THE RELATIONSHIP BETWEEN ORGANIZATIONAL INTELLIGENE AND STRATEGIC THINKING

[1]NOUR-MOHAMMAD YAGHOUBI (PHD), [2]SEYED MOHAMMAD SADEQ KHAKSAR, [3]FATEMEH AFRASIABI, [4]FATEMEH SHAKHSIAN

[1]University of Sistan and Baluchestan, School of Management and Accounting, Department of Management, Zahedan, Iran (E-mail:)

[2]Master of Information Technology Management, University of Sistan and Baluchestan, Iran

[3]Master of Management, University of Sistan and Baluchestan, Iran
[4]Research Scholar in Business Management, University of Payam noor, Iran

E-mail: [1]yaghoobinor@yahoo.com [2]sms.khaksar@yahoo.com [3]faafrasiabi@gmail.com
[4]fatemeh@shakhsian.com

ABSTRACT

Although strategic thinking is so important in strategic management, actually its role in the Organizational Vision Designing remains unrealized and vague. The element that would pave the way of better understanding this phenomenon is Organizational Intelligence. In a comprehensive definition can be said that strategic thinking is organization architecture and using of the employees' individual intelligence. The aim of this paper is studying on the impact of Organizational Intelligence on Strategic Thinking and identifying the relationship between dimensions of these two variables. Hypotheses have been proposed in the form of a conceptual model and results achieved by using Structural Equation Modeling (SEM) methodology. In this case, we used the Albert's model to determine dimensions of Organizational Intelligence and the Liedtka's model for dimensions of strategic thinking he results show that these variables are associated together. Therefore, to improve Strategic objectives in organizations it is recommended that senior managers should consider the linkage (relation) of these two variables.

Keywords: *Organizational Intelligence, Strategic Thinking, Structural Equation Modeling, IRAN*

1. INTRODUCTION

In the context of the organizational environment, the strategic perspective includes an intelligent analysis of the political, social, economical, technological and legal environment; generation of alternatives; and an appropriate strategic choice matching the organizational strengths and weaknesses with the environmental needs. The way of an organization formulates and select its strategies are known as strategic thinking. The Subject of strategic thinking as a matter of strategic management has been highly regarded and its in organizational decisions are mentioned by many scholars [1], [9], [24], [51], [59]. Strategic thinking is one of the most important features of a manager and strengths of an Intelligent Organization. The Intelligent Organization is an organization which seeks to integrate and organize the processes, procedures, organizational knowledge and technology. It is a factor for adapting an organization to its environment so can help to exploit available opportunities [11], [18], [29], [61]. Since the main attitude of an Intelligent Organization is a systematic and strategic approach to the organization and its environment [35], [19], [64], [53], so the management focus on strategic thinking process is important. Intelligent organizations require simultaneous attention to the organizational intelligence and strategic thinking components. The progress which is made in the field of individual intelligence in higher and strategic levels has an important role in shaping the concept of organizational intelligence [36]. From the strategic thinking perspective, organizational intelligence is a scientific and strategic process to identify organization successes and failures [22]. Considering to different aspects of strategic thinking and organizational intelligence; this paper tries to measure the relation between these two variables' dimensions as well as mention their literature. To study the dimensions of organizational intelligence Albert's model (2009)

and for strategic thinking comments of many researchers, especially Liedtka's model (1998) has been used. This paper attempts to explore the influence of organizational intelligence variable on strategic thinking variable through an exploratory, empirical and Survey study. In the same way, hypotheses are evaluated in the form of a conceptual model. Then, by using fitness test this model is evaluated (by Structural Equation Modeling). Next, the results are discussed and applied suggestions are offered.

2. LITERATURE REVIEW

2.1 Organizational Intelligence

To understand organizational intelligence and its application in the business environment also its importance for improving knowledge-based thinking, there are different approaches: one of main approaches is set by Peter Senge [60] and Chris Argyris [8] in the United States. Senge's view on the learning organization that is: "a group of people who continually enhance their ability to create and control the results they truly desire" proved by vary influential, in the last decade .According to Peter Senge's opinion, in order to make a learning organization, its members have to create new thinking and expression models and have to manage this thinking in order to achieve the vision and mission. Organizational Intelligence (OI) is a strategic ability of an organization to efficiently process, exchange, measure and reason about management affairs. OI is the combined knowledge and skills of both tangible and intangible assets that are available for collaborative problem-solving and decision making within the organization.

Some researchers have examined organizational intelligence behavior-based approach [15], [42], [46], [43], [64]. In all definitions, organizational intelligence is introduced as an organizational ability to create intelligent behavior, especially in strategic planning. The results of this approach show that when the employees' intelligent behavior change to habit, it becomes easier to gain the organizational objectives. Some other researchers focused on applied patterns of organizational Intelligence [66], [19], [27], [53]. In this approach organization is a collection of individuals that with creating and sharing knowledge, support organizational objectives. The results of this approach show that, new knowledge and thinking will be generated when activities become intelligent. Karl Albrecht, founder of the organizational intelligence concept, believes new competitive advantage of organizations that is

defined as "attracting and applying intelligent people to create and develop strategic thinking" [4]. Howson (2008) believes that inelegancy will be create in those organizations which relate to their environment systematically, improve organizational performance and has focus on identifying and creating unknown environmental opportunities. Albrecht proposed seven elements for organizational intelligence, but in this article, only six important dimensions will be evaluated based on behavioral and applied perspective [4]:

Strategic Vision: Every organization needs a theory, a concept, an organizing principle, a definition of the destiny it seeks to improve [50], [65]. Its leaders must answer questions like: Who are we? Why do we exist? What is the primary value motion that lies at the center of our existence? Why should the world accept, acknowledge, and compensate us for what we do? Strategic view refers to the valence to create evolve, and express the goal of the organization and not to any particular view, strategy, or mission concept in and of itself.

Appetite for Change: In intelligent organization, change shows challenge, opportunity for new and exciting experiences, and an occasion to undertake something new [45], [58]. Staffs in these environments see the need to rewrite the business model as a greeting and exciting challenge, and an occasion to learn new ways of subsequent [57]. Some organizational cultures, usually led by their executive teams, have become so firmly set in their ways of operating, thinking, and reacting to the environment that change shows a form of psychological discomfort or even distress. The appetite for change needs to be big enough to adaptation the kinds of changes called for in the strategic vision [7].

Shared Fate: When all or most of the individual related in the organization with some factors including collectivity of stakeholders like main suppliers and trade partners, and in some cases even the families of its members, know what the mission is, have a sensation of common purpose, and understand their individual parts in the inertia of its glee and prosperity, they can act synergistically to achieve the vision [6], [50], [37]. This common sense creates a powerful force of aggregation. Conversely, when they have no vision or shared concept of glee and prosperity, they cannot hope to chip in their individual endeavors.

Alignment and Congruence: Any group of people will start bumping into one another without a set of rules to operate by. They must organize themselves for the mission, divide up jobs and

responsibilities, and work out a set of rules for interacting with one another and for dealing with the environment. In the intelligent organization the system, broadly defined, all come together to enable the people to achieve the mission [5], [7], [56]. Any organizational structure you can imagine will impose limits and constraints as well as provide for cooperation. It's hard to work intelligently and perform effectively with crazy systems. Sometimes the organization itself — the configuration of roles, goals, rules, and tools — changes from a solution to a problem in and of itself. When the design of the organization and its structures, systems, methods, processes, policies, rules and regulations, and reward systems push people in directions away from the achievement of the mission, a chiropractic adjustment is in order. Unvoiced policies, norms, values, and expectations also play a part in shaping human effort either toward or away from the value proposition that justifies the organization's continued existence. In an intelligent organization the systems, broadly defined, all come together to enable the people to achieve the mission. Its designers and leaders have eliminated most of the structural contradictions to the core value proposition, and have promoted the alignment of individual energies toward the common purpose [6].

Knowledge Deployment: More and more these days, organizations succeed or fail based on the effective use of knowledge, information and data. Knowledge deployment deals with the capacity of the culture to make use of its valuable intellectual and informational resources. OI must include the free flow of knowledge throughout the culture and the careful balance between the conservation of sensitive information and the availability of information at key points of need [67], [50]. The capacity to create, transform, organize, share, and apply knowledge is becoming an ever more critical aspect of competing in complex business environments. Going well beyond the current information technology formulas for "knowledge management," knowledge deployment deals with the capacity of the culture to make use of its valuable intellectual and informational resources. In this respect, knowledge deployment probably deserves to be conceived of as an anthropological proposition rather than a technological or structural one. OI must include the free flow of knowledge throughout the culture, and the careful balance between the conservation of sensitive information and the availability of information at key points of need. It must also include support and encouragement for new ideas,

new inventions, and an open-minded questioning of the status quo [6].

Performance pressure: It's not enough for executives and managers to be preoccupied with the performance of the enterprise. In the intelligent organization, everyone owns the performance proposition, the sense of what has to be achieved and the belief in the validity of its aims. Leaders can promote and support a sense of performance pressure, but it has the most impact when it is accepted by all members of the organization as a self-imposed set of mutual expectations and an operational imperative for shared success [50], [63]. When people hold one another accountable for their contributions to the mission, a performance culture takes shape, and every new member who joins can feel the shared sense of imperative.

2.2 Strategic Thinking

During the 1990s, Mintzberg brought to the forefront the concept of strategic thinking, arguing that strategic planning is not synonymous to strategic thinking [47], [1]. Bonn (2005) posits that most studies on strategic management in the 1970s and 80s failed to investigate how strategy makers think about strategy and thereby ignored the cognitive aspects of strategists. Today, strategic thinking is considered an important part of strategic management [12], [23], [47]. Mintzberg's view of strategy making as a creative, dynamic, responsive, and often intuitive process that fits more closely with the concept of strategic thinking [48], [51] is supported by various researchers of strategic thinking [13], [23], [47], [55]. Accordingly, the role of strategic thinking is to seek innovation and imagine new and very different futures that may lead a company to redefine its main strategies and even its industry [18], [23].

Strategic thinking is a solution of solving problems that combines the rational and convergent approaches with creative and divergent thought processes and is intertwined with ongoing action processes, [12], [29], [48], [41]. This approach to strategic thinking is multi-dimensional, integrating the micro-domain's focus on individuals and groups with the macro-domain's focus on: organizations and their context [11], [12]; futures thinking; scenario thinking and creativity [29]; and learning [60]. The purpose of strategic thinking in all of the levels is to discover up-to-date and imaginative strategies which can re-write the rules of the competitive game; and to envision potential future significantly different from the present [59].

Another perspective strategic thinking is a composition process that includes intuition and creativity, whose outcome is an integrated view in organization. It involves staff's thinking and acting within a certain set of assumptions and potential action alternatives as well as challenging existing assumptions and action alternatives, potentially leading to new and more appropriate ones. Perhaps the best studies about strategic thinking could be pursued in researches of Liedtka (1998). According to Liedtka strategic thinking includes five elements:

Think in time: Thinking in time allows the intelligence organization and its objectives to link the past, the present, and the future together. By connecting the past with the present and linking this to the future, strategic thinking is always "thinking in time" [2], [52]. Neustadt (1986) states that: "Thinking in time (has) three components. One is recognition that the future has no place to come from but the past; hence the past has predictive value. Another is recognition that what matters for the future in the present is departures from the past, alterations, changes, which prospectively or actually divert familiar flows from accustomed channels . . . A third component is continuous comparison, an almost constant oscillation from the present to future to past and back, heedful of prospective change, concerned to expedite, limit, guide, counter, or accept it as the fruits of such comparison suggest [39].

Intelligent opportunism: Within an intelligent organization, there must be area for intelligent opportunism that not only furthers intended strategy but that also leave open the possibility of new strategies emerging. Thinking takes advantage of opportunity as they arrive, even when they aren't part of the formal vision of the firm [12]. Intelligently opportunistic leaves the possibility of emergent strategies open. This is a key point in the movement of strategic planning from a staff responsibility to a line responsibility. Intelligent opportunism fosters an emergent strategy, one that evolves and changes as necessary to achieve the strategic vision [52], [40]. In a healthy strategy system there's a tremendous view amount of communication and interaction around ideas and possibilities – from the ground, from middle management, from senior management – weaving back and forth, in and out, and not stopped by the dead hand of bureaucracy or orthodoxy.

Hypothesis-driven: The next element of strategic thinking recognizes it as a hypothesis-driven process. It mirrors the "scientific method", in that it deals with hypothesis generating and testing as central activities. In other word, Hypothesis-driven is Present formal hypotheses concerning consequences of the firm's actions (test them and revise them) [40]. Being hypothesis-driven is more foreign to business managers than are the other elements of strategic thinking discussed thus far. Hypotheses-driven implies that the organizational knowledge brings data, information and experiment to bear on the required analysis.

Intent-focused and intent-driven: To believe of Hamel and Prahalad (1994) Strategic intent is new term that implies a particular point of view about the long-term competitive position that a firm hopes to build over the coming decade or so. Hence, it conveys a sense of direction. A strategic intent is differentiated; it implies a competitively unique point of view about the future. It holds out to employees the promise of exploring new competitive territory. Hence, it conveys a sense of discovery. Strategic intent has an emotional edge to it; it is a goal that employees perceive as inherently worthwhile. Hence, it implies a sense of destiny [39]. Direction, Discovery, and destiny, these are the attributes of strategic intent. Liedtka (1998) believes Strategic intent provides the focus that allows individuals within an organization to optimize their Capabilities, to focus attention, to resist wackiness, and to concentrate for as long as it takes to achieve a purpose. In the Turning disparate of change, such mental energy may well be the scarcest resource an organization has, and only those who utilize it will succeed.

Besides these elements, which was introduced by Liedtka (1998), some researchers other elements were introduced for strategic thinking. These elements include:

Diversification in Mental models of information processing: Mental models are the mental frameworks that influence peoples thinking processes in understanding, interpreting and predicting the domain of interest [12]. Mental models as images, assumptions and stories which we carry in our mind about managers, other people, departments, organization and even interaction with other organizations in order to drawing diversification views of individuals about organization [17], [20], [21], [33], [38], [44]. The link between Mental models and strategic thinking through an individual's previous experiences, role requirement and knowledge about strategy [17], [20], [21], [33], [38], [44]. So, strategic thinking directions require integration of mental models in organization.

Environmental intelligence: The purpose of Environmental intelligence is understood the

strengths and weaknesses of internal environment and opportunities and threats of external environment organizations [2]. In other word, the purpose of Environmental intelligence is identify issues and strategic objectives to evaluate its inside and outside environment [16]. Therefore, aim of environmental intelligence is identify and develop strategic priorities in the context of strategic thinking [2], [16], [23]. From the perspective of strategic thinking when an intelligence organization is to identify and develop appropriate strategies and based on environmental conditions.

Systematic perspective: Strategic thinkers have a mental model of the complete system from beginning to end and understand the interdependencies within the chain surfacing, testing, and improving inside/outside pictures of intelligence organization. They understand the external system in which a firm operates and appreciate the inter-relationships among the individual internal parts [49], [12]. Most of an organization's problems are not unique errors but systemic issues. From a vertical perspective, strategic thinkers see the linkages in the system from multiple perspectives and understand the relationship among the corporate, business, and functional levels of strategies to the external context, as well as to the personal daily choices they make. From a horizontal perspective, they also understand the connections across departments and functions, and between the organization and clients and suppliers [40]. These two approaches show that an intelligent organization with strategic thinking will be able to manage interactions with the internal part surfaces and interactions with the external environment.

Creativity: Conceptual relationship between creativity and strategic thinking can be pursued in the concept of creative thinking. In fact, creative thinking is understood as a series of thinking processes that can be applied and learned, it suddenly becomes available to us all [23]. Due to their uniqueness and style, each individual will approach problems quite differently [30], [31]. The best different thinking approaches will allow every member of a team or group to share their thinking and ideas openly [31], [12]. According to these, Strategic thinking with creativity-based approach - both at the individual level and organizational level -, an outlook that encompasses cases:

1) Anticipate future events and issues; 2) create alternative scenarios; 3) understand your options; 4) decide on your objectives; 5) determine the direction to achieve those objectives on a winning basis.

3. HYPOTHESES AND CONCEPTUAL MODEL

Hypotheses of the study are stated in form of one main hypothesis and 8 sub-hypotheses which will be tested.

H1: Organizational Intelligence will positively influence on the Strategic Thinking

$H_{1.1}$: Organizational Intelligence will positively influence on think in time

$H_{1.2}$: Organizational Intelligence will positively influence on intelligent opportunism

$H_{1.3}$: Organizational Intelligence will positively influence on hypothesis-driven

$H_{1.4}$: Organizational Intelligence will positively influence on intent-driven

$H_{1.5}$: Organizational Intelligence will positively influence on mental models of information processing

H1.6: Organizational Intelligence will positively influence on environmental intelligence of organization

H1.7: Organizational Intelligence will positively influence on systematic perspective of organization

H1.8: Organizational Intelligence will positively influence on creativity of employees

4. RESEARCH METHOD

Sample and data collection procedure will be described. Then, the information about two measures will be elaborated below. Finally, the analytical strategy will be briefly discussed.

4.1 Population, Sample and Data Collection Procedure

Survey methodology has been used for the empirical analysis. Data were solicited from a population of 130 people (Including: Senior managers, Mid-level managers and operational level managers) in two large Companies in Zahedan city (IRAN), through a researcher-constructed questionnaire dispatched to all of managers of Oil Products Distribution Co. (OPDC) and Cement Co. Number of employees in OPDC is approximately 54 people and in Cement Co. is 87 people. To increase the accuracy and correctness of the analyses population samples has been estimated 130 people (there is always ratio of 10 to 1 between number of questionnaires and dimensions of conceptual model [10], so for analysis of thirteen dimensions in model, we need 130 of questionnaires). Therefore, 135 questionnaires have been distributed in 3 months period between statistical populations. Afterwards,

133 questionnaires have been collected and for easing the calculation of data process 130 of them have been used. The Questionnaire comprised four different sections. The first section questions have been used. 3 questions are related to personal information of the respondents. The second section contains 42 statements measuring the six dimensions of Organizational Intelligence. The third section contains 40 statements measuring the Strategic Thinking dimensions.

Fig. 1 : Conceptual model in this research

Respondent were asked to indicate their extent of agreement using a five point Likert scale (with 5

- *For question related to* Strategic Thinking *Cronbach's Alpha coefficient of 0.84 has been*
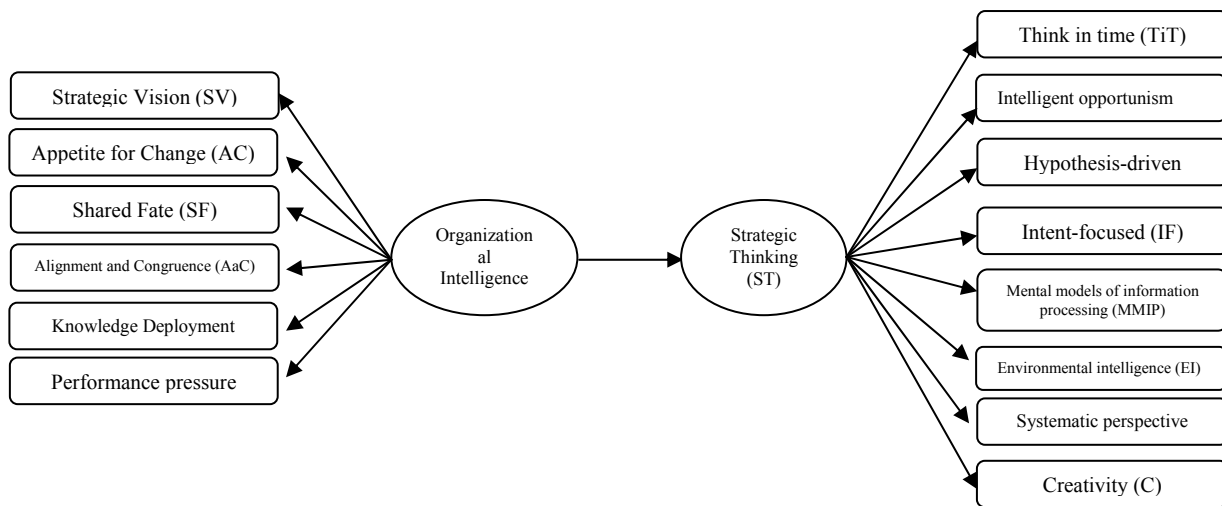
= completely agree, to 1 = completely disagree). For analyzing data derived from questionnaire, Structural Equation Modeling (Confirmatory factor analysis (CFA) / Path Diagram) has been used and the software's which have been used for analyzing the data are LISREL 8.54 and SPSS 18.

Among all respondents, 57.9% people have management-related education. From 130 respondents 5 people high school graduated, 43 people has Associate Degree, 60 with bachelor degree, 14 people with master degree, and finally 8 people hold a PhD degree. And this is while the age of 8 of these people were 20-25, 48 people between 26-35, 45 between 36-45, 23 people between 46-55 and 6 people were more than 56 years old.

4.2 Reliability and Validity of the Study

For determining *reliability* of the study Cronbach's Alpha method has been used. Followings have been resulted from this analysis:
- *For questions related to* Organizational Intelligence *the Cronbach's Alpha coefficient of 0.92 has been calculated.*

calculated.
- *For all questions Cronbach's Alpha coefficient of 0.91 has been calculated.*

For determining *validity* of the questionnaire content credit and Construct Validity has been used (Harandi et al, 2008). Content credit of this questionnaire has been justified by guide professors and co-guides and also initial distribution of questionnaire among number of experts, scholars and considering their corrective comments, it has the necessary credibility. For construct validity, has been used from the CFA in SEM. The results showed that, Validity of the questionnaire has high.

5. RESULT

5.1 Model-fit assessment

Model fit was assessed from three perspectives: (1) at global level (using several fit indices, Root mean square of approximation, etc), (2) at level of structural sub-model and (3) at level of measurement sub-model (construct validity and construct and measurement variable reliability). Model fit relates to degree to which hypothesized model is consistent with data at hand - degree to

which implied matrix of covariance (based on hypothesized model) and sample covariance matrix (based on data) fit [14]. Aim of global fit assessment is to determine degree to which model as a whole is consistent with data gathered. Through years, numerous global fit indices have been developed. Unfortunately, none of them is superior to others. Different authors favour various measures. Diamantopoulos and Siguaw (2000) recommend using several measures and at the same time provide reference values for every one of them (Table 1).

The purpose of assessing a model's overall fit is to determine the degree to which the model as a whole is consistent with the empirical data [25]. CFA was used to estimate convergent and discriminate validity of indicators of the two constructs: Organizational Intelligence and Strategic Thinking. CFA was conducted to estimate the quality of the factor structure and designated factor loadings by statistically testing the fit between a proposed measurement model and the data [68]. The purpose of assessing a model's overall fit is to determine the degree to which the model as a whole is consistent with the empirical data [25]. When assessing measurement sub-model fit, we focus on relationships between latent variables and their indicators (measurement, observed variables). Goal is to determine reliability and validity of measurement variables used to represent constructs of interest. Validity refers to degree to which indicator actually measures what it was supposed to measure, while reliability deals with consistency of measurement [3], [10]. As a result of CFA, the overall measurement model indicated an acceptable fit to the data. Table 2 shows the factor loadings of an overall CFA. All of the factor loadings were over 0.40 (else "creativity") and all t-values are larger than 1.96, meaning that construct validity is achieved in our case [34], [3], [62].

Table1 Goodness Of Fit Tests

index	χ^2/df	Root Mean Square Error of Approximation	Root Mean Square Residual (RMR)	Goodness of Fit Index (GFI)	Adjusted Goodness of Fit Index	Normed Fit Index (NFI)	Non-Normed Fit Index	Comparative Fit Index (CFI)
Conceptual model	1.64	0.071	0.042	0.96	0.96	0.90	0.92	0.92
reference	< 3	< 0.100	<0.050	0.90	0.90	0.90	0.90	0.90
	Bollen &Long, (1993)	Salisbury, Chin, Gopal, and Newsted (2002)	Yang, 2005	Bentler and Bonnett (1980)	Hoyle (1995)	Bollen &Long, , 1993	Tabachnick and Fidell, 2001	Diamantopoulos & Siguaw, 2000
Global model fit?	good	Very good	Very good	Very good	Very good	good	Very good	Very good

Table 2: Factor Loading And T-Values Of The Measurement Model

Construct/indicator	Factor Loading	t-value
Organizational Intelligence		
Strategic Vision	0.47	11.60
Appetite for Change	0.66	8.63
Heat		
Shared Fate	0.51	11.84
Alignment and Congruence	0.57	11.84
Knowledge Deployment	0.61	12.91
Performance pressure	0.51	14.26
Strategic Thinking		
Think in time	0.49	6.42
Intelligent opportunism	0.72	5.94
Hypothesis-driven	0.46	9.04
Intent-focused	0.42	7.45
Mental models of information processing	0.43	7.83
Systematic perspective	0.53	9.96
Systematic perspective	0.43	6.99
Creativity	0.36	6.09

5.2 Hypotheses Testing

The specification of the model consists of the translation of the verbal hypotheses into a series of equations previously represented in the form of a causal or a path diagram. The path diagram shows the causal relationships among all variables in the system. It should be based upon a priori knowledge of such relationships which are ultimately related to previous experience or theoretical basis (Harandi et al, 2008). Thus, the path diagram represents the working hypothesis about the causal relationships among variables. In this research, there is one main hypothesis and eight sub-hypotheses.

For this reason and for all hypotheses of the study below test assumption has been used.

$H_{0:}$ $\alpha = o$ *Null hypothesis:* Correlation between two variables is not significant

$H_{1:}$ $\alpha \neq o$ *Alternative hypothesis:* Correlation between two variables is significant

To address the research questions and test the hypotheses, the percentages of explained variance (*R2*) for each endogenous variable and the path coefficients of the hypothesized model were assessed.

Diagram 1 shows structural model of the study for confirming main hypothesis of the study in standard estimation state.

Diagram 2 also shows significance and resulted parameters from main hypothesis test (t-Value). Significance value of 7.35 is for the main hypothesis was determined. Significance value of the main hypothesis is placed out of (-1.98, 1.98)

interval, therefore, formed relation is out of the null hypothesis and indicates the ratification of the primary hypothesis of the research. According to results of these two models (relation is based on standard estimation of 0.72 and is based on significance equal to 7.35) hence, main hypothesis confirmed.

Based on analysis done using path analysis, results of testing sub-hypotheses of the study can be seen in table 2. Standard estimation test and significance value in confirming or rejecting considered hypotheses (significance of hypotheses) has been used.

Diagram 2 also shows significance and resulted parameters from main hypothesis test (t-Value). Significance value of 7.35 is for the main hypothesis was determined. Significance value of the main hypothesis is placed out of (-1.98, 1.98) interval, therefore, formed relation is out of the null hypothesis and indicates the ratification of the primary hypothesis of the research. According to results of these two models (relation is based on standard estimation of 0.72 and is based on significance equal to 7.35) hence, main hypothesis confirmed.

Based on analysis done using path analysis, results of testing sub-hypotheses of the study can be seen in table 2. Standard estimation test and significance value in confirming or rejecting considered hypotheses (significance of hypotheses) has been used.
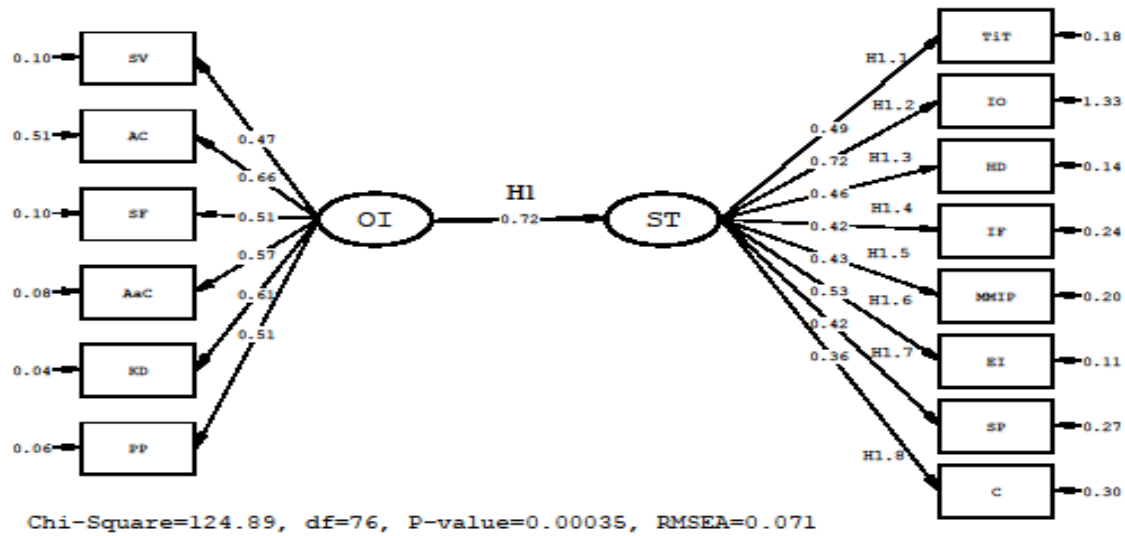
Chi-Square=124.89, df=76, P-value=0.00035, RMSEA=0.071

Fig. 1 structural model of study for confirming main hypothesis in Standard estimates state

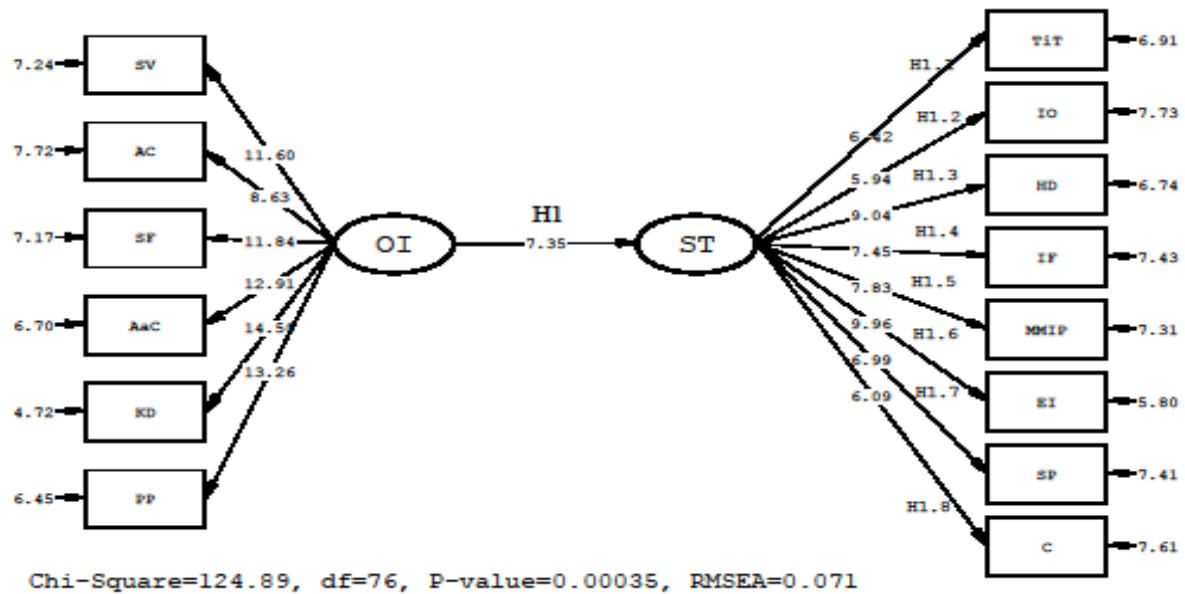Chi-Square=124.89, df=76, P-value=0.00035, RMSEA=0.071

Fig. 1 structural model of study for confirming main hypothesis in Standard estimates state

Diagram 2 also shows significance and resulted parameters from main hypothesis test (t-Value). Significance value of 7.35 is for the main hypothesis was determined. Significance value of the main hypothesis is placed out of (-1.98, 1.98) interval, therefore, formed relation is out of the null hypothesis and indicates the ratification of the primary hypothesis of the research. According to results of these two models (relation is based on standard estimation of 0.72 and is based on

significance equal to 7.35) hence, main hypothesis confirmed.

Based on analysis done using path analysis, results of testing sub-hypotheses of the study can be seen in table 2. Standard estimation test and significance value in confirming or rejecting considered hypotheses (significance of hypotheses) has been used.

6 DISCUSSION AND CONCLUSIONS

Strategic thinking has been acquired high popularity in the organization and management literature [13], [23]. This suggests that strategic thinking is to improve the attitude of managers and staff, In order to deploy intelligent systems, including manpower, material resources and technology [12], [23]. This intelligent system only in Organizational Intelligence content is capable to pursue long-term goals of the organization [19], [27], [32]. A few researches have been done about the relationship between Organizational intelligence and strategic thinking. Therefore, this article has been done to well indicate to well indicate the relationship of these two variables (and their dimensions).

In this study, by using of Albert's (2009) and Liedtka's models (1998) also benefiting from literature of strategic thinking and organizational intelligence is presented a conceptual model. This model was tested by the model fitness test in structural equation modeling. The results show that the conceptual model possesses adequate fitness for confirmation of relationship between variables.

However, it is essential to note that acceptance of the current model, does not confirm the rejection of other proposed models, but based on the current situation and according to the fitness model standards in LISREL 8.5 software it has the necessary credibility. As the evaluation of the model corroborate based on factor loading and t-values in the table 2, Conceptual model of the study showed that organizational intelligence has had the greatest impact on strategic thinking. So it is recommended to use this conceptual model for organizations to develop and priority of strategies.

The results also show that all research's hypotheses (main hypotheses and sub- hypotheses) are confirmed:

The first sub-hypothesis shows that there is a direct positive relationship between "Organizational intelligence" and "Thinking in time". So, when an organization is intelligent then it has the ability: (1) to use the history of organization to develop new strategies, (2) Link between past, present and future of organization.

Table 2 results of testing the hypotheses of the study using path analysis

Hypotheses of the study	Path		Standardized coefficient	The Significance of Values	Testing of Hypotheses
H1	**Organizational Intelligence**	**Strategic Thinking**	**0.72**	**7.35**	**Confirmed**
$H_{1.1}$	Organizational Intelligence	Think in time	0.86	10.43	Confirmed
$H_{1.2}$	Organizational Intelligence	Intelligent opportunism	0.79	9.46	Confirmed
$H_{1.3}$	Organizational Intelligence	Hypothesis-driven	0.81	9.92	Confirmed
$H_{1.4}$	Organizational Intelligence	Intent-focused	0.66	6.89	Confirmed
$H_{1.5}$	Organizational Intelligence	Mental models of information processing	0.59	6.34	Confirmed
$H_{1.6}$	Organizational Intelligence	Environmental intelligence	0.80	9.57	Confirmed
$H_{1.7}$	Organizational Intelligence	Systematic perspective	0.84	10.22	Confirmed
$H_{1.8}$	Organizational Intelligence	Creativity	0.57	6.11	Confirmed

The second sub-hypothesis shows that there is a direct positive relationship between "Organizational intelligence" and "intelligent opportunism". So, when an organization is intelligent then it has the ability: (1) use re-engineering of strategic processes based on

competitive advantage of market, (2) to develop new strategy based on the new environmental conditions.

The third sub-hypothesis shows that there is a direct positive relationship between "Organizational intelligence" and "hypothesis-driven". So, when an

organization is intelligent then it has the ability to (1) discuses good hypotheses in organizational environment, (2) generate effective hypotheses to be effective in current conditions.

The fourth sub-hypothesis shows that there is a direct positive relationship between "Organizational intelligence" and "intent-driven". So, when an organization is intelligent then it has the ability to: (1) create a strategic vision among staffs and their direct, (2) Motivate employees for discovering new environmental opportunities.

The fifth sub-hypothesis shows that there is direct positive relationship between "Organizational intelligence" and "mental models of information processing". So, when an organization is intelligent then it has the ability to: (1) Use of cognitive Concepts (e.g. pictures, maps of mental, Frameworks and Components of system), (2), Use think fluency methods to develop of mental Abilities of employees.

The sixth sub-hypothesis shows that there is a direct positive relationship between "Organizational intelligence" and "environmental intelligence". So, when an organization is intelligent then it has the ability to: (1) understand and evaluate of internal and external environment of organization, (2) identify the internal Intelligent than the internal strengths and environmental opportunities, (3) Understand the top management's strategic priorities

The seventh sub-hypothesis shows that there is a direct positive relationship between "Organizational intelligence" and "Systematic perspective". So, when an organization is intelligent then it has the ability to (1) care about interactions between Organization and its environment and understand the systematic relationships among sub-systems, (2) have process thinking with the system intelligence approach, (3) understand the organizational position within larger systems, (4) care about complete value chain and (5) Identify the individual roles in large-scale systems and understand the impact of his/her behavior on the output of system.

The eighth sub-hypothesis shows that there is a direct positive relationship between "Organizational intelligence" and "Creativity". So, when an organization is intelligent then it has the ability to: (1) provide alternative solutions, (2) Train staffs for providing new ideas and using organizational knowledge (3) Develop creative and unique solutions in order to achieve sustainable competitive advantages.

Finally, the main research hypothesis that shows the relationship between Organizational intelligence and strategic thinking is also confirmed. These two are the superior characteristics for all organizations. Organizational intelligence is a social outcome and is related to individual intelligence. Strategic thinking is a perspective and is associated with intelligence of individual employees and managers. Achieve to long-term goals of organization has strongly depends on the relationship of these two variables.

REFRENCES:

[1]. S. Abraham, "Stretching Strategic Thinking", *Strategy and Leadership*. Vol. 33, No.5, 2005, pp. 5-12

[2]. N. Acur, and L. Englyst, "Assessment of strategy formulation: How to ensure quality in process and outcome", *International Journal of Operations and production management*, Vol. 26, No.1, 2006, pp. 69-91.

[3]. J. C. Anderson and D. W. Gerbing, "Assumptions of the two-step approach to latent variable modeling", *Sociological Methods and Research*, February20, 1992, pp. 321-333.

[4]. K. Albrecht, "Organizational intelligence & knowledge management: thinking outside the Silos", 2009, available at: www.KarlAlbrecht.com.

[5]. M. Alnoukari, "Using Business Intelligence Solutions for Achieving Organization's Strategy: Arab International University Case Study" *INTERNETWORKING INDONESIA JOURNAL*, Vol. 1, No. 2, 2009, pp. 11-16

[6]. N. Al-sadat Nasabi and A. R Safarpour, "Key Factors in Achieving to an Intelligent Organization in the View of Employee in Shiraz University of Medical Science in 2008", *Australian Journal of Basic and Applied Sciences*, Vol. 3, No.4, 2009, pp. 3492-3499

[7]. A. E. Akgun, J. Byrne and H. Keskin, "Organizational intelligence: A structuration view". *Journal of Organizational Change Management*, Vol. 20, No. 3, 2007, pp. 272.

[8]. C. Argyris, "On Organizational Learning", *Second Edition, Blackwell Business, New York*, 1999.

[9]. C. Bailey and M. Bristow, "Thinking outside the Box", *Training Magazine*, Februray 2004, pp. 25-27.

[10]. P. M. Bentler, and C. P. Chou, "Practical issues in structural modeling", *In J. S. Long*

(Ed.), *Common Problems/Proper Solutions Beverly Hills, CA: Sage*, 1988, pp.161-192.

[11]. I. Bonn, "Developing strategic thinking as a core competency", *Management Decision,* Vol. 39, No. 1, 2001, pp. 63-70.

[12]. I. Bonn, "Improving Strategic thinking: a multilevel approach", *Leadership and Organization Development Journal*, Vol. 25, No. 5, 2005, pp. 336-345.

[13]. I. Bonn and J. Fisher, "Corporate Governance and Business Ethics: insights from the strategic planning experience", *Corporate Governance: An International Review*, Vol. 13, No. 6, 2005, pp. 730-738.

[14]. K. A. Bollen and J. S. Long, "Testing structural equation models″, Sage, New York, 1993, pp. 213-219.

[15]. C. W. Choo, "Information management for an intelligent organization: The art of environmental scanning", *Medford. NJ: Learned Information*, 1995, pp. 110-124.

[16]. D. B. Collins, J. S. Lowe and C. R. Arnett. "High-Performance Leadership at the Organization Level". *Advances in Developing Human Resources*, Vol. 2, No.18, 2000, pp. 19-46

[17]. A. T. Denzau, and D. C. North, "Shared mental models: ideologies and institutions". *Kyklos*, Vol. 47, No. 1, 1994, pp. 3 - 32.

[18]. C. Dereli, "The developing environment for strategy formation in smaller local authority", *International Journal of Public Sector Management,* Vol. 20, No. 5, 2007, pp. 366-379

[19]. S. Ercetin, "The abilities related to organizational intelligence and their action dimensions at school". *Educational research Quarterly*, Vol. 10, No. 2, 2004, pp. 3-18

[20]. S. T. Fiske and S. E. Taylor, "Social cognition". (2nd ed.). *New York: McGraw-Hill, Inc,* 1994.

[21]. D. Gentner and A. L. Stevens, "Mental models". *London: Lawrence Erlbaum Associates,* 1983, pp. 82-99.

[22]. M. A. Glynn, "innovate genius: a frame work for relating individuals and organization intelligences to innovation academy of management. *Journal of Applied psychology*, Vol. 86, No. 2, 1996, pp. 326-336

[23]. F. Graetz, "Strategic thinking versus strategic planning: towards understanding the complementarities", *Management Decision*, Vol. 40 No. 5, 2002, pp 456-462

[24]. T. Grundy and L. Brown "Be Your Own Strategy Consultant: Demystifying Strategic Thinking", *Thomson Learning, Singapore*, Vol. 1, 2003, pp. 4-5.

[25]. J. F. Hair, C. B. William, B. J. Babin, R. E. Anderson, and R. L. Tatham, "Multivariate Data Analysis, *Pearson University Press, New Jersey*, 2006.

[26]. G. H. Hamel and C. K. Prahalad, "Competing for the Future", *Boston, MA: Harvard Business School Press*, 1994.

[27]. E. W. Halal, "Organizational intelligence: What is it and how can managers use it", *Strategy & Business. Fourth Quarter*, Vol. 1, 1997, pp. 1-4 [Online] Available: http://www.strategy-business.com.

[28]. B. Harandi, A. Sarmad and E. Hejazi Research Methodology in Behavioral Sciences. *Agah Publications*, Tehran, 2008, pp. 112-129.

[29]. S. Harris and P. Ghauri, "Strategy formation by business leaders: Exploring the influence of national values". *European Journal of Marketing*. Vol. 34 (1/2), 2000, pp. 126-142.

[30]. N. Herrmann, "The Whole Brain", *Business Book, McGraw Hill*, 1996, pp. 45-56.

[31]. N. Herrmann, "The Creative Brain", *Brain Books*, 1988

[32]. C. Howson, "Successful business intelligence- secrets to making BI a Killer App", *McGraw-Hill Companies*, 2008, pp. 67-77.

[33]. C. D. Jacobs and L. T. Heracleous, "Answers for questions to come: reflective dialogue as an enabler of strategic innovation". *Journal of Organizational Change Management*, Vol. 18, No. 4, 2005, pp. 338 - 352.

[34]. K. G. Joreskog and D. Sorbom, "LISREL8 User's Reference Guide", *Scientific Software International, Chicago*, 1996.

[35]. K. Kafetsios, "attachment and organizational intelligence abilities across the life course personality and individual differences", *Journal of applied psychology*, Vol. 86, No. 2, 2004, pp. 329-333

[36]. V. Kalkan, "Orgutsel oorenme calismalawinds teru acilimlar: orgutsel zeka va bilgivretimi, 2005, Online available: (iibf.ogu.edu.tu/kongre/bildiriler/10-1.pdf

[37]. S. Kirn, "What is organizational intelligence", *Research Report of The Institute of Business Informatics*, Vol. 22, 2007, p.67.

[38]. K. Langfield-Smith, "Mapping cognitive structures: a pilot study to develop a research method″, *Parkville, Victoria: Graduate School of Management*, Vol. 14, 1989, p. 22-32.

[39]. E. Lawrence, "Strategic Thinking; A Discussion Paper", Prepared for the Research Directorate, Policy, Research and Communications Branch, Public Service Commission of Canada, *Personnel Development and Resourcing Group*, April 27, 1999, p.6

[40]. J. M. Liedtka, "Strategic Thinking: Can it be taught?" *Long Range Planning*, Vol. 31, No. 1, 1998, pp. 120 - 129.

[41]. E. Masifern and J. Vila "Interconnected mindsets: Strategic thinking and the strategy concept", *in Hitt, Ricart, Costa & Nixon. New managerial mindsets, organizational transformation and strategy implementation. Chichester: John Wiley & sons*, 1998, p. 43-62.

[42]. R. M. Mason, "Effective intelligent organizations: Knowledge is not enough in Organizational Design, Modeling, and Control", R.W. Banning & D. R. King. *Information System Series. Los Alamitos*, California, 1996, p 18.

[43]. M. D. McMaster, "Organizational intelligence. Talk given at the Industrial Society", London, 1998, [Online], Available: htpp://www.kbdworld.demon.co.uk/articles/indsoc.htm.

[44]. J. E. Mathieu, G. F. Goodwin, T. S. Heffner, E. Salas and J. A. Cannon-Bowers, "The influence of shared mental models on team process and performance". *Journal of Applied Psychology*, Vol. 85, No. 2, 2000, pp. 33-42

[45]. J. Menkes, "Executive intelligence", *New York: HarperCollins*, 2005, pp. 55-62.

[46]. P. R. Minch, "Hypermedia knowledge management for intelligent organizations". In R. W. Blanning & D.R. King, Organizational intelligence all in organizational design, modeling and control. *Information Systems,* Los Alamitos, California, 1996, p. 79

[47]. H. Mintzberg, "The fall and rise of strategic planning". *Harvard Business Review*, January - February 1994, pp. 107 - 114.

[48]. H. Mintzberg, B. Ahlstrand and J. Lampel "Strategy safari. A guided tour through the wilds of strategic management". *New York: The Free Press*, 1998.

[49]. S. Morrisette, and M. Schraeder, "Integrating Analysis and Narratives: Towards a More Systemic Approach to Strategic Thinking" *Journal of Organizational Leadership & Business*, Summer 2010, pp. 1-8. Online available:

http://www.tamut.edu/jolb/Scholar/2010Summer/2010Morrisette-Schraeder.pdf

[50]. A. R. Mooghali, A. R. Azizi, "Relation between Organizational Intelligence and Organizational Knowledge Management Development", *Word Applied sciences Journal* Vol. 4, No. 1, 2008, pp.2-4.

[51]. M. Munqith, I. Daghir and H. AlZaydie. "The Measurement of Strategic Thinking Type For Top Managers In Iraqi Public Organizations Cognitive Approach", *International Journal of Commerce & Management,* Vol. 15, No. 1, 2005, p. 41.

[52]. N. K. Napier and M. S. Albert, "East Asian and American perspectives On Thinking Strategically: The Leopard and His Spots", *Asia Pacific Journal of Human Resources*, Vol. 28 No. 40, 1990, pp. 40-50

[53]. N. A. Nasabee, J. Jahani, A.R. Safarpour, "Relationship of Organizational Intelligence and Personal Creativity in Shiraz University of Medical Science in 2008". *World Applied Sciences Journal*, Vol. 6, No. 11, 2009, pp. 1481-1488.

[54]. R. Neustadt, and E. May, "Thinking in time: the uses of history for decision-makers". *New York: Free Press*, 1986, p.251.

[55]. T. O'Shannassy, "Modern strategic management: balancing strategic thinking and strategic planning for internal and external stakeholders". *Singapore Management Review*, Vol. 25, No. 1, 2003, p. 53.

[56]. E. Pinchot, "The intelligent organization", *Pinchot & Company*, 2008, pp. 42-47.

[57]. M. Poole, A. Van De Ven, K. Dooleky, and M. Holmes, "Organizational Change and Innovation Processes: Theory and Methods for Research". *Oxford, UK, Oxford University Press. [Excellent review and application of tools from the sciences of complexity as they apply to organizational analysis.],* 2003, pp. 406.

[58]. M. Prejmerean, S. A Vasilache, "University's Organizational Intelligence. Standards, Strategies and Debouches", *Studia Negotia*, 2/2007, pp. 23-36.

[59]. B. Richmond, "The thinking in systems thinking: Seven essential skills". *Waltham, MA: Pegasus Communications*, 2000, pp. 12-23.

[60]. P.M. Senge, "The fifth discipline. The art and practice of the learning organization", *Random House, London,* 1990,

[61]. G. Stonehouse, and J. Pemberton, "Strategic planning in SMEs-some empirical findings".

Management Decision, Vol. 40, No. 9, 2002, pp. 853-861.

[62]. A. Tomer, and B. H. Pugesek, "Guidelines for the implementation and publication of structural equation models. In: Pugesek", B.H., *Applications in Ecological and Evolutionary Biology. Cambridge University Press*, Cambridge, 2003.

[63]. K. Toole, "ORGANIZATIONAL INTELLIGENCE AS A LEADERSHIP DEVELOPMENT MODEL", *HR Southwest Conference*, October 13, 2010, pp. 23-39.

[64]. Veryard Projects Ltd. (2004) *Towards* organizational intelligence, Retrieved 12 August 2007 online available: http://www.users.globalnet.co.uk/~rxv/kmoi/orgint.htm.

[65]. W. E. Halal, Organizational Intelligence: What is it, and how can managers use it? Retrieved 12 August 2007 from http://www.strategy-business.com/press/16635507/12644.

[66]. S. E. Weber and S. Diderleri, "Toward more intelligent organizations". In R. W. Blanning & D. R. King, Organizational intelligence all in organizational design, modeling and control. *Information Systems*, Los Alamitos, California, 1996, pp. 29-30

[67]. N. M. Yaghoubi, J. Moloudi and A. Haghi, "RELATIONSHIP OF ORGANIZATIONAL CULTURE AND ORGANIZATIONAL INTELLIGENCE IN PUBLIC ORGANIZATION" Business Management Quarterly Review, Vol. 1, No. 1, 2010, pp. 1-8.

[68]. S. H. Yang, "A study on the participation motivation of the taekwondo club members at high schools in Nanou County", Unpublished master thesis, Asia University, Taiwan, 2005, pp. 23-44.