persist with it with health. Organizations with strong health exert greater efforts to master a challenge while those with weak health are likely to reduce their efforts or even quit [2-3-20-18].

It is an organization's capability to successfully perform a particular task. Organizational Health is one on the most powerful motivational predictors of how well an organization will perform at almost any endeavour. An organizations' health is a strong determinant of their effort, persistence, strategizing, as well as their subsequent training and performance. Besides being highly predictive, much is also known about how organization health can be developed in order to harness its performance enhancing benefits [14].

## Characteristics of healthy organizations

Organizational health is an organization's ability to function effectively, to cope adequately, to change appropriately, and to grow from within.

According to Organizational Health Diagnostic and Development Corporation (OHDDC), 2010, Organizational Health is defined as an organization's ability to function effectively to cope adequately, to change appropriately, and to grow from within. Organizational Health consists of the following ten dimensions:

1. Goal- Focus; the ability of persons, groups, or organizations to have clarity, acceptance,

- support, and advocacy of school-wide goals and objectives.
- 2. Communication Adequacy; that state when information is relatively distortion free and travels both vertically and horizontally across the boundaries of an organization.
- 3. Optima Power Equalization; the ability to maintain a relatively equitable distribution of influence between the leader and members of his/her work unit.
- 4. Resource Utilization; the ability to coordinate and maintain inputs, particularly personnel, effectively with a minimal sense of strain.
- 5. Cohesiveness; the state when persons or groups have a clear sense of identity, are attracted to membership, want to stay, and are willing to influence and to be influenced.
- 6. Morale; that state in which a person, group, or organization have feelings of security, satisfaction, well-being, and pleasure.
- 7. Innovativeness; that ability to be and allow others to be inventive, diverse, creative and risk-taking.
- 8. Autonomy; that state in which a person, group, or organization have the freedom to fulfill their roles and responsibilities.
- 9. Adaptation; that ability to tolerate stress and maintain stability while changing to meet the unique needs of their stake holders.
- 10. Problem-Solving Adequacy; an organization's ability to perceive problems and to solve them with minimal energy. Problems get solved, stay solved and the problem solving procedures are strengthened [15].

#### METHODOLOGY AND INSTRUMENTS

This project has been done by two questionnaires with high reliability and validity scale among 194 (118 Male and 76 Female) supervisors, managers and employees in Islamic Azad University branches in local 13.

Critical Thinking, Researchers have used The Watson Glaser critical thinking test to measure the amount of the participants' critical thinking scale. It consists of 80 questions which measures Inference, deduction, recognition, hypothesis, interpretation and evaluation. In each part of the critical thinking questionnaire there is an example it is as a guide for participants to know how to fulfill the questionnaire. Answers are sometimes having two fields like (Compatible and incompatible) and sometimes have five fields. Validity of the survey 81 percentages and reliability is upper than 30 percentages [23]. We have used from the translated version (Farsi, Iranian Language) of this questionnaire this version has revealed a good validity and reliability also [6].

*Organizational Health:* To measure organizational Health, OH, researchers' developed questionnaire was used, which consists of thirty seven questions about organizational health which are important and as key factors obtained from Organizational Health theory from different theorists on OH. This questionnaire has had high reliability and validity in different researches and in ours also [9].

#### **Research Hypothesis**

- 1. There is significant relation between supervisors' critical thinking and Organizational Health in Islamic Azad University branches in local 13?
  - 1-1 there is significant relation between supervisors' critical thinking and Institutional Organizational Health in Islamic Azad University branches in local 13?
  - 1-2. there is significant relation between supervisors' critical thinking and Administrative Organizational Health in Islamic Azad University branches in local 13?
  - 1-3. there is significant relation between supervisors' critical thinking and Technical Organizational Health in Islamic Azad University branches in local 13?
- 2. There is significant relation between Managers' critical thinking and Organizational Health in Islamic Azad University branches in local 13?
  - 2-1. there is significant relation between Managers' critical thinking and Institutional Organizational Health in Islamic Azad University branches in local 13?

- 2-2. there is significant relation between Managers' critical thinking and Administrative Organizational Health in Islamic Azad University branches in local 13?
- 2-3. there is significant relation between Managers' critical thinking and Technical Organizational Health in Islamic Azad University branches in local 13?
- 3. There is significant relation between Employees' critical thinking and Organizational Health in Islamic Azad University branches in local 13?
  - 3-1 there is significant relation between Employees' critical thinking and Institutional Organizational Health in Islamic Azad University branches in local 13?
  - 3-2. there is significant relation between Employees' critical thinking and Administrative Organizational Health in Islamic Azad University branches in local 13?
  - 3-3. there is significant relation between Employees' critical thinking and Technical Organizational Health in Islamic Azad University branches in local 13?

#### **Data Analysis**

To assess normal distribution, Descriptive statistics was applied. To determine the relationship between critical thinking and organizational health, Kolmogorov-Smirnov test for the necessity condition for using suitable method tested and using parametric statistics methods for T- Test for independent groups and ANOVA and LSD have been conducted in this study.

#### **RESULTS**

Table 1, shows the results of descriptive statistics for the two instruments – Critical Thinking and Organizational Health questionnaires - used in the research (see Table 1).

Table 1: Kolmogorov-Smirnov test for assessing normality and validity for using parametric statistics

Variable	Numbers	Mean	Variance	Kolmogorov- Smirnov	significance	Result
Deduction	194	5.3	3	2.64	0.000	Significant
Identifying assumptions	194	9.4	2	2.5	0.000	Significant
inference	194	8.9	1.8	2.3	0.000	Significant
interpretation	194	9.4	2.2	1.91	0.001	Significant
Evaluation Logical reasoning	194	8.8	2	1.57	0.015	Significant
Critical thinking	194	41.9	7.2	1.92	0.001	Significant
Institutional organizational health	194	12.6	2.3	2.36	0.000	Significant
Administrative organizational health	194	41.5	9.8	1.58	0.013	Significant
Technical organizational health	194	39.8	10.8	1.53	0.019	Significant
Organizational health	194	63.9	20.8	1.82	0.003	Significant

Obtained Z for all studied variables are statistically significant so all the variables can be used by parametric statistics. So for data analysis and hypothesis testing parametric statistical methods were used.

As Table 2, shows there are significant relationship between critical thinking and organizational Health. It also reveals that not only there are significant relationships between supervisors, managers and employees' critical thinking with organizational health in general but also among the dimensions of Organizational Health, i.e. Institutional, administrative and technical dimensions of organizational health as well. And the degree of relationship can be understood from the Pearson correlation coefficient. Shortly this table also shows the intensity of the relationship between two factors, dependent and independent variables and also and the significance of variables i.e. Are two studied variables significant or not?

Table 2: Summary of significance and correlations

First Variable	Second Variable	Among	The correlation coefficient	Level on Significance	Result
Critical Thinking	Organizational Health	Supervisors	0.66	0.002	significant
Critical Thinking	Institutional Organizational Health	Supervisors	0.65	0.002	significant
Critical Thinking	Administrative Organizational Health	Supervisors	0.68	0.002	significant
Critical Thinking	Technical Organizational Health	Supervisors	0.57	0.009	significant
Critical Thinking	Organizational Health	Managers	0.75	0.000	significant
Critical Thinking	Institutional Organizational Health	Managers	0.78	0.002	significant
Critical Thinking	Administrative Organizational Health	Managers	0.67	0.000	significant
Critical Thinking	Technical Organizational Health	Managers	0.74	0.000	significant
Critical Thinking	Organizational Health	Employees	0.58	0.000	significant
Critical Thinking	Institutional Organizational Health	Employees	0.45	0.002	significant
Critical Thinking	Administrative Organizational Health	Employees	0.49	0.002	significant
Critical Thinking	Technical Organizational Health	Employees	0.55	0.000	significant

#### DISCUSSIONS AND IMPLICATIONS

One of the innovation of this study is about the study of organizational health in three different scales i.e. supervisors, managers and employees. This is very important phenomena because normally if we ask from an organization's manager, is your organization health? He or she normally says yes. But this study had studied organizational health from other angels like supervisors and employees as well.

Manager who has high critical thinking ability can analyze the environment well and can cope with the market and organizational facts better than others who do not have more. Then a manager who has a good ability in critical thinking can manage the situation well and run the university more successfully than the others [14].

The Table 2 revealed that there is significant relationship between Critical Thinking and Organizational Health and also among dimensions of Organizational Health with supervisors, managers and employees' critical thinking ability. It is logical in the real world because if someone has a high critical thinking ability then he.she can manage the situation well and will have higher ability to develop the university and organization to higher ranks and positions and this will lead managers to be aware of some wrong acts that have been done in the organization and will not allow the organization to go in a blurry spheres like we call it not healthy spheres and can manage the organization and universities in the direct of healthy organization. In the following we bring some practical steps and guides to help developing of both Critical thinking and Organizational Health in the organization in general and specifically in the universities.

# Some practical guides for having critical thinkers and healthy organizations in the universities come in the following:

- 1. Reading books that are related to improve thinking critically in the organizations and universities.
- 2. Doing cross word puzzles for developing critical thinking.
- 3. Providing some special time for discourse and discussions about critical thinking.
- 4. Reading, listening and reviewing materials regarding thinking critically.
- 5. Holding some specific meeting and workshops for developing organization's health and critical thinking.
- 6. Doing exercises for developing critical thinking abilities.

- 7. Using mass media, newspapers and bulletins for employees and managers and others who have role in the universities, about the importance of thinking critically and having health organizations.
- 8. Reading manifestos of successful characters with high critical thinking talents.
- 9. Searching strategies that develop critical thinking ability in the universities.
- 10. Encouraging people with suitable strategies to have high critical thinkers.

#### Specifically on developing organizational health

- 11. Concentrating more on choosing and selecting managers in the universities.
- 12. Providing experiences in different occasions in written form not just orally. This will improve formality of the organization.
- 13. Having periodically meetings on the performance of the universities.
- 14. Using high experienced staffs in the university meetings to solve some problems and especially financially wrong acts.
- 15. Using high talent staffs in the university especially in education and finance departments to monitor the environment [13].

#### **ACKNOWLEDGEMENT**

This research has been done by financial support of Islamic Azad University of Bonab Branch, Iran.

#### REFERENCES

- 1. Alman, David, 2010, Organizational Health, available online at: http://hr.toolbox.com.blogs.organizational-health.organizational-health-an-introduction-37419
- Bandura, A., & Schunk, D. H. (1981). Cultivating Competence, Self-efficacy, and Intrinsic Interest through Proximal Self-motivation. *Journal of Personality and Social Psychology*, 41 (3), 586-598.
- 3. Brown Jr., I., & Inouyne, D. K. (1978). Learned Helplessness Through Modeling: The Role of Perceived Similarity in Competence. *Journal of Personality and Social Psychology, 36* (8), 900-908.
- 4. Critical Thinking Community, CTC, (2012), critical thinking definitions, available at:
- 5. http://www.criticalthinking.org.pages.defining-critical-thinking.766
- 6. Eysenck, H. J., & Kamin, L. (1981). *Intelligence: The battle for the mind*. Great Britain:
- 7. Faravani, A., (2006), Portfolio and critical thinking. Unpublished MA. Thesis Iran, Mashhad University
- 8. Gardner, H. (1995). Reflections on multiple intelligences: Myths and messages. *Phi Delta Kappan*, 77(3), 206-209. Greyden Press.
- 9. Hosseini, C. (2003). *The relationship between Iranian EFL students' multiple intelligences and their use of language learning strategies*. Unpublished master's thesis, Tabiat Modarres University, Tehran, Iran. http://site.ebrary.com.lib.modarres.Doc?id=10044795&page=1.
- 10. Jalili, Amir, (2011), a survey on the effects of organizational health on knowledge management in Sepah Banks in East Azerbaijan Province branches. Conducted in Islamic Azad University Bonab Branch.
- 11. Kail, R., & Pelligrino, J. W. (1985). *Human intelligence: Perspectives and prospects*. New York: Freeman & Company.
- 12. Kline, P. (1991). Intelligence: The psychometric view. London: Routledge.

- 13. Moafian, Fatemeh. (2008). the relationship between Iranian EFL teachers multiple intelligence and their success in language teaching a comparative study, Multimedia Publication. Mazandaran University.
- 14. Noruzi, Mohammad Reza Jose Vargas Hernandez, (2010), Acta Universitatis Danubius. Œconomica, Vol 6, No 1 (2010), An Exploration of Critical Thinking Necessities, Barriers and CAT MAGIC Notion. pp 12-22
- 15. Noruzi, Mohammad Reza, Gholam Reza Rahimi, (2010), Multiple Intelligences a new look to organizational effectiveness, Journal of Management Research ISSN 1941-899X 2010, Vol. 2, No. 2: E4 pp. 1-15
- 16. Organizational Health Diagnostic and Development Corporation (OHDDC), 2010, available at: http://www.organizationalhealth.com.publications.OHFinal.pdf
- 17. Pishghadam, Reza, (2005), Developing Critical thinking by literary discourse, Ferdowsi University journal, Vol 159, winter 2005. Pp.153-167
- 18. Sariolghalam, Narges, Mohammad Reza Noruzi, (2010), A Study of LF and, GSE Among Mathematics Students in Math Classes in Payam e Noor University of Maragheh, MANAGEMENT SCIENCE AND ENGINEERING Vol. 4, No. 4, 2010, pp. 132-135
- 19. Sariolghalam, Narges, Mohammad Reza Noruzi, (2010), A Survey on the Relationship between Critical Thinking and Self-Efficacy Case Study: Mathematic Students of Payam e Noor University in Maragheh, Studies in Mathematical Sciences Vol. 1, No. 1, 2010, pp. 61-66
- 20. Schwarzer, 2006, General Self-Efficacy Scale (GSE), available at: http://userpage.fu-berlin..htm
- 21. Shearer, B. (1996). Multiple intelligences developmental assessment scale. Ohio
- 22. Staples D. Sandy, John S. Hulland, Christopher A. Higgins. (2005). A Self-Efficacy Theory Explanation for the Management of Remote Workers in Virtual Organizations Retrieved from: http://jcmc.indiana.edu.vol3.issue4.staples.html#Abstract
- 23. Valsiner, J. & Leung, M. (1994). From intelligence to knowledge construction: a sociogenetic process approach. In R J. Sternberg & R. K. Wagner (Eds.), *Mind in Context: Interactionist perspectives on human intelligence* (pp. 202-217). Cambridge: Cambridge University Press. Virginia USA,
- 24. Watson, G & Glaser, E. M. (1994b). Watson Glaser critical thinking Appraisal Form- S, San Antonio TX: Psycological Corp.
- 25. Weinberg, R. S., Gould, D., & Jackson, A. (1979). Expectations and Performance: An Empirical Test of Banduras Self-efficacy Theory. *Journal of Sport Psychology*, *1* (4), 20-331.
- 26. Wood, R., & Bandura, A. (1989). Social Cognitive Theory of Organizational Management. *Academy of Management Review*, *14* (3), 361-384.