

# Studying the Relationship between Educational Managers' Thinking Style and Transformational Leadership Style Sari Islamic Azad University as Case Study

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## Abstract

The purpose of this study is to investigate the relationship between educational managers' thinking style and transformational leadership style in Sari branch of Islamic Azad University. The present study is a descriptive-correlational research. The statistical population of this study includes all educational managers (both assistants and heads of departments) in Sari branch of Islamic Azad University. The statistical population consists of 59 members (including 3 faculty chairs, 9 assistants, and 49 educational managers). In order to collect the research data, questionnaire of thinking styles and questionnaire of transformational leadership were used. Both descriptive and inferential statistics were used for analyzing the research data and testing the hypotheses. T-test is the main statistical method which was used for this purpose. The findings revealed that educational managers' thinking style is judicial style from functional view, is holistic one from level perspective, is an outward-oriented one from scope view, and is a liberal one from tendency view. The findings also revealed that measure of transformational leadership style of the educational managers is an ideal-influence model. Based on the findings of this study, it can be concluded that educational managers of this university have a hierarchy-based thinking style and oligarchy style and mental motivation measure in their style.

**Keywords:** style, thinking, manager, training, leadership

## 1. Introduction

Management and leadership of educational environments is one of the most difficult and sensitive functions of managers in public sector. Educational managers and leaders have an especial position based on their activities, methods, and goals (Haghghatjo, 2008: 13-20). Nowadays, managers cannot deal with increasingly changes and variations through their traditional methods and assumptions. In this regard, they need creativity and innovation for survive and development. Thinking style is one of the main effective factors on managers; creativity and innovation (Sternberg, 2002: 37). With respect to the educational leaders' position in organizations, their thinking style is very important. The reason is that leadership is process of influencing others' activities and efforts in achieving certain goals. In other words, organizational leaders play supportive, encouraging, and effective roles in terms of subordinates and coworkers' behavior. This implies that leaders not only should define their workplace and organizational goals and objectives, but they should make workplaces more active and dynamic (Alaghemand, 2005). As a result, recognition and awareness of managers' thinking style and its effects on employees' behaviors and performances can pave the ground for creativity and progress. As a result, organization can be successful. The results of different studies of Borlandoe, Harrison and Bramson, Sternberg, Yarbrough, and Melanie revealed that different thinking styles play serious role in leadership, management, and communications approaches. Also individual thinking style influences analysis, communications, approaches, conditions, organizations, problem-solving, leadership, and management abilities. Different styles of managers' thinking in different organizations can result in different levels of performance. Indeed, consistency of thinking styles of employees and their job can be helpful in achieving success. This is why that it is inevitable that there is a significant consistency between employees' job and their thinking style. Sternberg believes that thinking style is not a competency, but it is capability of utilizing different methods. Indeed, thinking style refers to what a person likes to do and prefers to do. When there is a considerable consistency between thinking styles and environment, employees can progress. On the other hand, employees' performance depends on the consistency between their thinking style and environmental conditions (Sternberg, 2002: 36). Indeed, thinking styles can be helpful in understanding employees' job success and failure from one hand, and appropriateness and inappropriateness from other hand. As a result, managers' failure and organizational failure may derive from inconsistency between thinking style and job. Notably, employees and managers of different levels of organizational hierarchy need sound, rational, effective, and efficient thinking styles (Haghghatjo, 2008: 18).

With respect to the importance of leadership as a coordinating factor in today's organizations, it is considered as a key success factor (Dobrin, 2008: 176). It is an inevitable need in the educational organization whom goal is educating skillful and professional employees. On the other hand, there is a significant difference between identity of educational organizations because of individual and human considerations, abilities,

capabilities, needs, and entities. Especially, there is a considerable difference between higher education institutions and other educational organizations (Norshahi, 2006: 163). Undoubtedly, an educational organization with considerable sources of basic knowledge and new and creative ideas is necessary for organizational development. As a result, the organization will be able to educate professional and skillful manpower and transiting suitable culture with environmental changes and rapid technology progresses. According to Smith, manager thinking influences decisions, designs, behaviors, problem-solving, and different organizational conditions directly (Zareei, 2006). So it is expected that recognition of thinking styles can be effective in managers' success and organizational effectiveness.

Since thought is the main human characteristic, human dominate variable and complex environment and survive by help of their thinking. Indeed, people think about job methods based on their own styles. On the other hand, thinking style is not ability, but it is a method for utilizing ability (Sternberg, 1998: 5). He suggests theory of mental regulation and presents 13 components for it including functions, forms, levels, scopes, and tendencies. In summary, functions refer to the employees' desire to creativity and doing activities in a new method. On the other hand, a person with conservative style wants to do activities through predetermined and sound methods (Emamipor, 2001). Main thoughts attitude of a group is influenced by thought philosophy of managers. Because all of organizational authorities and responsibilities are undertaken by managers, they can direct organization through their behavior, performance, and policy so exactly that is in consistency with thought approaches. Indeed, it is an inevitable fact. Individuals with different thinking styles want to utilize their abilities in different methods and react based on their thinking (Sternberg, 2002). In different studies in the 1950s and 1960s, several conceptual-theoretical models were suggested. In addition, some theorists combined these models in the 1980s and 1990s. The authors view the issues from different perspectives. Such studies are doing in past years. For example, a student has already been done in 2004. The study recognizes three approaches including cognition-based approach, personality-based approach, and activity-based approach (Norshahi, 2008: 26). Cognition-based movement, which was dominated in the 1950s and early of the 1960s, states that thought is a bridge between cognitive and personality studies. Personality-based approach starts from 1970s. The movement was used for understanding styles and methods of personality conceptualization and measurement. In personality-based movement, different theories such as personality types theory, capability theory, and so on were suggested. In activity-based approach, thought methods were investigated in terms of their relationship with different activities, the relationship between organizations and environment, and different sets. Indeed, activity-based approaches focused on the activities which are involved in different conditions of life such education more than other approaches. (Sternberg, 2002: 207). Theory of mental autonomy refers to individuals' thought styles which can be used for different types of activities such as education and learning. There is an important and basic point in this theory. It is this point that people need administrating their day-to-day activities and they select which styles for administrating that are similar to them. The theory recognizes 13 dimensions for mental autonomy and categorizes them in five classes including performances, forms, levels, scopes, and tendencies (Zhang, 2000: 409).

1. **Performances:** it includes different legal, administrative, and juridical styles. Individuals with legal style want to use their own methods and prefer unpredictable and unplanned problems. Such individuals like to do their activities based on their own desire and interest in creation, development, and design of affairs. In other words, they want to develop rules by themselves and prefer activities which satisfy their regulatory desires. In contrast, individuals with administrative style want to implement rules and regulations and like to be directed by others. They prefer complex activities method and bureaucracies seriously. On the other hand, individuals with juridical style prefer judgment about affairs and evaluation of issues. Such individuals prefer to analyze and evaluate thoughts and affairs through their abilities.
2. **Forms:** it includes autocracy and chaos. Individuals with autocracy style are motivated through certain goal or need at a time. This is why that they have limited perception of other priorities and solutions. They are one-single and hard-working ones and believe that the ends justify the means. They are serious in solving problems. In contrast, individuals with chaos style are motivated through different goals. They use random methods for solving problems. In some cases, there are unjustifiable forces beyond their activities. They have not any self-awareness and are fully flexible ones. Because they have not any certain and fixed rules for prioritization, face different problems in prioritization. They are extreme in their serious. They reject serious systems and struggle with limiting systems.
3. **Levels:** in includes holistic and detailed. Individuals with holistic style prefer be involved in subjective and holistic issues and ignore details. This is why that they may see jungle, but do not see its trees. They love conceptualization and deal with world of ideas. Sometimes, they think more and more and love journey in their thoughts. On the other hand, detailed individuals deal with objective and detailed issues. They are pragmatic and may do not see jungle because of its many trees.
4. **Scopes:** it includes inward-oriented and outward-oriented styles. Individuals with inward-oriented style

have rare interpersonal awareness and love to work lonely. They usually utilize their though forces lonely. They have rare social sensitivity. On the other hand, individuals with outward-oriented styles are collective and have much social sensitivity. This is why that they have more interpersonal awareness than inward-oriented individuals and love to work with others. Indeed, they search conditions for not only working, but also for solving problems.

5. **Tendencies:** it includes conservative and liberal styles. Conservatives love to follow existing methods and rules. This I why that they prefer minimum level of changes and variations so that avoid ambiguity conditions and prefer familiar ones. They enjoy constructed and predictable environments. This is why that they attempt to create such environment. On the other hand, liberals love moving beyond existing methods and rules. As a result, they prefer maximum level of changes and variations and seek ambiguity conditions. They also seek unfamiliar and new conditions in their work (Seyf, 2007: 275).

The purpose of this study is to investigate the relationship between educational managers' thinking style and transformational leadership style in Sari branch of Islamic Azad University. The results of this study can be used for selecting suitable educational managers in universities and higher education institutes. The results of this study also can be used for examining consistency between thinking styles and job performance. The main objectives of this study are presented in the following section.

1. Recognizing thinking style of educational managers of Sari branch of Islamic Azad University
2. Recognizing transformational leadership styles of Sari branch of Islamic Azad University
3. Investigating the relationship between transformational leadership styles and thinking styles of educational managers in of Sari branch of Islamic Azad University

In order to achieve such goals, the authors attempt to answer the following research questions.

1. What is thinking style of educational managers in Sari branch of Islamic Azad University?
2. What is transformational leadership style of educational managers in Sari branch of Islamic Azad University?
3. Is there any significant relationship between thinking style and transformational leadership styles of educational managers in Sari branch of Islamic Azad University?

## 2. Research methodology

The present study is a descriptive-correlational research. Indeed, correlational studies attempt to investigate the relationship between variables through correlation coefficient. In such studies, the purpose is investigating the relationship between variations of a variable and variations of other variables. The reason of using correlation method in this study is investigating the relationship between personality traits and thinking styles of educational managers. For this purpose, it is necessary to define statistical population. The statistical population of this study includes all of heads of departments and educational assistants in Sari branch of Islamic Azad University (table 1).

**Table 1: the members of statistical population**

Head of departments	Head of faculty	Assistants	Total
47	3	9	59

In order to collect the research data, census was employed rather than sampling. In order to collect the research data, both review of literature and field study methods were used. The first method was used for reviewing literature critically. In the next step, two questionnaires were used for collecting the respondents' viewpoints. The first questionnaire is Sternberg's questionnaire of thinking styles and the second is transformational leadership questionnaire of Bass and Avolio. The second questionnaire consists of 56 questions with Likert seven-point scale. The first questionnaire consists of 83 questions with Likert five-point scale. In order to examine validity of the questionnaire, professors and experts were asked to read and review the questionnaire. After reviewing the questionnaire, final version was developed and thereby its face validity was confirmed. Also the reliability of questionnaire was examined. In order to analyze the research data and test the hypotheses, both descriptive and inferential statistics were used in the SPSS. Averages, standard deviations, t-test, and correlation coefficient are the main statistical methods which were used in this study.

## 3. Findings

The results of first questions are presented in table 2. The results revealed that judgment average is more than other styles in terms of performances area.

**Table 2: comparison of averages of thinking styles from performance perspective**

Factors	Legal	Administrative	Judicial
Averages	4.87	5.15	5.37
Standard deviation	1.18	1.32	1.32

The results of comparison of different thinking styles are presented in table 3. The results revealed that there is not any significant difference between legal and administrative styles and between administrative and judicial styles. But difference between legal and judicial styles was significant. It can be said that thinking style of educational managers of Sari Islamic Azad University is judicial from functional perspective.

**Table 3: comparison of thinking styles from functional perspective**

Groups	t-value	df	Sig
Legal-administrative styles	-1.65 <sup>ns</sup>	29	0.110
Legal-judicial styles	-2.90 <sup>**</sup>	29	0.007
Administrative-judicial styles	-1.84 <sup>ns</sup>	29	0.075

(\*\* refers to  $p \leq 0.01$  and –ns refers to lack of significant difference)

Also thinking style can be examined in terms of its form. The results of comparing thinking styles are presented in table 4. As the results of this table revealed, hierarchical style has the most average. Also table 5 compares difference between thinking styles from form perspective. The results of this table revealed that there is not any significant difference between autocracy and chaos styles. Indeed, two styles are at certain level. Difference between other styles is significant. It can be said that educational managers of Sari Islamic Azad University had hierarchical style of thinking.

**Table 4: the results of comparison of thinking styles from form perspective**

Factors	Autocracy	Hierarchical	Oligarchy	Chaos
Averages	4.35	5.21	3.93	4.61
Standard deviation	1.16	1.38	1.02	1.29

**Table 5: the results of comparison of thinking styles**

Groups	t-value	df	Sig
Autocracy-hierarchical styles	-3.733 <sup>**</sup>	29	0.001
Autocracy- oligarchy styles	2.437 <sup>*</sup>	29	0.021
Autocracy-chaos styles	-1.232 <sup>ns</sup>	29	0.228
Hierarchical- oligarchy styles	4.991 <sup>**</sup>	29	0.000
Hierarchical- chaos styles	3.184 <sup>**</sup>	29	0.003
Oligarchy-chaos styles	-3.250 <sup>**</sup>	29	0.003

(\*\* refers to  $p \leq 0.01$  and –ns refers to lack of significant difference)

Also thinking styles can be investigated from its levels (holistic and detailed). The results of this comparison are presented in table 6. Based on the results of this table, average of holistic style is more than detailed one. Also the results of comparison between these styles are presented in table 7.

**Table 6: the results of comparison of thinking styles from level perspective**

Factors	Holistic style	Detailed style
Averages	4.85	4.38
Standard deviation	1.13	1.05

**Table 7: the results of comparison of thinking styles**

Groups	t-value	df	Sig
Holistic-detailed style	<sup>**</sup> 2.83	27	0.009

(\*\* refers to  $p \leq 0.01$  and –ns refers to lack of significant difference)

The results of comparison of thinking styles from scope view. The results of these tables revealed that outward-oriented style is more than inward-oriented one. Also the results of table 9 showed that difference between thinking styles is significant. It can be said that thinking styles of educational managers of Sari Islamic Azad University is outward-oriented.

**Table 8: the results of comparison of thinking styles from scope perspective**

Factors	inward-oriented	Outward-oriented
Averages	3.87	5.55
Standard deviation	1.26	1.64

**Table 9: the results of comparison of thinking styles**

Groups	t-value	df	Sig
<b>inward-oriented and outward-oriented styles</b>	-4.79**	29	0.000

(\*\* refers to  $p \leq 0.01$  and –ns refers to lack of significant difference)

The results of comparison between thinking styles from tendency are presented in tables 10 and 11. Based on the results of table 10, liberal style has the most average. Also the results of table 11 showed that there is a significant difference between thinking styles from scope view.

**Table 10: the results of comparison of thinking styles from tendency perspective**

Factors	Liberal	Conservative
<b>Averages</b>	5.35	4.44
<b>Standard deviation</b>	1.28	1.08

**Table 11: the results of comparison of thinking styles**

Groups	t-value	df	Sig
<b>Liberal-conservative styles</b>	5.052**	28	0.000

(\*\* refers to  $p \leq 0.01$  and –ns refers to lack of significant difference)

The second questions of this study states that “what is transformational leadership style of educational managers in Sari branch of Islamic Azad University?” the results of the question are presented in table 12 and 13. Based on the results of table 12, average of ideal-effective style is more than others. Also the results of table 13 revealed that difference between thinking styles is significant. It can be said that thinking style of educational managers of Sari Islamic Azad University is one of the ideal-effective, individual consideration, and mental motivation. But it is not mental stimuli.

**Table 12: the results of comparison of transformational leadership styles**

Factors	Ideal-effective	Mental stimuli	Mental motivation	Individual consideration
<b>Averages</b>	2.80	2.48	2.75	2.74
<b>Standard deviation</b>	0.57	0.44	0.63	0.53

**Table 13: the results of comparison of thinking styles**

Groups	t-value	df	Sig
<b>Ideal-effective-mental stimuli style</b>	4.50	22	0.000
<b>Ideal-effective-mental motivation style</b>	-0.83	19	0.41
<b>Ideal-effective-individual consideration style</b>	1.28	19	0.21
<b>Mental motivation-mental stimuli styles</b>	-5.09	20	0.00
<b>Mental motivation-individual considerations</b>	-3.62	19	0.002
<b>Mental motivation-individual consideration styles</b>	2.27	17	0.036

(\*\* refers to  $p \leq 0.01$  and –ns refers to lack of significant difference)

After examining thinking styles and transformational leadership, it is very important to investigate the relationship these variables. The results of this examination are presented in table 14. The results of this table revealed that administrative thinking style and mental motivation style. Notably, it is a direct relationship. Also a significant direct relationship was found between hierarchical style and mental motivation style. In addition, there is a significant relationship between oligarchy and mental stimuli. Also the relationship between detailed thinking style and mental stimuli is significant.

**Table 14: the results of the relationship between thinking styles and transformational leadership styles**

Main thinking styles	Secondary thinking styles	Measures	Transformational leadership styles			
			Ideal-effective style	Mental stimuli style	Mental motivation style	Individual considerations
Functional	Legal	Correlation coefficient	0.09	0.12	0.183	.34
		Sig	0.65	0.55	0.40	.13
		Frequency	25	25	23	21
	Administrative	Correlation coefficient	0.32	0.31	0.42*	.35
		Sig	0.12	0.12	0.04	.11
		Frequency	25	25	23	21
	Judicial	Correlation coefficient	0.22	0.28	0.38	.27
		Sig	0.29	0.16	0.07	.22
		Frequency	25	25	23	21
Form	Autocracy	Correlation coefficient	0.20	0.31	0.40	.18
		Sig	0.33	0.13	0.05	.41
		Frequency	25	25	23	21
	Hierarchical	Correlation coefficient	0.34	0.34	0.451*	.38
		Sig	0.09	0.09	0.03	0.08
		Frequency	25	25	23	21
	Oligarchy	Correlation coefficient	0.28	0.44*	0.37	.12
		Sig	0.17	0.02	0.07	.59
		Frequency	25	25	23	21
	Chaos	Correlation coefficient	0.29	0.46*	0.38	.22
		Sig	0.14	0.02	0.07	.37
		Frequency	25	25	23	21
Level	Holistic	Correlation coefficient	0.23	0.21	0.18	.22
		Sig	0.27	0.32	0.41	.34
		Frequency	24	24	21	21
	Detailed	Correlation coefficient	0.28	0.44*	0.36	.28
		Sig	0.17	0.03	0.08	.20
		Frequency	25	25	23	21
Scope	Inward-oriented style	Correlation coefficient	0.25	0.26	0.38	.36
		Sig	0.21	0.19	0.07	.10
		Frequency	25	25	23	21
	Outward-oriented style	Correlation coefficient	0.09	0.10	0.07	.19
		Sig	0.64	0.61	0.75	.40
		Frequency	25	25	22	21
Tendency	Liberal	Correlation coefficient	0.256	0.27	0.38	.36
		Sig	0.21	0.19	0.07	.10
		Frequency	25	25	23	21
	Conservative	Correlation coefficient	0.09	0.11	0.07	.19
		Sig	0.64	0.62	0.75	.400
		Frequency	25	25	22	21



#### 4. Discussion and conclusion

The results of this study revealed that educational managers' thinking style is judicial style from functional view. The results showed that the difference between legal and administrative styles and difference between administrative and judicial styles is not significant. But difference between legal and judicial styles is significant. The results of this study also revealed that educational managers' thinking style is holistic one from level perspective. The results of this study also revealed that educational managers' thinking style is an outward-oriented one from scope view. The results of this study also revealed that educational managers' thinking style is a liberal one from tendency view. The findings also revealed that measure of transformational leadership style of the educational managers is an ideal-influence style. Based on another part of our results, it can be concluded that educational managers of this university have a hierarchy-based thinking style and oligarchy style and mental motivation measure in their style. Also the relationship between mental motivation and individual consideration is significant. It can be said that thinking style of educational managers of Sari Islamic Azad University is one of the ideal-effective, individual consideration, and mental motivation. But it is not mental stimuli. Also the relationship between thinking styles and transformational leadership styles were examined and the following results were found.

- There is not any significant relationship between legal and administrative styles and between administrative and judicial styles. But there is a significant relationship between legal and judicial styles.
- There is a significant direct relationship between administrative and mental motivation style.
- There is a significant direct relationship between hierarchical style and mental motivation style.
- There is a significant direct relationship between oligarchy style and mental stimuli.
- There is a significant direct relationship between face thinking styles and transformational leadership style.
- There is a significant direct relationship between detailed thinking style and mental stimuli.
- There is not any significant direct relationship between different thinking styles and measures of transformational leadership.

The results of this study imply that educational managers of Sari Islamic Azad University want to utilize hierarchical, oligarchy, and mental motivation measures.

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