

THE RELATIONSHIP BETWEEN THINKING STYLES AND THE SOURCES OF POWER AMONG BASKETBALL COACHES

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ABSTRACT

The study aimed to investigate the relationship between thinking styles and sources of power among basketball coaches in Iran. Statistical sample included 114 elite basketball coaches who were coaching at the national basketball leagues. Data were collected using a Thinking Styles Inventory and power sources questionnaire. Pearson correlation test results showed that the correlation of expert power and thinking styles among female coaches is significant. Also a significant relationship was seen between the thinking styles and referent power among male coaches. There was a positive significant relationship between expert power of female coaches and legal, liberal and conservative thinking and there was an inverse correlation between the legitimate power and liberal thinking. The priority of coaches in the use of power sources was dedicated to the expert power and the reward power was the last priority.

KEY WORDS: basketball league, elite coaches, power sources, thinking styles.

INTRODUCTION

Coaching is one of the issues which has attracted special attention in sports psychology discussions. The role of educators and coaches in social and sports training is known by everyone. The human nature of teams, the complex behavior of the players, their personality features and components can help coaches to recognize individuals and help team to achieve success in competitive sports. Therefore the coaches who in addition to technical, tactical skills have the ability to use psychological skills are the favorite ones. In today advanced world no athlete can succeed unless he/she has an aware and powerful coach. According to Reuben Frost, coaches are the main axis and important pillar of sports teams (Thamy, 2010). A successful coach today is not a tactic architect, but is a manager that uses his own mental abilities to lead the team in a desired way. Academic ability, creativity and having a brilliant coaching experience are not necessarily guaranteeing good coaching practices. Successful sports teams usually have a prominent trait that distinguishes them from the unsuccessful teams and that is their effective, active and competent management and leadership (Khabiri, 2008). Humans in various dimensions have differences in abilities, talents and desires which finally manifest in their thinking style. Paying attention to these differences can guide people in the appropriate direction of education and job. Human beings through their thought have been able to master complex and variable environment and continue their life. All the situations and progress of human depends on fertile, dynamic and effective thought (Atkinson *et al.*, 1998). Understanding the thinking styles helps people to moderate their thought, in order to cope with different thinking styles are yet succeed in their communications. People with their special styles think about the ways of conducting works. The term style is not synonymous with the ability but is a way of being able to use one's abilities (Sternberg, 1998).

In general, thinking styles indicates preferential styles of individuals in their use of their individual abilities. Perhaps the most important issue that should be conscious of it is the styles of thinking. The findings of Shokri *et al.*, (2009) showed that Sternberg's view on the validity of the theory of mental self-management in academic situations in different cultures mainly Iranian culture is supportable. In addition, the study of thinking styles in addition to examining the notion of characteristic in two conceptual and empirical levels was indictable and significant. The findings of Jahanshahi (2006) revealed a significant relationship between thinking styles and age, gender, profession and education level. Thinking styles makes directors to be more aware of their abilities and allow them to make the right decisions at various stages of life. Thinking styles are important factors in the success of directors. Thinking style is a particular reasoning and problem-solving strategy that will help to clarify why people in career and academic matters or social interactions with other people react in different ways (Chartrand, 2011).

Since thought is not directly observable, so by the means of its results i.e. problem-solving and decision-making one can become aware of it. In fact, the thought always refers to a problem which an individual should find a way to solve it. The goodness of badness of thinking style is relative and is different over the time, place and situations. Individuals

are flexible in providing in thinking styles and variables such as culture ,gender, age as well as thinking styles of parents and educators are effective in changing the thinking styles (Gunter, 2000).

In order to have influence on the thoughts and actions of others leader should use power .Coaches play a major role in personal life and career of athletes and should use their power in a moral way .The power lies in the nature of the coaching and is a tool that is used by them to reach their goals. Also through the exercising power coaches can influence their athletes. The proper use of power sources can cause loyalty, emotional loyalty, belief in the teamwork values, participation in affairs and efforts to achieve the goals in the game .Power plays a major role in communication and relationships between people and its influence cannot be ignored in team or group actions and coaching practices. Hersey and Blanchard argue that if we can get to know and understand the range of power and which leadership power bases are needed then we can increase our ability to succeed as a leader. Mohammadi and Pourqaz (2013) studied the relationship between thinking styles and sources of power. The results showed a significant relationship between thinking styles and sources of power and no significant differences between thinking styles and power sources in the case of sex, level of education and managerial experience except the legal thinking style in which significant difference was seen based on gender .Amir Tash (2013) in his study concluded that expertise power is in the first priority of coaches and referent, legitimate, reward and coercive were in next priorities.The results of Rahman Pour *et al.*, (2012) research showed that expert power was in the first priority of power sources and coercive power was the last priority . Gunter (2011) research results showed that married coaches have a higher perception of referent power than unmarried coaches and being professional and amateur was not effective factor .Also professional coaches have a better understanding of expertise power than amateur coaches and the marital state of coach has no effect on it. Gunter (2007) examined the perception players and coaches of leadership power according to their gender .The results showed that the only significant difference between male and female athletes was on the expertise power so that athlete female has a higher perception of expertise power than males .Also the legitimate and referent powers of male coaches were higher than females. Essential role of sports coaches in the success of athletic and helping team to achieve its goals clarifies the necessity of the need to examine their psychological knowledge and managerial skills .Investigating the review of literature indicates that not much research has been conducted on the relationship between the thinking styles and power sources of coaches and most of those conducted studied have focused on managerial aspect and less attention has been paid on their sportive dimension. Therefore, further research should be conducted to determine which of the thinking styles are associated with power sources of coaches .Also, this project can determine that which one of the thinking styles have greater share in the use of power sources among coaches .In addition, the results of this study provide practical and useful information through which fertile ground is provided for coaches to use appropriate power sources. According to the importance of these results and considering that there are conflicting findings ,despite the lack of scientific research to assess the thinking styles with the power sources of coaches, it seem that this relation should be studied in different cultures of different levels in sports fields .Therefore, further research should be conducted in this regard to determine that which thinking styles are associated with power sources of coaches ?Hence, this study aimed to investigate the relationship between the thinking styles and power sources of basketball coaches in Iran .

MATERIALS AND METHODS

This study is a descriptive-survey which conducted as a field study .The statistical population of this research was all elite basketball coaches of country who holds a coaching degree of international, national and grade one and 135 of them were selected randomly as the statistical sample.

Research tools

The following questionnaires were used to collect the data:

Thinking Styles Inventory (Sternberg and Wagner, 1992)

This questionnaire includes 40 questions designed by Sternberg and Wagner (1992) which measures the executive, judicial, conservative, liberal and legal style of thinking.

Power source questionnaire Sussman and Deep (1989)

Inventory of power source (Sussman and Deep, 1989) examines the power sources of leadership from the perspective of the subordinates .This research tool evaluates five power sources in the form of 20 pair expression including: Expert, Legitimate, Referent, Coercive and Reward .The reliability of the questionnaires was estimated through Cronbach's alpha. The reliability coefficients for styles of thinking $\alpha=0.85$ and for power sources scale was $\alpha=0.84$.In order to analyze the data collected from 114 questionnaires, descriptive and inferential statistics were used .To organize and

summarize the descriptive statistics, frequency distribution tables; central and dispersion indices were calculated for individual characteristics and variables. To examine the relationship between variables, Pearson's correlation coefficient and to compare the viewpoints of male and female regarding the study variables multivariate analysis of variance was used.

RESULTS

The descriptive findings of individual data in both male and female show that the age ranges of male and female coaches are respectively 6.4 ± 42.1 and 7.1 ± 40.4 and %50 of them are female and %50 male. 26.8 percent of female coaches and 12.3 percent of male coaches had under 5 years coaching experience, 26.3 percent of female coaches and 33.3 of male coaches had between 5- 10 years, 12.3 percent of female coaches and 19.3 males had between 10-15 years, 15.8 percent of female coaches and 17.5 percent of male coaches had between 15-20 years, 19.3 percent of female coaches and 17.5 percent of male coaches had over 20 years of coaching experience. 14 percent of female coaches and 8.8 percent of male coaches had international coaching degree, 19.3 percent of female coaches and 42.1 percent of male coaches had the degree of national coaching, 64.9 percent of female coaches and 49.2 percent of male coaches had coaching degree level 1. The highest average of thinking styles among female coaches was executive thinking (38.5) and liberal thinking (38.2), judicial thinking (37.3), legal thinking (35.8) and conservative thinking (25.4) were at next priorities. The highest average of thinking styles among male coaches was executive thinking (38.2), liberal thinking (36.3), judicial thinking (36.3), legal thinking (34.4) and conservative (23.3) were at next priorities. The highest source of power used by female coaches was expertise (5.3) and legitimate (3.9), referent (3.8), coercive (3.6) and reward (3.1) were in next levels. The highest source of power used by male coaches was expertise (5.1) and referent (4.6), legitimate (4.1), coercive (3.7) and reward (2.8) were in next levels.

Table (1) the results of the Pearson correlation coefficient between thinking styles and dimensions of power sources among female coaches

Variable	1	2	3	4	5	6
1. Thinking styles	1					
2. Coercive power	-0.1	1				
3. Legitimate power	-0.14	-0.32*	1			
4. Reward power	-0.19	-0.19	-0.13	1		
5. Expertise power	0.35**	-0.37	-0.28*	0.19	1	
6. Referent power	0.03	-0.12	0.009	0.51**	-0.27**	1

* Correlation is significant at 0.05 ** Correlation is significant at the level of 0.01

Table (1) shows the Pearson correlation results for the relationship between thinking styles and sources of power among the female coaches. Based on the results of this table, the correlation between the expertise power and thinking styles (0.35) is significant at the level of 0.01 and the correlation between the variables of thinking styles and other sources of power is not significant.

Table (2) the results of the Pearson correlation coefficient between thinking styles and dimensions of power sources among male coaches

Variable	1	2	3	4	5	6
1. Thinking styles	1					
2. Coercive power	-0.13	1				
3. Legitimate power	0.11	-0.002	1			
4. Reward power	-0.11	-0.2	-0.52**	1		
5. Expertise power	-0.1	-0.51**	-0.1	-0.31*	1	
6. Referent power	0.27*	-0.23	-0.17	-0.32*	-0.1	1

* Correlation is significant at 0.05 ** Correlation is significant at the level of 0.01

Table (2) indicates the results of Pearson correlation for the relationship between thinking styles and sources of power among male coaches .Based on the results of this table, the correlation between the variables of thinking styles and sources of power (0.27) is significant at the level of 0.05 and the correlation between the variables of thinking styles and other sources of power is not significant.

Table (3) the results of the Pearson correlation coefficient between thinking styles and dimensions of the power source among female coaches

Variable	1	2	3	4	5	6	7	8	9	10
1.Executive Thinking	1									
2. Legal Thinking	0.15	1								
3. Judicial Thinking	0.30	0.61**	1							
4. Liberal Thinking	0.17	0.52**	0.52**	1						
5. Conservative Thinking	-0.1	0.4**	0.18	0.17	1					
6. Coercive power	0.14	-0.15	0.05	0.04	-0.25	1				
7. Legitimate power	0.1	-0.1	-0.02	-0.30*	-0.11	-0.32**	1			
8. Reward power	-0.11	-0.16	-0.18	-0.19	-0.01	-0.19	0.23	1		
9. Expertise power	-0.11	0.29*	0.18	0.36**	0.33*	-0.37**	-0.28**	-0.19	1	
10. Referent power	0.02	0.11	-0.03	0.03	-0.02	-0.12	0.01	-0.51**	-0.27*	1

* Correlation is significant at 0.05

** Correlation is significant at the level of 0.01

Table (3) indicates the results of Pearson correlation for investigating the significance of the relationship between thinking styles and sources of power among female coaches .Based on the results of this table, the correlation between the liberal thinking and legal power (-0.30) is significant at the level of 0.05. The correlation of expertise power and legal thinking (0.29) is significant at the level of 0.05. The correlation of expertise power and liberal thinking (0.36) is significant at the level of 0.01. The correlation of expertise power and conservative thinking (0.33) is significant at the level of 0.01. The correlation of other thinking styles and sources of power is not significant.

Table (4) shows the results of the Pearson correlation coefficient between thinking styles and dimensions of power in male coaches

Variable	1	2	3	4	5	6	7	8	9	10
1.Executive Thinking	1									
2. Legal Thinking	0.01	1								
3. Judicial Thinking	0.17	-0.49**	1							
4. Liberal Thinking	0.28*	0.32*	0.32*	1						
5. Conservative Thinking	-0.21	0.32*	-0.02	-0.42**	1					
6. Coercive power	0.13	-0.18	0.2	0.05	-0.15	1				
7. Legitimate power	0.05	0.18	-0.1	0.01	0.1	-0.002	1			
8. Reward power	-0.25	-0.1	0.11	0.04	-0.13	-0.20	-0.52**	1		
9. Expertise power	0.05	-0.1	-0.06	0.17	0.1	-0.51**	-0.1	-0.31*	1	
10. Referent power	0.1	0.23	0.23	0.1	0.13	-0.23	-0.17	-0.32*	-0.07	1

* Correlation is significant at 0.05

** Correlation is significant at the level of 0.01

Table (4) indicates the results of Pearson correlation for investigating the significance of the relationship between thinking styles and sources of power among male coaches .Based on the results of this table, the correlation between the mentioned variables is not significant. In this section the views of male and female coaches are compared regarding their thinking styles and power resources .To test the hypothesis multivariate analysis of variance (MANOVA) was used.

Table (5) the results of Levine's test for variance homogeneity of study variables

Variable	F-value	Significance level	Test result
Thinking Styles	1.2	0.9	Homogeneous
Personality Traits	0.01	0.2	Homogeneous
Coercive power	0.14	0.7	Homogeneous
Legitimate power	0.07	0.7	Homogeneous
Reward power	1.4	0.2	Homogeneous
Expertise power	1.3	0.2	Homogeneous
Referent power	0.2	0.6	Homogeneous

**Significance level $p < 0.01$

Levine's test was used to analyze the variance homogeneity of the study samples. Based on the result of this test the significant level and variances higher of 0.01 ($p > 0.01$) are homogeneous. Therefore the analysis of variance is allowed.

Table (6) the results of MANOVA to compare male and female viewpo

Factor	Source of change	Value	f-value	(df)	(df) of Error	Significance level
Male and Female	Pilla's Trace	0.29	2.4	16	96	0.004
	Wilks' Lambda	0.71	2.4	16	96	0.004
	Hotelling's Trace	0.41	2.4	16	96	0.004
	Roy's Largest Root	0.41	2.4	16	96	0.004

The results of MANOVA are reported in Table (6). This table indicates that the null hypothesis is rejected ($P = 0.004$, $F(16, 96) = 2.4$, (Wilks' Lambda = 0.71), which means that male and female viewpoints in at least one of the variables of personality traits and power sources is different.

DISCUSSION AND CONCLUSION

One of the most important factors in the selection of managers is their personal traits. Many researchers and their studies have focused on the human personality and achieved different results. The present study found a significant difference between personal traits regarding the sex; these results were consistent with the results of Shokri *et al* (2008) and Kalkhuran (2011). Personality traits in female coaches were conscientiousness, agreeableness, enthusiasm for new experiences, extroversion - introversion and neuroticism which were consistent with the results of Bakhshayesh (2013). Personality traits of male coaches respectively were conscientiousness, agreeableness, and passion for new experiences, introversion-extroversion and neuroticism that is consistent with Khorsandi *et al.*, (2010) study. Dominant personality trait of male and female coaches is conscientiousness that is consistent with the study of Khorsandi (2010), Ferdowsi *et al.*, (2012), Bakhshayesh (2013). In this study neuroticism had the least average among the personal traits which was consistent with the study of Dehghani Firoozabad *et al.*, (2006), khorsandi *et al.*, (2010), Kalkhuran (2011) and Bakhshayesh (2012) but was not consistent with the results obtained by Ferdowsi *et al.*, (2012) study in which they mentioned desire to new experience as the latest personal trait. However, in the effect of exercise on the human personality, this is one of the most widespread beliefs that sport through various ways can have a positive effect on spirit and personality of athletes and coaches. Such effects may be temporary or permanent. Probably the most important aspect of these impacts is the personality development. Besides the personality development, sport is effectively important in the evaluation of social aspect of personality or its social competence. Sport in general is full of opportunities for dealing with obstacles and taking appropriate ways to solve them. The results of present study showed significant differences between thinking styles among male and female coaches which was not consistent with the findings of Kayani (2003), Jahanshahi (2006), Kim (2009) and Shokri *et al.*, (2006), Pour Kayani and Shahilou (2010), Mahdavi Shakib (2011), and Mohammadi and Pourqaz (2013) which showed that the gender effect on thinking styles is not significant. The dominant thinking style among coaches is executive thinking that is consistent with the results of Mohammadi (2011) and Farhush and Ahmadi (2013). Sternberg (1997) states that the executive thinking style is welcomed in an educational setting because executers do what they are told to do. This result was not consistent with

the findings of Keshavarzi *et al.*, (2003), which reported legal as the dominant thinking style, and Mohammadi and Pourqaz (2013) which reported external thinking as the dominant thinking style. The dominant thinking style among female coaches is executive thinking style that was consistent with the results reported by Pour Kayani (2003), Jahanshahi and Abrahami (2006) and Najaf Abadi *et al.*, (2010) who reported executive thinking as the predominant thinking style among females. The dominant thinking style among male coaches was executive thinking which was inconsistent with the findings of Pour Kayani (2003) and Keshavarzi Arshadi *et al.*, (2003) which reported legal thinking as the dominant thinking style and Najaf Abadi *et al.*, (2010) and Farhush and Ahmadi (2013) which reported judicial thinking style as the dominant thinking style. In our results the conservative thinking style was in the last priority which was consistent with results of Mohammadi (2011) and inconsistent with Farhush and Ahmadi (2013) who reported judicial thinking style as the one with lowest priority. According to the Sternberg's mental self-government theory, people might have similar capabilities; but have different thinking styles. In fact, community does not always judge people in the same way according to their same abilities, but the ones their thinking style in a special situation is along with the expectations of society are judged as the one who has a high level of ability. If coaches have the appropriate knowledge, skills and thinking styles undoubtedly teams will have high efficiency. Given the importance of thinking styles it is recommended that for appointment of coaches, first of all we measure their thinking styles and then according to their thinking style give an appropriate job position to them. Our acquaintance with the style of thinking makes us capable to understand the way of thinking, to communicate with others, predict behavior and impress them. It also allows us to express our ideas in a way that is more compatible with their thinking style. The results of present study showed that from among the five power sources, coaches mostly use expertise power and the tendency to use the reward power is in the last category.

The results of statistical analysis showed a significant difference between sources of power based on the sex. So that the power sources in female coaches were respectively expert, legitimate, referent, coercive and reward powers which was consistent with the findings of Noorbakhsh and Mohammadi (2003) and Mohammadi and Pourqaz (2013). The priority of power sources in men were expert, referent, legitimate, coercive and reward powers which was consistent with the findings of Layoz *et al.*, (2003). Female coaches had higher expertise and reward powers than male coaches, but the male coaches had higher perception of legitimate, referent, coercive power which is consistent with Gunter (2007) findings. The dominant power among coaches is expertise. In other words, the expertise power of coach comes along with his expertise and includes technical knowledge, ability to teach the techniques, practices, strategies and understanding competitive strategies of his own team and opponent team that are among the most important factors which makes players to accept the requests of coach. In confirming the mentioned results, in the studies of Tabayyan (2002), Noorbakhsh and Mohammadi (2003), Mohammadi (2005), Ramazan Neghad *et al.*, (2010), Elahi *et al.*, (2013), Moradi *et al.*, (2013), Memari *et al.*, (2014), Rahman Pour *et al.*, (2012), and Amir Tash (2013) the same as current study expertise power was the main source of practicing power. Perhaps with regard to the technical nature of different fields of sport it seems obvious that power source of expertise in the majority of researches conducted on sports teams is known as the first priority. Power of expertise is one of the most powerful sources of power supply, because world is stepping toward modern technology and since affairs get more specialized, to achieve their objectives clubs are more depended on the specialized coaches.

In this regard Varsavsky *et al.*, (2006) also stated that the players' perception of the experience and expertise of a coach can improve the relationship between coach and player. On the other hand the results of researches conducted by Torabian (2006), Safari (2010), Ehsani *et al.*, (2013) which considered the dominant power as referent power, Huang (2007) and Altın Türk and Yılmaz (2013) which considered the dominant power as legitimate power and Ehsani *et al.*, (2013) which considered the dominant power as reward power, are inconsistent with our findings. Interestingly, the power of reward had the least important among the power sources of coaches and this was consistent with the results of Noorbakhsh and Mohammadi (2003), Mohammadi (2005), Moradi *et al.*, (2003), Ehsani *et al.*, (2012) and Altın Türk and Yılmaz (2013). The less importance of coaches' reward power can be due to the reason that players follow their coaches because of their expertise and personality, so that players have no expectation of any reward from their coaches. Lack of financial and material resources, inappropriate types of rewards given to players, short period of coaching of coaches in each team may lead to loss of use of this power source. Given that the reward is the last priority of power practicing one can never suggest that this type of power should not be used but it is suggested that coaches with a better understanding of the different positions use various types of power to influence their athletes but for best results, they should study more in sport psychology and improve their abilities in recognizing situations for the better use of the various types of power. The results of Ramazan Neghad *et al.*, (2010), Thamy *et al.*, (2010), Safari (2010),

Elahi *et al.*, (2013), Memari *et al.*, (2014), and Amir Tash (2013), Mohammadi and Pourqaz (2013) reported the referent power as a last power source which was inconsistent with the results of our study. One reason for the difference in results of this research and some previous researches can be due to the differences in statistical population and situational traits. In other words, leaders by paying attention to various situations are in need of different sources of power since based on the theory of situational leadership there is no such thing as the best way to influence people. Research findings on the relationship between thinking styles and power sources used by female coaches indicated that there is a significant relationship between liberal, legal and conservative thinking styles with expertise power which is consistent with the part of Mohammadi and Pourqaz (2013) findings which reported positive significant correlations between liberal thinking style and expertise power. Therefore it can be concluded that coaches who are looking for the maximum change and think beyond the available programs and laws and usually are looking for high-risk situations and vague situations in most of the cases use their expertise and skill power to have authority on their subordinates and control their behavior. Legal power is inversely correlated with the liberal thinking so that in coaches liberal thinking which involves ambiguity or novelty has an inverse relationship with legal power which is based on situation or official authority and the person's power in the hierarchy of the organization. The findings regarding the relationship between thinking styles and sources of power among male coaches showed a significant correlation between thinking styles and referent power. Among female coaches the correlation of referent power and introversion-extroversion is significant. Females have a sensitive nature and in case of this power attraction and fascination of coach are justified through her extroversion personality trait which has tendency toward socialism, loving people and being active. The correlation between other personality traits and sources of power is not significant. Among male coaches the expert power and agreeableness is significant. The correlation between other dimensions of personality traits and sources of power is not significant.

Considering the findings of this study on the significant role of expertise power in sports teams, this case can be utilized in the selection of qualified coaches, therefore being technical and expert in a specific field can be considered as a first variable to select coaches. But still understanding the importance of power in theory and practice is ambiguous and our knowledge and recognition is limited and this is due to insufficient understanding of individuals about the nature of the power and its associated factors in various organizations such as clubs and sports teams. This is also due to the significant role of the power in discussions and relationships between people which its influence cannot be ignored team or group actions and coaching practices. Therefore, sport managers and coaches by learning the appropriate way of using power in organizations and clubs can be a more effective manager and coach. At the end it seems necessary to mention that none of the thinking styles has superiority on another. In any situation one of them obtains the best results. So people just by using one of these styles cannot always be successful. Also, if one indulges the use of one of these styles cannot have a good cooperation with others. Sternberg (1998) says the greatest success is obtained when the thinking style of a person is consistent with the situations and conditions.

REFERENCE

- Altinkurt Y. and Yilmaz K. (2013).** Relationship between School Administrators Organizational power Sources and Teachers Organizational Citizenship Behaviors. *Edu. Sci. Theory Practice*. 12 (3): 1843-1852.
- Amir Tash A.R., Esmayili M. R. and Mohammadi F. (2013).** The relationship between the power practicing of coaches and sport commitment of judo fighters in sports clubs of Tehran. 2 (3): 23-36.
- Atkinson R., Hilgar R. and Atkinson R. (1998).** The field of psychology. Translation Baraheni, M.T. (2003). Volume II. Tehran. Roshd Publication.
- Bakhshayesh AR. (2013).** The relationship between personality traits of teachers with classroom management style in the city of Yazd. *New approach in the J. Educational Management*. 2: 185-198.
- Chartrand J., Emery S., Hall R., Ishikawa H. and Maketa J. (2011).** Now you're Thinking! Upper Saddle River, NJ: FT Press.
- Dehghani Firouz-Abadi H., Hamidi M. and Panahi Shabani J.S. (2010).** The relationship of five personality dimensions and ways of dealing with conflict. *Sport Management*. 7: 92-73.
- Elahi AR., Peymanfar MH. and Mohammadi S. (2013).** Power sources of coaches and their relationship with team cohesion Iranian athlete students. *Sports Management Studies*. 18(5): 159- 174.
- Farhush M. and Ahmadi M. (2013).** The relationship between thinking styles and learning strategies with achievement motivation. *Developmental Psychology: Iranian Psychologists*. 35(9): 24-36.

- Ferdowsi MH., Marashis F. and Talebpour M. (2012).** The relationship between personality traits and organizational commitment and organizational health among the staff in the General Administration of Youth and Sports Khuzestan. *Sports Management Studies*. 15: 188-173.
- Gunter (2000).** The effect of video and computer games on children. Translation by Pour Abedi, H. (2004). Tehran. Young publication.
- Huang SK. (2007).** Development of a Coach Base Inventory in Taiwan. Dissertation for Doctor of Sport Management. United states Sport Academy.
- Jahanshahi F. and Ebrahimi Gavam S. (2006).** A comparative study of the relationship between thinking style with age, gender, field of study and education level of teachers in three elementary, middle and high schools. *Edu. Psychol.* 58-37.
- Kalkhuran F. (2011).** Comparing five big personality traits of athlete and non-athlete male and female. Growth and motor learning – Sport. 8: 98-81.
- Keshavarzi Arshadi F., Emami Pour S. and Mazaheri Kalahrodi M. (2003).** Thinking styles and gender effects on emotional intelligence. *J. Thoughts Behavior*. 2: 68-80.
- Khabiri M. (2008).** Application of psychology at the football coaching. Institute of Tehran University Press.
- Khorsandi F., Kamkar M. and Malekpour M. (2010).** Relationship between five big personality traits and self-regulation learning strategies among high school male and female students in Esfahan at the school year 2007-8. *New Approach Training*. 5(2): 57-69.
- Laios A. (2003).** Leadership and power: How Important Factors for Effective Coaching. *International Sporting J.* 7 (1); 150 -154.
- Mahdavi Shakib A. (2011).** The relationship between thinking style of administrators in primary schools with their transformational leadership style based on Bass and Avolio model. *J. Educational Leadership and Management*. 6(4): 26-39.
- Memari Zh., Farahani A. and Sanati I. (2014).** Analysis of the relationship between power bases of coaches and athletes' satisfaction in individual and collective fields. *Sports Management Studies*. 22: 127-154.
- Mohamadi A. and Pourghaz A. (2013).** An Investigation Into the Relationship Between Thinking Style of Schooled Principals and Their Sources of Power. *Quarterly J. New Approach in Educational Administration*, Volume 4, and Number 3 (15): 117-138.
- Mohammadi S. (2005).** The impact of some individual characteristics on the perspective of faculty members on power sources of director of physical education faculties of country. *J. Persian Language and Literature of Kurdistan University*, 1: 41-52.
- Moradi H., Kozechiayan H. and Ehsani M. (2013).** The relationship between power sources and satisfaction of coaches and athletes in Iranian female handball league. *Sports Management*. 16: 21-38.
- Najaf Abadi MA., Nazari far F., Kamali H. and Hafshjany T. (2010).** Investigating of the relationship between the function of thinking styles and academic achievement among students of the Faculty of Engineering, Tehran University. *J. Engineering Education*. 47(12): 49-61.
- Noorbakhsh M. and Mohammadi S. (2003).** Study on the relationship between leadership styles and power sources among physical education schools' administrators from the perspective of faculty members. *Harakat*. 19: 43-58.
- Pour Kayani M. and Shahilou F. (2010).** Relationship of management styles in the trap of time: Case study of gimmick: 60-64.
- Rahman Poor A. (2012).** Relationship between Coaches Power Supplies with Team Cohesion among South Khorasan Team Sports. *European J. Experimental Biol.* 2 (3): 730 -735.
- Ramezani Nejad R., Hemmati Nejad MA., Banar N. and Fallah M. (2010).** The relationship between the practices of power of female coaches and satisfaction among female athletes in Mazandaran province. *Quarterly Olympics*. 1: 45-5
- Safari Sh. (2010).** Investigating power sources of managers and its relation with organizational climate from the perspective of school teachers. *J. Industrial Organizational Psychol.* 1(3): 48-41.
- Shokri O., Daneshpour Z. and Askari A. (2008).** Gender differences in academic performance: the role of personality traits. *J. Behavioral Sci.*, 2 (2): 127-142.
- Shokri O., Kadivar P., FarzadV. and Daneshpour Z. (2006).** The relationship between thinking styles and learning approaches with students' progress. *New Cognitive Sci.* 8(2): 52-44.

Shokri O., Khodayi A., Daneshpour Z., Toulabi S. and Foladvand Kh. (2009). Application of Sternberg's theory of mental self-management in academic situations, ways of thinking and five personality traits. *J. Behavioral Sci.* 3(6): 286-279.

Sternberg Robert J. (1997). Thinking styles. Translation Etemadi Ahari, A. Khosravi, A.A. (2002). Dadar Publication. Second edition.

Sternberg Robert J. (1998). Ways of thinking. Translation Etemadi Ahari, A., Khosravi, A. and Jafari. (2002). Second edition. Tehran. Nashr and Pajooheshe Dadar.

Tabayyan A. (2002). The relationship between the power bases with efficiency and the performance of dean of colleges and administrators of physical education groups in public universities from their own perspective and faculty members. Ph.D. thesis, University of Tehran Teacher Training.

Thamy G. (2010). Investigating the relationship between leadership style and sources of power among premier league volleyball coaches from the perspective of the players. MS Thesis, School of Physical Education, Tehran University.

Torabian S. (2007). The relationship between power sources used by managers and organizational climate in the Governmental Girls' High Schools in Kerman from the perspective of teachers. Master's thesis, Shahid Beheshti University, Faculty of Education and Psychology.