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Correlation Between Organizational Thinking & Strategic Vision

An Applied Study in Sample Jordanian Organizations

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Abstract

This research aims to consider the correlation between organizational thinking & strategic vision. To do so, a model was designed consisting of four organizational thinking types (Critical Thinking, Creative Thinking, Higher-Order Thinking & Meta-Thinking) and three dimensions of the strategic vision (Vision as Process, Vision as Content, and Vision as Leadership), using data collected from three different Jordanian organizations. The results indicate that there are strong effects and linkages with statistical implication between patterns of organizational thinking and strategic vision. When we have merged organizational thinking with strategic vision, a matrix with four cells. The total sample location within this matrix was defined , where it became clear that the thinking and vision of the sample was limited but balanced so that the bulk of thinking was invested in the production of their vision.

Key Words: Organizational Thinking, Critical Thinking, Creative Thinking, Higher-Order Thinking, Meta-Thinking, Strategic Vision, Vision as Process, Vision as Content, Vision as Leadership.

INTRODUCTION

When markets shake and mind becomes absent, organizations perish and become aimless. When organizations lose their sagacity, they become directionless, and they will likely lose their way. Visionary organizations, however, see things differently, and realize that they have the capacity to constantly deliver superior performance, do their activities well, and their vision is a real fact. So, they balance between clear understanding of the present and clear focus on the future. They distinguish between what needs to be changed and what needs not to be changed; so they control over what to be changed, and adapt to constants. Vision, therefore, is a driving force for an organization and gives it hope and mission for it to achieve in order to survive, succeed and create future.

An organization's thinking affects its vision, and then vision is established in light of thinking trajectories. Accordingly, mind and vision interact constantly and permanently to produce foresight either opening or closing way to organization. So, our research goes to examine the composite relationship between thinking of the organization and its vision to explore related evidences and proofs as they are vital paths for organization's success and on which assured and sustainable competitive advantages are built. The research equation, then, was based on the Cause & Effect principle between thinking and vision; if thinking exists, vision will be straight and the organization will be on the right way.

Theoretical Framework

Strategic Vision: An organization's strategic vision is derived from its philosophy, and includes 2 dimensions: Static (Ideology = Core Values + Core Purpose); and Dynamic (Envisioned Future = Strategic Objectives + Vivid Description) (Al Sayah 2000, pp 51-52). Organizations, always making success, have a core ideology that is constant and unchanged, and their strategies, objectives and activities are adapted in consistence with change movement in the changing environment. Those organizations understand the clear difference between what ought to remain static and what to be dynamic, and this rare capability in perceiving what is static and managing what is dynamic is closely related to the capacity of developing a strategic vision. The strategic vision (by eye and by mind) provides a solid base concerning the foundation to be maintained (static) and results in the future to be reached (dynamic). A strategic vision stems from (Collins & Porras, 1996, P: 66-77):

- **Core Ideology:** determining the constant and permanent identity of the organization, is discovered and

understood by the organization when speculating itself. It stays as a spring for guidance and inspiration, making the organization coherent during course of its life. This ideology consists of (1) deeply rooted and established Core Values resisting time tests and very rarely changing (Bartlet & Ghoshal, 1996, P: 85). The organization's values, objectives, activities and strategies which should be open to adaptation and change are not mixed; and (2) Core Mission which represents the reason why an organization exists (Schermerhoon, 1996, P: 161); it is pursued forever, but can never be reached. Yet, although a mission itself does not change, it inspires and suggests change events.

- **Envisioned Future:** It is an imagination and a practical scenario for the organization position in the future. It also represents what an organization intends to be, to achieve, and to create; and this is an exciting thing which requires bringing about great change and progress to continue in motivating the organization (Snyder & Graves, 1994, P: 6). Envisioned Future consists of (1) Strategic Objectives reflecting the wide vision which covers the organization as a whole; these objectives are the focus around which the organization's hopes, efforts and activities are combined, in addition to having a clear end line (Hess & Sicilano, 1996); and (2) Vivid Description reflecting the situation of the organization when its objectives are met, translating vision from words into actions, or creating images individuals can bear (Kapur, 1994, P: 49).

An organization, therefore, ought not to mix between the core ideology (process of discovery) and envisioned future (creation and innovation), and particularly between its core mission (a star in the horizon to be pursued constantly but cannot be reached) and its strategic objectives (a mountain to be climbed and reached to top).

Organizational Thinking: Thinking is an evolving phenomenon developing with organizations. Views on thinking varied in terms of its dimensions, reflecting complexity of organizations. As such, scientists used thinking in many titles and descriptions to distinguish and recognize its different types. Researchers are not in agreement on the organization thinking; some believe it is an apparent behavior and it should be dealt with in an experimental manner since internal processes are difficult to be observed and measured. Others believe it is an intrinsic knowledge and the organization behavior is the product of its thinking.

Our focus is on examination of the thinking processes producing strategic visions; and thinking may be either abundant or insignificant, familiar or unfamiliar, repeated or condensed, organized or unorganized, presented in a certain manner or another, interesting or boring, and certain or uncertain. Thinking analysis, description and assessment, therefore, become more urgent and pressing in order to know the optimal way for managing these mental processes and understanding the organization's behavior. Organizational thinking is comprised of several components: some of them are specific to a certain subject or material, others are organizational factors and preparations such as trends and tendencies, and some others represent complex knowledge processes such as problem solving or less complex processes such as comprehension, application, and deduction, or meta-cognition direction and control processes. The most important thinking patterns are:

- **Critical Thinking:** it is defined (Petress, 2004) ،(Hutt, 1998) as a scientific approach to dealing with all information and situations. It includes production and organization of ideas, comparison making, conclusion drawing and assessment, and problem solving.

Table (1): Critical Thinking Skills

	Thinking Skill	Description
1.	Assumptions	Examine credibility of information and facts, and make hypotheses and predictions.

2.	Interpretation	Identify and understand a problem, identify logical interpretations, and extract meaning from data.
3.	Reliance on Logic Leaders	Pursue all forms of deduction, conclusion and inference
4.	Evaluation	Assess arguments, demonstrations, evidences, an claims, identify and refute them, and differentiate between facts and claims.
Sources: (Facione, 1998), (Beyer, 1999), (Stevenes, 1998), (Otum, et al., 2011, P: 81)		

- **Creative Thinking:** It includes readiness of organization's mind to produce ideas and genuine solutions by using imaginations and insights, finding and creating new unexpected linkages and relationships, and developing new creative meanings (Court, 1998) ،(Kerka, 1999). This kind of thinking includes 4 Ps (Process, Person, Product, and Press). Creative Thinking is based on knowledge fundamentals (mental processes and their effect on creation) and behavior fundamentals (reinforcement techniques and their effect on products) (Honig, 2001).

Table (2): Creative Thinking Skills

	Thinking Skill	Description: Ability to ……
1.	Fluency	Produce as much as ideas, generate alternatives, solve problems and deal with probabilities.
2.	Flexibility	Change thinking method, change mind state with the changing situation, think in alternatives, and produce probabilities.
3.	Originality	Not to repeat others' mistakes, hypertext thinking, and being far from familiar things.
4.	Elaboration	Launch exciting ideas, deal with problems, prolonged planning, and illustration and explanation.
5.	Sensitivity	Feel and sense the problem, increase awareness on the problem, and ability to focus and direct organizing.
Sources: (Priest, 2002), (Michalko, 2002), (Fleith, 2002), (Outm, et al, 2011, P: 145)		

- **Higher - Order Thinking**: It combines critical thinking and creative thinking. Critical Thinking includes logical judgment, while creative thinking includes mental creative judgment. Higher - Order Thinking, therefore, is deductive, productive, and speculative (Lipman, 1998) ،(Resnick, 2001) ،(Swidrek, 2000).

Table (3): Higher Order Thinking Skills

	Thinking Skill	Description
1.	Observation	Examine things and go deep in events by using senses.
2.	Description	Identify an idea, and enable others to obtain a new idea for the thing described.
3.	Organization	Put the related concepts or events in a consecutive context.
4.	Critical Query	Find and ask questions uncovering strengths and weaknesses based on accepted criteria.
5.	Open-ended Problem Solving	Find solutions and ideas for the open-ended problems (which require multiple solutions).
6.	Data Analysis and	Break down complex information into its sub components, express

	Modeling	thin in equations, and establish relations joining these components.
7.	Predictions Making	Read information and data and go beyond.
8.	Synthesis	Join parts together to produce a creative and unique thing.
9.	Evaluation	Make judgment on a thing as per a certain criterion.
Sources: (Lawrence, 2000), (Oliver & Vannafin, 2000), (Guptill, 2000), (Outm, et al., 2011, P: 227)		

- **Meta Cognition (Meta – Thinking):** It is thinking in thinking, or knowing the knowledge. It includes the organization's awareness on its knowledge processes, its ability to organize and assess its thinking in such a way that allows the organization to effectively monitor and control its knowledge processes, and learn how and why the organization does its work (Pintrich, 2002) ،(Bronson, 2000 ،(Anderson, 2002) ،(Leather & Mcloughlin, 2001).

Table (4): Meta-Thinking Skills

Thinking Skill		Description
Knowledge of Meta-knowledge	1. Individual Knowledge	How an organization thinks about itself, about others, and about inter-individual and intra-individual differences.
	2. Task Knowledge	It includes (1) Dedicative Knowledge, in that the factors affecting organization performance; (2) Procedural Knowledge, in that how to establish and carry out a task, and (3) Conditional Knowledge, in that the mechanism of some strategies, when to use them, and why some of them are better than others.
	3. Task Strategy	Analyze the environment inside and outside the organization, and design relevant strategies to deal with it.
Meta-knowledge Experiences	1. Objective Knowledge	Determine new objectives for the organization, and review or cancel the old ones.
	2. Knowledge of Meta-knowledge	Add knowledge to organization's knowledge, or delete from it or modify it.
	3. Knowledge of Strategies	Implement and activate strategies seeking to achieve main and secondary objectives.
Sources: (Pintrich, 2002), (Bronson, 2000), (Baired, 1999), (Gama, 2001), (Outm, et al., 2011, P: 270-271)		

We conclude that thinking, as a knowledge process, is characterized by such features as: a developed and evolving behavior that is different in its degree and levels quantitatively and qualitatively depending on growth of the organization and its accumulated experiences. This behavior is meaningful taking place in certain situations and taking different patterns such as the creative thinking, critical thinking, abstract thinking, logical thinking, etc. Effective thinking produces meanings and information that are capable of being extracted and used; it is a relative concept and it is difficult to be complete due to being formed from overlapped environmental elements in which thinking (thinking period), and attitude or experience. Finally, it takes place in different forms (verbal, symbolic, quantitative, logical, special, informal), and each has its own specificity.

- Strategic Vision in Previous Studies researches and studies related to organizational strategic vision were reviewed. After examining those studies, we found they are divided into three categories:
- Studies dealing with strategic vision as a role for the Visionary Leadership (Thompson, 1997, P: 128). In accordance with these studies, characteristics of visionary leadership are focused (Westley & Mintzberg, 1988), (Davidson & McGlaughlin, 1999), (McGlaughin, 2001), (Gary, 2005).
- Studies dealing with strategic vision content and characteristics through examining the actual content of the statements indicating the strategic vision of the organizations in question, or studying their constituent dimensions and characteristics and their relationships with other variables (Kantabutra, 2006), (Baum, 1998),(Larwood, et al., 1995), (Kantabutra & Avey ,2003, 2004), (Bird & Brush, 2000).
- Studies dealing with strategic vision as a visionary process. These studies focus on steps related to the process of preparing the strategic vision (formation, communication, execution) (Embar, 1995).

Research Problem: The key research problem lies in the lack of a clear and interrelated structure for looking-forward behavior (producing effective strategic visions due to prevailing thinking types). The process of accurate examination we made for vision of researched organizations indicated to a theoretical description of leaders behaviors, and organizations looking forward (limited dealing with dimensions and components of future vision, and effect of thinking models on production of those visions). This research, therefore, came to present evidences derived from the Jordanian business environment on correlation between organizational thinking and strategic vision through answering the following questions: (1) What is the nature of thinking and vision of researched organizations? How do they think? Do they have a strategic vision? and (2) Are there interrelatedness and influence relationships between organizations' thinking (including the sub variables) and their strategic vision (including the sub variables)?

Research Hypotheses:

H1: Extrusive and moral interrelationships are expected to be existing between thinking types (critical thinking, creative thinking, higher-order thinking, meta-knowledge thinking) and strategic vision dimensions (vision as process, vision as content, and vision as leadership) at the level of (α = 0,05-0,01)

H2: Thinking (and its types) affects strategic vision (and its dimensions) at the level of (α = 0,05-0,01)

MATERIALS AND METHODS

Variables and Measures: The field research was built on a questionnaire designed to fit research objectives. The questionnaire consisted of 7 main variables, 4 of them were specified to measure models of organizational thinking, and the other 3 ones were specified to measure strategic vision. The main variables included 36 items in the research questionnaire. The questionnaire was subject to statistical tests to verify its validity and consistency of its variables. Results in Table (5) imply the high degree, consistency and validity of variables and their items, so that they can be relied on.

Table (5): Tests of Homogeneity and Discriminate Validity

Variables	Alpha	Average Correlation	Extent of Alpha	Average Alpha	Mean Correlation
Critical Thinking	0.81	0.74	0.74-0.82	0.78	0.73
Creative Thinking	0.78	0.78	0.96-0.75	0.72	0.76

Higher-Order Thinking	0.73	0.71	0.71-0.77	0.74	0.72
Meta-Knowledge Thinking	0.67	0.73	0.66-0.73	0.70	0.74
Strategic Vision as Process	0.75	0.72	0.75-0.79	0.77	0.70
Strategic Vision as Content	0.79	0.75	0.72-0.78	0.75	0.76
Strategic Vision as Leadership	0.74	0.82	0.69-0.73	0.71	0.82

Table (5) indicates the measure's cohesion and consistency of variables because ؛(0.60 ≤ Alpha). This is acceptable in researches related to organizations. The measure was featured by Discriminate Validity due to differences in Mean Correlation (Finkelstein, 1992, P: 519)

- Types of Organizational Thinking (Independent Variable): Include apparent behavior and intrinsic knowledge

$$F(x)= X_1+X_2+X_3+X_4$$

Where F(x) = function of organizational thinking, X1= critical thinking, X2= creative thinking, X3= high-order thinking, X4 = meta-knowledge thinking.

- Strategic Vision (Dependent Variable): It is a real future focusing on what an organization will be in the future, providing a path to be reached, and requiring a balance between the clear cognition of the present and clear focus on the future (Collins & Porras, 1996, P: 65).

$$F(y)=Y_1+Y_2+Y_3$$

Where F(y)= function of strategic vision, y1= vision as process, y2= vision as content, y3= vision as leadership.

Research Sample and Population: the research population includes managers working in : Al Balqa'a Applied University, Ministry of Public Works, and Department of Statistics. Sample size was determined through the following equation:

$$N= \frac{Npq}{(N-1)\,A+Pq} = \frac{(65)(0.05)\,(0.05)}{(65-1)\,(0.50)^2 \div\ 4+(0.50)\,(0.50)} = 56$$

Where n = size of the required sample, N = size and number of population (65) individuals, P = % of individuals in whom research characteristics exist, namely 50%, q = % of individuals in whom research characteristics do not exist, namely 50%, A = B2÷4, where B represents the permissible error limits, namely 5% for confidence level 95%.

Table (6): Key Characteristics of Research Sample

Gender	Male		Female		Total			
	#	%	#	%	#	%		
	38	68	18	32	56	100		
Research Sample	Ministry of Public Works		Al Balqa'a University		Department of Statistics			
	#	%	#	%	#	%		
	26	46.4	16	28.6	14	25		
Job Title	Division Head		Section Head		Director		Director General	
	#	%	#	%	#	%	#	%
	5	8.69	36	64.3	13	23.2	2	3.6
Educational Level	Diploma		Bachelor's Degree		Master		PhD	
	#	%	#	%	#	%	#	%
	10	17.9	34	60.7	8	14.3	4	7.1
Job Experience	Year	≤ 4	5-8	9-12	13-16		≥ 17	
	%	17.9	19.6	10.7	12.5		39.3	

HYPOTHESES TEST

H1 Test: (Correlation): Table (7) shows that all thinking types are extrusively correlated with the strategic vision variables. Correlation strength ranged between (0.64) as minimum and (0.85) as maximum. Strategic Vision as Leadership ranked first in terms of its strong connection to thinking types (0.86). Strategic Vision as Content came second in terms of significance (0.84); and then came the Strategic Vision as Process (0.81). These correlations are ensured when considering the total relationship between thinking and strategic vision (0.90) and it is moral at the level of (0.01). Hypothesis 1 is concluded as accepted.

Table (7): Spearman Correlation between Thinking Types and Strategic Vision

Vision / Thinking	Strategic Vision Variables			Total Strategic Vision
Critical Thinking	0.75**	0.76**	0.80**	0.83**
Creative Thinking	0.64**	0.68**	0.69**	0.72*
Higher-Order Thinking	0.79**	0.83**	0.85**	0.87*
Meta-Knowledge Thinking	0.74**	0.73**	0.73**	0.79**
Total Thinking Types	0.81*	0.84**	0.86**	0.90**

**Correlation is Significant at the (0.01) level (2-taild)

H2 Test: (Impact): Multiple Regression was used to test the second Hypothesis. Table (8) shows that the calculated (F) value = 198; it is more than its tabulated value 3.56. Since the calculated (F) value is more than its tabulated value, so we accept the hypothesis. This means that thinking in its different types affect strategic vision in all its dimensions. This result is consistent with the result of the first hypothesis which indicated to existence of a strong correlation (rs=0.90). Consequently, we can be certain that there are fundamental relations and effects not attributed to chance between thinking and strategic vision. This result is supported by the fact that thinking as an independent variable accounts for 79% of the dependent variable of the strategic vision. To identify the most effective thinking variables, Stepwise Regression was used.

It was demonstrated that creative thinking is the most effective variable on strategic vision.

Table (8): Effect of Organizational Thinking on Strategic Vision

Calculated F	Tabulated F	SiG	Result of H2 Test	Correlation Coefficient rs	Determination Coefficient R2
198	3.56	0.01	Acceptance	0.90**	0.79

**Correlation is Significant at the (0.01) level (2-taild)

DISCUSSION

Analysis and Assessment of Organizational Thinking Types: Research presupposes existence and practice of thinking in all researched organizations though different in its type and extent, and to consider types and extents of that thinking, Table (9) was prepared which indicates a limited variance in the thinking types of the research sample as per the arithmetic mean. The Critical Thinking dominated the other types of thinking; in that 72.4% of the sample indicated practice of that thinking, and this thinking exceeded over the hypothetical mean (3), reaching (3.62), while Higher-Order Thinking ranked second among the other thinking types with an arithmetic mean (3.73) or equivalent to (67.4) of the sample. Meta- Knowledge Thinking ranked third with an arithmetic mean (3.35) representing (67%) of the sample. The Creative Thinking obtained less attention, and (66.6%) of the sample with a mean (3.33) only indicated practice of this thinking type.

Table (9): Thinking Reality in Research Sample Organizations

Thinking Types	Response Level (% Significance)					Significance indicator	Arithmetic mean	Standard Deviation
	Totally disagree	Disagree	Neutral	Agree	Totally agree			
	1	2	3	4	5			
Critical Thinking	3	19	17	37	24	72.4%	3.62	1.036
Creative Thinking	6	23	20	33	18	66.6%	3.33	0.910
Higher-Order Thinking	3	23	24	37	13	67.4%	3.37	0.836
Meta-Knowledge Thinking	1	27	23	35	14	67%	3.35	0.898
Total Thinking						68.2%	3.41	0.824

Analysis and Assessment of Strategic Vision: Strategic vision is related to 3 dimensions: vision as process, vision as content, and vision as leadership. These ought to be analyzed, assessed and tested. The study of these dimensions indicates the type and depth of the organization's thinking. From Table (10), it is shown that the total strategic vision appeared with an arithmetic mean (3.33) which is close to the constant mean (3) and with a standard deviation (0.948). Strategic vision was measured via 3 main variables of which the highest arithmetic mean was (3.46) at the variable of Vision as Process with a standard deviation (0.945), and the lowest arithmetic mean (3.20) at the variable of Vision as Leadership with a standard deviation (1.101). This result points out the limited strategic vision of the research sample in addition to its ambiguity due to low level and haziness of thinking. When analyzing variables of strategic vision, the following was clear: (1) % of the sample agreement on items of the Strategic Vision as Process ranged between (41.1% - 66.1%) against percentages of the disagreement on the same variables ranging between (12.5% - 28.6%) of the research sample. These results imply a relative attention to the Strategic Vision as Process in all its items except the item of identifying paths getting to future which obtained low attention. (2) Items of the Strategic Vision as Content got agreement percentages of (53.6% -53.5% - 42.9%) against disagreement percentages of (19.7% - 30.4% - 26.8%); this means a moderate attention by the sample for items of the Vision as Content except the item of response to change. (3) The percentage of agreement of the sample on items of the Strategic Vision as Leadership reached (42.8% - 42.9% - .43%) while disagreement percentage on the same items reached (28.5% - 29.3% - 32.1%), and this is an indicator on the low attention of the sample for all items of the Vision as

Leadership.

Table (10): Strategic Vision Reality in Research Sample

Key variable	Strategic vision (items)	Response level (Significance %)		Items		Variable arithmetic mean and standard deviation	Item value	Variable value
		% agreement	% disagreement	Arithmetic mean	standard deviation			
Vision as Process	Formation of strategic vision	66.1	17.9	3.59	1.075	3.46 0.945	Relatively clear	Limited
	Identifying factors of strategic effect	58.9	12.5	3.57	0.970		Relatively clear	
	Balance between strategic factors and current potentials	55.4	21.5	3.45	1.061		Limited	
	Identifying paths getting to future	41.1	28.6	3.18	1.081		Limited	Limited
Vision as Content	Vision Formulation(Strategic Focus)	53.6	19.7	3.45	1.044	3.40 1.012	Limited	
	Vision Execution (Effective Communication)	53.5	30.4	3.31	1.094		Limited	
	Creative reality (response to change)	42.9	26.8	3.27	1.087		Limited	
Vision as Leadership	Management leaders behavior	42.8	28.5	3.18	1.114	3.20 1.101	Limited	Limited
	Knowledge skills required for management leaders	42.9	29.3	3.23	1.206		Limited	
	Management leaders looking forward	43.0	32.1	3.18	1.267		Limited	
Total Strategic Vision				3.33	0.946	-	-	Limited vision
Scale	4.5-5 Very clear		4-4.49 Clear	3.5-3.99 Relatively clear		3-3.49 Limited	Less than (3) Poor	

No doubt the success of an organization depends on its vision which is the product of its thinking, so it is right to say that

thinking is unfeasible unless it produces a vision leading an organization to long term success. What helps combine organizational thinking and strategic vision is to ask the following question: how a strategic vision is determined in organizations? To answer this question, the organizational thinking - strategic vision matrix was designed.

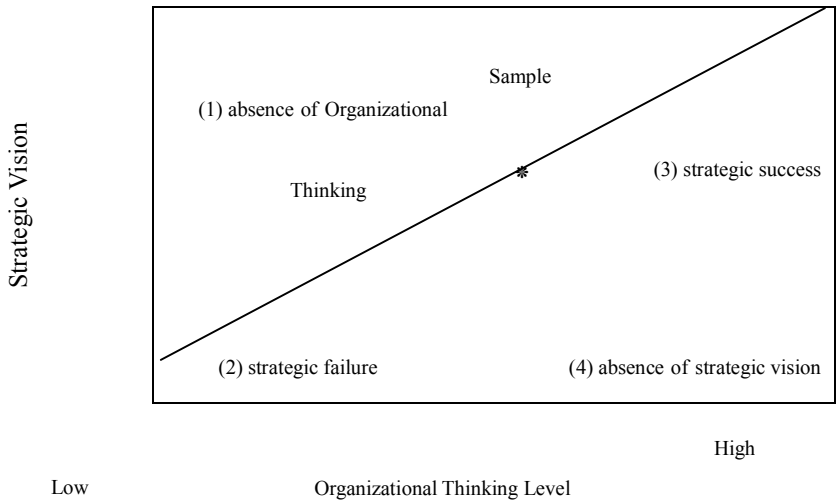

Figure (1): Organizational Thinking - Strategic Vision Matrix

*The sloping line represents a break even line, and any point on this line means that the Organizational Thinking = Strategic Vision

The matrix points out that the research sample lies at the break even line (Thinking – Vision). This means that all thinking of the sample is invested in producing its vision.

CONCLUSION

Reliance is on organizational thinking as function of strategic vision, where value of the regression model (R2) indicates that (0.79) of the variance in strategic vision is due to variance in organizational thinking. This supports the calculated (F) value (198) as compared to the tabulated (F) value which indicates the determination coefficient moral (R2) at moral level ($P \leq 0.01$) with a degree of freedom (4,2), in addition to the existence of a positive correlation relationship having a statistical implication between organizational thinking and strategic vision and also between organizational thinking and dimensions of the strategic vision. Those relationships were strong, ranging between (0.64 – 0.85). finally, there was clear limited practice of organizational thinking in all its dimensions. This was reflected in a limited and modest strategic vision.

RECOMMENDATIONS

Awareness must be disseminated on importance of organizational thinking in all its dimensions as being a critical element in building a solid strategic vision leading the organization to success and superiority. Websites on the Internet are to be designed to develop thinking skills and institutionalize future looking capabilities and behaviors. Companies are to be committed to writing its strategic vision on bulletins directed to employees, public audience, and investors. Training programs must be oriented to subjects that develops thinking and produces creative vision. and also a center for future management leaders (futures) is to be established.

FUTURE DIRECTIONS OF THE RESEACH

Researches and studies to explore strategic visions at the level of economic sectors are to be conducted, and content of those visions is to be analyzed. Among the key points is to find out the causes and obstacles which limit managers' interest in future visions, and may also limit readiness for future. It is feasible to conduct a study for impact of legal, administrative and cultural obstacles on design and production of organizational visions. Also, effect of some situational variables – size, structure, and environment – on production of strategic organizational visions.

References

al-sayah,Abed Al-sttar,(1999*), Analyzing the Relationship Between Organizational Power and its Effect on the Determination of Strategic Objectives*. Unpublished Ph.D. Dissertation, Bsrah University, Iraq.

Andersen, C. (2000). *Thinking as thinking about: cognition and meta cognition processes in drama*. In Bjorn, R & Anna – Lena S. (Eds.) playing betwixt and between. The IDEA dialogues 2001 (pp. 256-270) Oslo. Landslaget drama Skolen.

Barid, J. (1999). Self-*regulated teaching for self-regulated learning, paper presented at the eighth European conference for research on learning and instruction*, goteborg, Sweden, 31 August 1991.

Bartlett, C., & Ghoshal, S., *.Building Structure in Manager's Minds*, In, Mintzberg, H., & Quinn, J.B., (1996), "*The Strategy Process, Concepts, Contexts, Cases*", U.S.A., Prentice-Hall International, Inc.

Baum, R. (1998). *A Longitudinal study of the relation of vision and vision communication to venture growth in entrepreneurial firms,* journal of applied psychology, vol. 83, no. 1, 43-54.

Beyer, B. (1999). *Practical strategies for teaching of thinking*. Boston, Allyn & Bacon.

Bird, B. and Brush, C. (2000). *Vision of women entrepreneurs and execrative: a hint for the new millennium*. USASBE / SBIDA – plenary address, February 18.

Bronson, M. B. (2000). *Self-regulation in early childhood; nature and nurture*. New York: Guilford press.

Collins, J.C., & Porras, J.I., (1996). *Building Your Company's Vision*. Harvard Business Review, September - October.

Court, Andrew, W., (1998). *Improving creativity in engineering design. Education*, European journal of engineering education. Vol. 23, Issue 2, P. 141.

Davison, G. and C. McGlughin, (19990). *Visionary leadership for a sustainable age*.

Embra, C. (1995). *strategic visioning. Software engineering institute*, Nov/Dec.

Facione, P (1998*). Critical thinking: what it is and way it counts*. California academic press.

Fleith, D. (2002). *Teacher and student perceptions of creativity in the classroom environment*, roeper review, 22 (3), 148-154.

Gama, C. (2001). *Investigating the effects of training in meta cognition in a interactive learning environment: design of and empirical study.* Retrieved 3/2/2003. from: www.cogs.susx.ac.uk/lab/hct/hctw2001papers/gama.pdf

Gary, J. (2005). *Visionary leadership in world futures*. JayGary.Com updates, sep 11.

Guptill, A. (2000). *Using the internet to improve student performance*. Teaching exceptional children, 32 (4), 16-21.

Honig, A. (2001). *How to promote creative thinking. Early childhood today*, 15(5), 34-41.

Huitt, W. (1998). *Critical thinking: an overview. Educational psychology interactive*, Valdosta state university.

Kantabutr, S. and Avery, G. C. (2003). *Investigating relationship between vision components and hospital performance: proposed model*. International business and economics research journal, 2(1), 1-8.

Kantabutra, S. (2006). *Relating vision – based leadership to sustainable business performance: A Thai perspective*. Leadership review, kravis leadership institute, Claremont McKenna college, vol. 6, spring, 37-53.

Kerka, (1999). *Creativity in adulthood. Eric clearing house on adult career and vocational educational Columbus*. OH.

Larwood, L., Falbe, C. M., Kriger, M.P. and Miesing, P. (1995). *Structure and meaning of organizational vision*. Academy of management journal, 38, 740-769.

Lawrence, A. (2000). *The concept of meta cognition. Retrieved November 2002 from the world wide web*: 19. http://www.face.nova.ed/lawalain/deproj.html.

Leather, C. & McLoughlin, D. (2001*). Developing task specific metacoginitive skills in literate dyslexic adults. London: adult dyslexia and skills development centre*, retrieved 1/1/2003 from: http://www.bdainternationalconference.org/presentations/fri_s7_d_7.htm.

Lpman, M. (1998). *Strengthening reasoning and judgment through philosophy. In: learning to think, thinking to learn*, (Maclure, S. & Davis, P. (Eds.) Uk Pergamon press plc. Oxford, pp: 103-113.

McLaughin, C. (2001), *Visionary leadership. The center for visionary leadership*. Washington, D.C.

Michalko, C. (2002). *Four steps toward creative thinking*. Futurist, 34 (3), 18-22.

Oliver, K. and Hannifin, M. (2000). *Students management of web-based hypermedia resources during open – ended problem solving*. Journal of educational research, 94 (2), 75-93.

Outm, et al.,(2011), *Development of Thinking Skills :Theoretical Models and Applied* , Third Edition , Published Dar Al-Mserah, Amman , Jordan.

Pintrich, P. R. (2002). *The role of meta cognitive knowledge in learning, teaching and assessing. Theory into practice*, 41 (4), 220-227.

Preiest, T. (2002). *Creative thinking in instructional classes*. Music educators journal, 88 (4), 47-53.

Ptress, K. (2004*). Critical thinking an extended definition. Education*, vol. 124, (3), 461-467.

Resnick, L. (2001*). Education and learning to think*. Washington. Dc: national academy press.

Schermerhorn, J.R., Hunt, J.G., Osborn, R.N., (1996).Organizational Behaviour. 6th ed., U.S.A., John Wiley & Sons Inc.

Snyder, N.H., & Graves, M., (1994).Leadership and Vision. Business Horizons, January – February.

Stevenes, M. (1998). *Practical problem solving for managers*. New Delhi: universal book stall.

Swidered, B. (2000)/. *Making news connection, journal of adolescents & adult literacy*, vol. 41, Issue 7, p. 584.

Thomspon, J. L. (1997). *Lead with vision: manage the strategic challenge*. Boston MA, international Thompson business press.

Westley, F., and Mintzberg, H. (1988). *Visionary leadership and strategic management*. Strategic management journal, 10, 17-32