

## Comparing the thinking and attachment styles in adolescents with and without parents

Shabnam Moadab Kazerouni<sup>1</sup>, Noshirvan Khezri Moghadam<sup>2</sup>, Seyed Mehdi Hosseini<sup>3</sup>

<sup>1</sup>. M.A. Department of Clinical Psychology, Science & Research Branch, Islamic Azad University, Kerman, Iran

<sup>2</sup>. Assistant Professor, Shahid Bahonar University of Kerman, Kerman, Iran

<sup>3</sup>. Assistant Professor, Medical Sciences University of Kerman, Kerman, Iran

**Abstract:** This study aims to compare the thinking and attachment styles in adolescent with and without parents. The participants of this survey study includes all adolescents aged 12-18 years in Kerman and adolescents aged 12-18 years who have no parents and are kept in centers under the supervision of Kerman Welfare General Department; 100 adolescents without parents and 100 adolescents with parents were respectively selected through census and random method as participants. Data were collected using attachment styles questionnaire and thinking styles questionnaire, and analyzed using descriptive statistics, independent T-Test and chi-square. The results have indicated that there is a significant difference between adolescents with and without parents in attachment styles. Moreover, there is a difference between them in functional, judicial, anarchic, oligarchic, internal, external, liberal and conservative thinking styles at level 0.01, and in anarchic thinking, hierarchical, local and global styles at level 0.05; there is no significant between them in executive thinking style. Dominant styles in adolescence with and without parents are secure and anxious attachment style, respectively. Functional, anarchic, external, judicial, liberal, conservative, local, global, internal, hierarchical, executive, anarchic and oligarchic thinking styles are dominant ones in adolescence with parents; functional, anarchic, global, local, external, executive, judicial, liberal, hierarchical, conservative, internal, anarchic and oligarchic thinking styles are dominant ones in adolescents without parents.

[Shabnam Moadab Kazerouni, Noshirvan Khezri Moghadam, Seyed Mehdi Hosseini. **Comparing the thinking and attachment styles in adolescents with and without parents.** *N Y Sci J* 2014;7(5):47-58]. (ISSN: 1554-0200). <http://www.sciencepub.net/newyork>. 10

**Keywords:** thinking styles, attachment styles, adolescence without parents, adolescence with parents

### 1. Introduction

Thinking is the basic characteristic of human being. Humans have been able to overcome complex and variable environment, and continue their lives by their thoughts. People think in their own special styles to do their works. "Style" is not a synonym of "ability", but it is a way to apply person's ability (Sternberg, 1998). Sternberg presents 13 styles for thinking styles by presenting his Mental Self-government Theory; these styles are classified into the following five dimensions: function, forms, levels, scopes and tendency (Imami Pour, 2001). Another characteristic of human is attachment first presented by John Bowlby to explain the emotional bond between children and their parents. He believed that attachment is an important combination of human experiences; it means the experiences that start from childhood to death. Moreover, he believed that relations related to attachment play an important and a huge role in emotional life of adults in such a way that problems available in interpersonal relationships and experience of various types of anxieties depend on people's attachment styles (Bowlby 1979). When a child feels a kind of effective and sensitive attachment, he or she feels secure, health and self-confidence in such a way that he. She behaves with happiness. However, when the child

feels a kind of risk in establishing a relationship with the other people or even with himself. Himself (for example illness, fear and separation), he or She feels anxiety and fear, and tries to attract his or her parents' attention. Therefore, attachment style affects the person's life from childhood to adulthood (Bowlby 1969). Since adolescence is a period in life of every individual and has an important role in human life, it attracts the attention of scientists, psychologists, and writers to this period. This period is called the period of sentimentalism, emotion-oriented, maker crisis, and pressure by different psychologists. All these considerations illustrate the importance of this period of life. All these features lead to inflammation, anxiety and changes in adolescents and unusual effects emerge in him. It is clear that appearance of these manners in adolescent result in special behaviors from parents and teachers (Parrott, 2004)

Among adolescents, some of them have no parents and are kept in boarding centers and welfare organizations. They are the ones who have lost their parents due to death. Studying available backgrounds about teenagers without parents and their comparison with adolescents who have parents have indicated that growth in people's behavior is affected by the kind of family in which they live. In addition, the results have shown that adolescents living in single-

parent families and adopted adolescents are at higher risk for non-adaptive behaviors (Key Pesly, 2000, quoted from Wolf, 1998).

Since no research has been carried out on thinking styles and attachment in adolescents without parents up to now, considering the presented introduction and role of these two dimensions in life, in this research, we are trying to compare the thinking styles and attachments in adolescents with and without parents and to apply its results for presenting and planning some practical solutions.

### Statement of the problem

Adolescence is one of the important growing stages that faces human emotional and physical crises. Adolescents seek identity in this period. Searching for his or her identity is the important task which is difficult for an adolescent, (Mansour, 2005). Human is separated from infancy period and goes to an area that should pass the sociological and psychological challenges, and calms his turbulent mind in adolescence (Hilgard, 2004). Research findings have shown that adolescent thinking skills are not enough to face modern issues and information age, this issue reflects a strong emphasis on being conservative, paying less attention to modernization, innovation and future orientation in our teaching methods (Hashemian, 2001).

Thinking means preparing a map. Believing means tendency to act; thinking consists of three elements: emotion, imagination and memory. Thought is the ability to apply the inference power, imagination and recognition in order to achieve a result. Thought is a process in which a person tries to identify a problem faced with and to solve it using his own experiences (One Fanzhe, 1995). According to John Dewey, thought means understanding relationships and basic thought means exact investigation of every opinion with regards to results that support it. Thought means directed activities of mind to solve the problem or in other words thinking about that mental activity or behavior (Shariatmadari 1982).

Thinking style can be divided into two styles. The first type of thinking styles (such as legal, judicial, global, hierarchical and liberal) results in creativity and needs to complex information processing. Persons who apply this style of thinking tend to challenge norms and to accept risk. Second type of thinking styles (such as executive, local, monarchic and conservative) needs to simple information processing. Persons who apply this style of thinking tend to keep norms and are authority-oriented.

The four remaining thinking styles (such as anarchic, oligarchic, internal and external) can be placed in complex or simple thinking styles

according to the style and specific task (Zhang and Postiglione, 2001). It can be said that thinking styles and cognitive growth are interdependent and the more the cognitive growth is, the more the person tends to use a wider range of thinking styles (Zhang, b 2002); moreover, there is a difference between thinking styles and personality traits according to the Big Five Personality Inventory (Zhang, c 2002). Thinking is one of the three factors (two other factors are intelligence and personality) that affect creativity and innovation (Sternberg, 1998). Several factors such as abilities and incentives are necessary for innovation in any organization, but thinking has an important role in this area (Ford, 1999). Attachment is a deep emotional bond that we have with certain people in our life. When we interact with them, we enjoy; moreover, when we are near to them in times of stress, we feel calm. In the second half of the first year, adolescents are attracted in familiar people who have responded to their needs and choose their parents for special attention. Freud was the first person who stated that the child emotional bond with his or her mother is the basis for all subsequent relationships. According to Bowlby, the parent-child relationship starts with a series of natural signs that attract parent to the child. Gradually, actual emotional bond is formed, and new cognitive and emotional abilities, and history of sincerely and loving care will help it.

According to Mary Ainsworth, attachment is formed in four stages:

1. **Secure attachment:** children consider their parents as a secure base and prefer the absent parent to strangers.
2. **Avoidant attachment:** when parents are present, children ignore them and when children rejoin their parents, the children don't welcome them or do it slowly.
3. **Resistant attachment:** These children want to be near their parents before separation, but they do not search. Moreover, when their parents leave them, they get sad, and after their parents come back, they get angry.
4. **Disorganized and Disoriented attachment:** These children suffer the greatest insecurity and after their parents rejoin, they show some opposite and disoriented behaviors; they may even not look at their parents while their parents are hugging them (Berk 2009).

Persons' ability to cope and adapt to life events depends on the close cooperation of intellectual and emotional capacities (Salovey et al, 2000). Although adolescent period is critical, there are some adolescents who have no parents and are kept in centers under the supervision of Welfare Organization. Studying the available backgrounds

about adolescents who have no parents and their comparison with those who have parents have indicated that there is a significant difference between adolescent girls with and without parents in the rates of mental distress, depression, social discords, suspicion and paranoia, isolation, strange and odd thoughts, and insecurity (Mosala, 1994). Therefore, since thinking and attachment styles play an important role in making people's lives, and so far no research has been done, especially in adolescent with and without parents, this research aims to study the differences between thought and attachment styles in adolescents with and without parents. The results will show the role of parents' presence in these two personality factors; they can be applied for educational planning.

#### **Research methodology:**

This study is a survey research and its objectives and hypotheses are as follows:

#### **The overall objectives:**

Comparing the thinking and attachment styles in adolescence with and without parents

#### **Secondary objectives:**

1. Comparing attachment styles in adolescents with and without parents
2. Comparing functional thinking styles in adolescents with and without parents
3. Comparing executive thinking styles in adolescents with and without parents
4. Comparing judicial thinking styles in adolescents with and without parents
5. Comparing anarchic thinking styles in adolescents with and without parents
6. Comparing hierarchical thinking styles in adolescents with and without parents
7. Comparing oligarchic thinking styles in adolescents with and without parents
8. Comparing anarchic thinking styles in adolescents with and without parents
9. Comparing global thinking styles in adolescents with and without parents
10. Comparing local thinking styles in adolescents with and without parents
11. Comparing internal thinking styles in adolescents with and without parents
12. Comparing external thinking styles in adolescents with and without parents
13. Comparing liberal thinking styles in adolescents with and without parents
14. Comparing conservative thinking styles in adolescents with and without parents

#### **Research hypotheses**

1. There is a difference between attachment thinking styles in adolescents with and without parents

2. There is a difference between functional thinking styles in adolescents with and without parents

3. There is a difference between executive thinking styles in adolescents with and without parents

4. There is a difference between judicial thinking styles in adolescents with and without parents

5. There is a difference between anarchic thinking styles in adolescents with and without parents

6. There is a difference between hierarchical thinking styles in adolescents with and without parents

7. There is a difference between oligarchic thinking styles in adolescents with and without parents

8. There is a difference between anarchic thinking styles in adolescents with and without parents

9. There is a difference between global thinking styles in adolescents with and without parents

10. There is a difference between local thinking styles in adolescents with and without parents

11. There is a difference between internal thinking styles in adolescents with and without parents

12. There is a difference between external thinking styles in adolescents with and without parents

13. There is a difference between liberal thinking styles in adolescents with and without parents

14. There is a difference between conservative thinking styles in adolescents with and without parents

Based on statistics provided by Kerman Province Welfare General Department, participants includes 100 adolescents without parents aged 12-18 years and kept in centers under supervision of this organization in Kerman. Considering the small size of participants, 100 persons were selected as subjects using census.

In simple random sampling, each member of the society has an equal and independent chance to be a member of the subjects. Independent means selecting one member has no effect on selecting the other members of the society (Delawar, 2006).

Considering the number of adolescents aged 12-18 years in Kerman are 32485, 100 persons were randomly selected as subjects.

#### **Data Collection Instruments:**

**A) Attachment Style Questionnaire:** reviewed Collins and Reed's adult attachment questionnaire

(1990) was used to measure the attachment questionnaire. The questionnaire is a kind of self-assessment from communication skills and methods used to shape attachment; it consists of 18 articles which are assessed by marking on a five-degree scale from Likert type. Every subscale consists of six articles. Subscales include anxiety, dependency and proximity. (Quoting from Hamidi, 2007). These scales were measured by Cronbach's alpha coefficients 74 % - 28 % - 52 %, respectively. The validity and reliability of this scale have been confirmed by several studies.

**B) Thinking Styles Inventory:** In this study, the long form of Thinking Styles Inventory of Sternberg - Wagner (1992) was used to measure the thinking styles. Inventory consists of 114 questions and 13 sub-tests. Every sub-test consists of 5 questions; each of these questions measures one style of thinking. The reliability coefficient of this inventory ranges between 40% to 80% in previous studies. Concurrent validity of this inventory with short inventory of thinking style is 79% (Imami Pour, 2003).

After determining the subjects, the researcher performed thinking styles questionnaires and adult attachment scale (RASS) in adolescents with and without parents to collect data. Data were analyzed using SPSS 19 and independent T-Test after collecting. Descriptive statistics (frequency, percentage, mean and standard deviation) and inferential statistics (T-test and chi-square) were used to analyze data.

#### Findings:

The frequency of all attachment styles in adolescents with and without parents are shown in Table 1. According to available data, among 100 adolescents without parents, 35 ones have secure attachment style, 26 ones have anxious attachment style and 39 ones have social attachment style. Among 100 adolescents with parents, 67 ones have secure attachment style, 23 ones have anxious attachment style and 10 ones have avoided and attachment style.

**Table 1: frequency of attachment styles in adolescents with and without parents**

Total	Attachment style			
	Avoidant	Anxious	Secure	
100	39	26	35	Without parents
100	10	23	67	With parents
100	49	49	102	Sum total

Chi-square test was used to respond the hypothesis (1) that there is a difference between adolescent with and without parents in attachment styles. According to data recorded in Table 2, the chi-square value obtained 38.27 that is significant in

level 0.01 and 99% confidence. Therefore, the difference between frequencies of attachments styles in adolescents with and without parents was significant; there was a relationship between attachment style, and having or not having parents.

**Table 2, chi-square, the difference of attachment styles between adolescent with and without parents**

Sig. (2-sided)	df	Value	
.000	2	386.27	Pearson Chi-Square
.000	2	734.28	Likelihood Ratio
.000	1	034.27	Linear-by-Linear Association
		200	N of Valid Cases

Considering the significance level of chi-square shown in table 2, the relationship level between attachment style and having or no having parents is shown in table 3. Since the classes of table are more

than  $2 \times 2$ , Cramer's coefficient is calculated. The relationship value is 37.0 that is significant in level 1.0.

**Table 3: the relationship level of attachment style and having or not having parents**

Sig.	Value		
.000	370.0	Phi	Nominal by Nominal
.000	370.0	Cramer's V	
	200		N of Valid Cases

Descriptive data of different thinking styles in adolescents with and without parents are shown in Table 4.



**Table 4: Descriptive data of different thinking styles in adolescents with and without parents**

Mean	od standard error	Standard deviation	Mean	No.		
71047.0		10467.7	2200.36	100	Without parents	functional
59107.0		91074.5	4500.39	100	With parents	
91535.0		15348.9	4500.35	100	Without parents	Executive
72509.0		25085.7	4700.36	100	With parents	
76851.0		68512.7	3600.35	100	Without parents	Judicial
70063.0		00634.7	1100.39	100	With parents	
75623.0		56229.7	0600.36	100	Without parents	Monarchic
79278.0		92781.7	2800.39	100	With parents	
63695.0		36947.6	6600.30	100	Without parents	oligarchic
65609.0		56095.6	6200.33	100	With parents	
71132.0		11320.7	2200.34	100	Without parents	anarchic
73535.0		35355.7	1900.36	100	With parents	
77993.0		799932.7	8300.34	100	Without parents	hierarchical
60314.0		03139.6	3100.37	100	With parents	
71233.0		1233.7	8400.35	100	Without parents	Global
79160.0		91600.7	0600.38	100	With parents	
72093.0		20927.7	8100.35	100	Without parents	Local
63629.0		36286.6	1700.38	100	With parents	
69125		91252.6	4300.34	100	Without parents	Internal
68561.0		85613.6	9400.37	100	With parents	
89501.0		95012.8	5800.35	100	Without parents	External
68165.0		81650.6	2000.39	100	With parents	
75152.0		51523.7	3100.35	100	Without parents	Liberal
77359.0		73591.7	7900.38	100	With parents	
73778.0		37779.7	5500.34	100	Without parents	Conservative
68876.0		88763.6	4300.38	100	With parents	

Chi-square test was used to respond the hypotheses 2 to 14. There is a significant difference in level 0.01 between adolescent with and without parents in legal, judicial, monarchic, oligarchic, internal, external, liberal and conservative styles.

There is a significant difference in level 0.05 between adolescent with and without parents in anarchic, hierarchical, global and local styles.

## Discussion and conclusions:

### First hypothesis

There is a difference between adolescents with and without parents in attachment styles. The research results have shown that among 100 adolescents girls with parents, 67 ones have secure attachment style, 23 ones have anxious attachment style and 10 ones have avoidant attachment style; among 100 adolescents girls without parents, 35 ones have secure attachment style, 39 ones have anxious attachment style and 26 ones have avoidant attachment style. This difference is in level 0.01 and the relationship between having or not having parents is 0.37. Therefore, the dominant style in adolescents with and without parents is secure attachment style

and anxious attachment style, respectively. The results of this research are in line with a research carried out by Ezat et al (2009) entitled “comparing the attachment styles in students affected by behavior disorders and dyslexic, and normal students. The results of the research carried out by Ezat et al (2009) indicated that the normal students have secure attachment style. There is a significant difference between normal students and those affected by dyslexic and behavior disorder in attachment styles.

In order to explain this hypothesis, Bowlby (1969) believes the attachment styles are formed in response to biological and psychological needs of mother and child, and human baby's does something that cause others to take care of him and stay near him/her. This attachment and emotional bond with mother causes the child to seek the comfort obtained by his/her mother's presence, especially when he/she feels fear and uncertainty. Bowlby and Mary Ainsworth believe that all children feel attached, and strong attachment is the foundation of healthy social and emotional growth in adulthood. In fact, the persons' attachments have vital role in his/her life. Moreover, Ainsworth(1969)states that secure

attachment style facilities the application and qualification in interpersonal relationships.

**Table 5: independent T-test, mean equality of thinking styles in adolescents with and without parents**

T-test, mean equality					Levine test			
Std Error Difference	Mean Difference	Sig (2-tailed)	df	t	Sig.	F		
92419.0	23000.3-	001.0	198	495.3-	010.0	732.7	Supposing of variance equality	functional
92419.0	23000.3-	001.0	656.191	495.3-			Supposing of variance inequality	
16774.1	93000.0-	427.0	198	796.0-	798.0	066.0	Supposing of variance equality	Executive
16774.1	93000.0-	427.0	143.188	796.0-			Supposing of variance inequality	
03995.1	75000.3-	000.0	198	606.3-	691.0	158.0	Supposing of variance equality	Judicial
03995.1	75000.3-	000.0	331.196	606.3-			Supposing of variance inequality	
09562.1	22000.3-	004.0	198	939.2-	524.0	407.0	Supposing of variance equality	Monarchic
09562.1	22000.3-	004.0	560.197	939.2-			Supposing of variance inequality	
91442.0	96000.2-	001.0	198	237.3-	715.0	134.0	Supposing of variance equality	oligarchic
91442.0	96000.2-	001.0	827.197	237.3-			Supposing of variance inequality	
02309.1	97000.1-	056.0	198	926.1-	646.0	212.0	Supposing of variance equality	anarchic
02309.1	97000.1-	056.0	782.197	926.1-			Supposing of variance inequality	
98594.0	48000.2-	013.0	198	515.2-	012.0	467.6	Supposing of variance equality	hierarchical
98594.0	48000.2-	013.0	217.186	515.2-			Supposing of variance inequality	
06492.1	22000.2-	038.0	198	085.2-	085.0	006.3	Supposing of variance equality	Global
06492.1	22000.2-	038.0	836.195	085.2-			Supposing of variance inequality	
96156.0	63000.2-	015.0	198	454.2-	075.0	214.3	Supposing of variance equality	Local
96156.0	63000.2-	015.0	990.194	454.2-			Supposing of variance inequality	
12503.1	51000.3-	000.0	198	605.3-	567.0	329.0	Supposing of variance equality	Internal
12503.1	51000.3-	000.0	987.197	605.3-			Supposing of variance inequality	
12503.1	51000.3-	002.0	198	218.3-	134.0	232.2	Supposing of variance equality	External
12503.1	51000.3-	002.0	936.184	218.3-			Supposing of variance inequality	
07853.1	48000.3-	001.0	198	227.3-	985.0	000.0	Supposing of variance equality	Liberal
07853.1	48000.3-	001.0	834.197	227.3-			Supposing of variance inequality	
00931.1	48000.3-	000.0	198	844.3-	521.0	414.0	Supposing of variance equality	Conservative
00931.1	48000.3-	000.0	072.197	844.3-			Supposing of variance inequality	

Ainsworth(1991)considered the person's children to searching their environment; he regarded attachment as the security source (secure site) of the mother's sensitivity important for infant and

considered its role vital for attachment styles growth of mother – infant. Therefore, these results are in line with the present research; since the normal adolescence have parents, secure attachment is their dominant style. As some researchers have shown, having opportunity to establish a close relationship, continuous and regular nursing quality and suitable family conditions are factors which affect the secure attachment style; adolescents with parents have this condition, but adolescents without parents don't have the same condition. On the other hand, as Ainsworth(1978) have stated, anxious attachment style is observed in adolescence exposed to clinical problems and adolescents who have experience of an inner shock such as losing their parents, separating from their parents or have been abused. These findings are in line with the present research results because adolescents without parents are those who have no parents from childhood or who have lost their parents due to death or death of one of them and they are now kept in the centers; in this research, their dominant style is anxious one and secure attachment style is allocated to only 35 adolescents out of 100 ones.

### **Second hypothesis**

There is a difference between adolescents with and without parents in functional thinking style. This difference is significant in level 0.01 and with 99% confidence. This thinking style is used in adolescents with parents more than ones without parents. It means that these adolescents compared to those without parents prefer to do their works by their own tendencies; in other words, they like to control their lives by themselves. The results of the present research are in line with the results of a research conducted by Susan ImamiPour and Seif (2003) entitled "a developmental study of thinking styles on school students and university students, and their relationships with creativity and academic achievement. It can be concluded that there is a difference between thinking styles of subjects with various ages. Functional style is increased in some ages.

In order to explain this hypothesis, it can be mentioned that persons with functional style like to do their work by their own tendencies. In other words, these people have enacted their own laws. Sternberg (1997) states that these learners prefer unstructured issues because they want to organize the issues by themselves. Some other things that these people like to do are writing creative articles and short stories, composing poetry, designing mathematical issues, scientific projects and decision making about life affairs. Since adolescents are grown in an un systematic environment, it seems that

they have some problems within internalizing the rules, and do not follow the functional thinking style.

### **Third hypothesis:**

There is a difference between adolescents with and without parents in executive thinking styles. The results have indicated that executive style in adolescents with parents is stronger. This difference is not significant in level 0.01 and with 99% confidence. There is no difference between two groups of adolescents in executive thinking styles, and adolescents without parents observe the rules like those who have parents.

In order to explain this hypothesis, it can be mentioned that persons with executive thinking style are intersected in execution of instructions. Therefore, they like to be guided by the others. They like to do the complex administrative affairs and like strict regulations. Learners with this thinking style compared to those with functional thinking style prefer the issues which are completely organized. According to Sternberg (1997), people with executive thinking style prefer the issues that the other people prepare or organize for them. These people are man of action and generally like to enforce the rules (both their own rules and the other people's rules). Since the adolescents without parents are grown in an environment without family principle, it seems that they have problems in enforcing rules and instructions, and don't follow the executive thinking style.

### **Fourth hypothesis:**

There is a difference between adolescents with and without parents in judicial thinking styles. The results have indicated that judicial style in adolescents with parents is stronger. This difference is significant in level 0.01 and with 99% confidence. There is a difference between the two groups of adolescents in judicial thinking styles and adolescents with parents use this style more than those without parents. It means that these adolescents prefer to evaluate the affairs and analyze the thoughts compared to those without parents.

In order to explain this hypothesis, it can be mentioned that persons with judicial thinking style are interested in judging affairs and evaluating various issues. These persons prefer the issues through which they can analyze and evaluate the thoughts and affairs (Sternberg 1997). Since the adolescents without parents are grown in an environment without rules, it seems that they have problems in evaluating and analyzing the affairs and problems, and don't follow the judicial thinking style.

### **Fifth hypothesis:**

There is a difference between adolescents with and without parents in monarchic thinking styles. The

results have indicated that monarchic style is stronger in adolescents with parents. This difference is significant in level 0.01 and with 99% confidence. There is a difference between the two groups of adolescents in monarchic thinking styles and adolescents with parents use this style more than those without parents. It means that these adolescents prefer to concentrate on one task in each time compared to those without parents. The results of the present research are in line with the results of a research conducted by Susan Imami Pour and Seif (2003) entitled "a developmental study of thinking styles on school students and university students, and their relationships with creativity and academic achievement. It can be concluded that there is a difference between thinking styles of subjects with various ages. Monarchic style is increased in some ages.

In order to explain this hypothesis, it can be mentioned that persons with monarchic thinking style enjoy doing tasks that allows him to concentrate on only one task in each time (Sternberg 1997). Since the adolescents without parents are grown without family, it seems that they have problems in concentrating on one task, and don't follow the monarchic thinking style.

#### **Sixth hypothesis:**

There is a difference between adolescents with and without parents in oligarchic thinking styles. The results have indicated that oligarchic style is stronger in adolescents with parents. This difference is significant in level 0.01 and with 99% confidence. There is a difference between the two groups of adolescents in oligarchic thinking style, and adolescents with parents use this style more than those without parents. It means that these adolescents prefer to do several tasks in each time without having any priorities and this thinking style doesn't observe in adolescents without parents.

In order to explain this hypothesis, it can be mentioned that persons with oligarchic thinking style tend to concentrate on several tasks in each time without having any priorities. (Sternberg 1997). Since the adolescents without parents are grown without family principle, it seems that they don't have any priorities in allocating time to some tasks, and don't follow the oligarchic thinking style.

#### **Seventh hypothesis:**

There is a difference between adolescents with and without parents in anarchic thinking styles. The results have indicated that anarchic style is stronger in adolescents with parents. This difference is significant in level 0.05 and with 95% confidence. There is a difference between the two groups of adolescents in anarchic thinking style. The results of the present research are in line with the results of a

research conducted by Susan Imami Pour and Seif (2003) entitled "a developmental study of thinking styles on school students and university students, and their relationships with creativity and academic achievement. It can be concluded that there is a difference between thinking styles of subjects with various ages. Anarchic style is decreased when the age is increased.

In order to explain this hypothesis, it can be mentioned that persons with anarchic style enjoys doing the tasks in which they have authority in terms of "what", "where", "who" and "how" to do (Sternberg 1997). Since the adolescents without parents have no authorities to do their works independently, they have no anarchic style and can't enjoy having authority to do their works.

#### **Eighth hypothesis:**

There is a difference between adolescents with and without parents in hierarchical thinking styles. The results have indicated that hierarchical style is stronger in adolescents without parents. This difference is significant in level 0.05 and with 95% confidence. There is a difference between the two groups of adolescents in hierarchical thinking style and adolescents with parents use this style more than those without parents. It means that these adolescents prefer to distribute their focuses among several tasks. The results of the present research are in line with the results of a research conducted by Susan Imami Pour and Seif (2003) entitled "a developmental study of thinking styles on school students and university students, and their relationships with creativity and academic achievement. It can be concluded that there is a difference between thinking styles of subjects with various ages. Hierarchical style is increased in some ages.

In order to explain this hypothesis, it can be mentioned that persons with hierarchical style prefer to distribute their focuses among several tasks that are prioritized (Sternberg 1997). Since the adolescents without parents have to obey a specific discipline in centers which they are kept in, they prioritize their concentrations between some tasks and observe the hierarchical thinking style.

#### **Ninth hypothesis:**

There is a difference between adolescents with and without parents in global thinking styles. The results have indicated that the difference is significant in level 0.05 and with 95% confidence. There is a difference between the two groups of adolescents in global thinking style, and adolescents with parents use this style more than those without parents. It means that these adolescents prefer to focus on general idea of a subject and concentrate on abstract beliefs compared the adolescents without parents; in



other words, thinking abstractedly is stronger in adolescents without parents.

In order to explain this hypothesis, it can be mentioned that persons with global style focus on general idea of a subject and concentrate on abstract beliefs (Sternberg 1997). Since the adolescents without parents have problems in concentrating their minds, they don't focus on abstract beliefs, and don't follow the global thinking style.

#### **Tenth hypothesis:**

There is a difference between adolescents with and without parents in local thinking styles. The results have indicated that local style is stronger in adolescents with parents. This difference is significant in level 0.05 and with 95% confidence. There is a difference between the two groups of adolescents in local thinking style and adolescents with parents use this style more than those without parents. It means that the adolescents with parents prefer to focus on the details compared to adolescents without parents. The results of the present research are in line with the results of a research conducted by Susan Imami Pour and Seif (2003) entitled "a developmental study of thinking styles on school students and university students, and their relationships with creativity and academic achievement. It can be concluded that there is a difference between thinking styles of subjects with various ages. Local style is decreased when the age is increased.

In order to explain this hypothesis, it can be mentioned that persons with local style enjoys doing a task that allows them to work on specific dimensions, main subject and concrete details. (Sternberg 1997). Since the adolescents without parents can't decide independently, they don't enjoy doing some tasks that they are allowed to work on their concert details and don't observe the local thinking style.

#### **Eleventh hypothesis:**

There is a difference between adolescents with and without parents in internal thinking styles. The results have indicated that internal style is stronger in adolescents with parents. This difference is significant in level 0.01 and with 91% confidence. There is a difference between the two groups of adolescents in internal thinking style.

In order to explain this hypothesis, it can be mentioned that persons with internal style enjoys doing the tasks that they can do them independently. This thinking style is more in adolescents with parents. It means that these persons enjoy doing the tasks independently. It can be explained that living in the centers increases the dependency to the others and persons don't have self-confidence to do their works independently (Sternberg 1997).

#### **Twelfth hypothesis:**

There is a difference between adolescents with and without parents in external thinking styles. The results have indicated that external style is stronger in adolescents with parents. This difference is significant in level 0.01 and with 99% confidence. There is a difference between the two groups of adolescents in external thinking style.

In order to explain this hypothesis, it can be mentioned that persons with external thinking style prefer to do some tasks that make an opportunity for them to interact with the other people. This thinking style is more common adolescents with parents. It means that having an opportunity to interact with the others is more attractive for adolescents with parents compared to adolescent without parents. It can be said that family life will improve interpersonal relationships and trust in people (Strenberg, 1997).

#### **Thirteenth hypothesis:**

There is a difference between adolescents with and without parents in liberal thinking styles. The results have indicated that liberal style is stronger in adolescents with parents. This difference is significant in level 0.01 and with 99% confidence. There is a difference between the two groups of adolescents in liberal thinking style, and adolescents with parents use this style more than those without parents. It means that novelty and newness of subjects are more attractive for adolescents with parents compared to those without parents.

In order to explain this hypothesis, it can be mentioned that persons with liberal style enjoy doing the tasks that include the novelty and ambiguity (Sternberg, 1997). Since the adolescents without parents don't have wide external communications, the novelty is not attractive for them, and they don't follow liberal thinking style.

#### **Fourteenth hypothesis:**

There is a difference between adolescents with and without parents in conservative thinking styles. The results have indicated that conservative style is stronger in adolescents with parents. This difference is significant in level 0.01 and with 99% confidence. There is a difference between the two groups of adolescents in conservative thinking style. Therefore, observing rules and methods in their work is important for them. In other words, this can be explained that presence in the family results in internalization of observing rules, but living in the centers may results in externalization of observing rules. The results of the present research are in line with the results of a research conducted by Susan Imami Pour and Seif (2003) entitled "a developmental study of thinking styles on school students and university students, and their relationships with creativity and academic

achievement. It can be concluded that there is a difference between thinking styles of subjects with various ages. The conservative thinking style is decreased when the age is increased.

In order to explain this hypothesis, it can be mentioned that persons with conservative thinking style tend to observe rules and available methods in order to do the tasks (Sternberg, 1997). Since the adolescents without parents are not grown in a functional environment, they don't like to observe the rules and do their tasks, and don't observe the conservative thinking style.

The overall results have shown that legal, monarchic, external, judicial, liberal, conservative, local, global, internal, hierarchical, executive, anarchic and oligarchic thinking styles are dominant ones in adolescents with parents, respectively; functional, monarchic, global, local, external, executive, judicial, liberal, hierarchical, conservative, conservative, internal, anarchic and oligarchic thinking styles are dominant ones in adolescents without parents, respectively.

#### References:

1. Atkinson, Rita. L. And others. (2004). Hilgard psychology. (Translated by Hossein Rafiee). Tehran: Arjemand publications.
2. Sternberg, Robert J. (2001). Thinking styles. (Translated by Aladdin Atemad Ahery and Ali Akbar. Khosravi). Tehran: Dadar Publication.
3. Akbarzadeh, Maryam. (2006). Reviewing the personality and academic study and survive by thinking styles and its relation to academic achievement of students. Master Thesis, curriculum, Faculty of literature and Human Sciences, Shahid Bahonar University of Kerman.
4. Susan Imami Pour and Seif (2003), a developmental study of thinking styles on school students and university students, and their relationships with creativity and academic achievement, Ph.D thesis, Islamic Azad University, Science and Research Unit, Tehran.
5. Susan Imami Pour and Seif (2003), a developmental study of thinking styles on school students and university students, and their relationships with creativity and academic achievement, Journal of Educational Innovation, volume 3. Second year. Pp. 35-56
6. Omidvar, Benafshe, and Hossein Chari, Masoud. (2008). Studying the relationship between thinking styles and strategies to overcome the stress. Shiraz University. The fourth seminar on students' mental health.
7. Baezat, Fereshte et al. (2009). Comparison of attachment styles of students with behavior disorders and normal. ones, Volume 3, Number 3.
8. Borshan, Adibeh. (2011). The relationship between attachment styles and coherence sense in patients referring to an addiction treatment clinic. Journal of Nazemva Amniat Ejtemaie, No. 3, second year.
9. Burke, Laura. (2009). Developmental psychology. (Translated by Yahya Seyed Mohammadi). Tehran: Arasbaran Publication.
10. Parrott, Thompson, Brown, Douglas. (2004). Psychotherapy and Counseling for Children and Adolescents (Practical application in medical centers and schools). (Translated by Farahi, Hassan). Tehran: Arjmand Publication.
11. Hosseini Hafshjany, Toraj. (2009). The relationship between cognitive styles, thinking styles and achievement motivation, and learning of ICT principles. Master's Thesis in Educational Technology Allameh Tabatabai University.
12. Hamidi, Faride. (2007). Studying the relationship between attachment styles and marital satisfaction in married student secretary. Journal of Family Studies, No. 9.
13. Khoshabi, Ketayoon., and Abohamzeh, Elham. (2007). Attachment theory. Tehran: Danje Publication.
14. Delavar, Ali. (2006). Research methods in psychology and educational sciences. Tehran: Payam Noor University Press.
15. Razavi, Abdolhamid., and Ahmed Ali Shiri. (2005). A comparative study of the relationship between thinking styles of girls and boys studying in high school and their academic achievement. Journal of educational innovations. Number 12, year 12.
16. Sadok, Benjamin, James, and Virjia Alcott Sadook. (2008). Synopsis of Psychiatry. (Translated by FarzinRezaie). Tehran: Arjmand.
17. Sepah Mansour, Mojganet al. (2009). The relationship between attachment styles and conflict resolution strategies of children towards parents. Psychological research, (4), 63-72.
18. Solgi, Zahra. (2011). Studying the relationship between thinking styles and academic achievement. Journal of Ferdowsi University of Mashhad.
19. Seif, Ali Akbar (2008). Educational psychology (Psychology of Learning and Teaching). Tehran: Doran Publication.
20. Shariatmadari, Ali. (1982). Developing the scientific spirit and logical thinking. Tehran: Peyvand Publications.
21. Sadiq, Maryam. (2005). The efficacy of teaching of problem solving in depression reduction of girls escaping from their houses and are now living in welfare centers of Tehran, MA thesis, Allameh Tabatabai University.
22. Abdullah Zadeh, Ali Akbar. (2007). Comparing different types of thinking styles and learning level of the basics of ICT among male and female students of Tehran studying intechinal and vocational schools, Educational Technology Master Thesis, Faculty of Psychology and

- Educational Sciences, Allameh Tabatabai University.
23. Franken, Robert Lee. (2005). Motivation and Emotion. (Translated by Shams Esfandabadi et al). Tehran: NasherNabiPublication.
  24. Ghanbari, Nikzad et al. (2006). The relationship between emotional intelligence and attachment styles with homesickness. Cognitive Science, the 8<sup>th</sup> Year, Number 1.
  25. Farnaz et al. (2006). The effect of thinking styles and gender on and emotional intelligence. Journal of Applied Psychology, 2, 48-36.
  26. Kadivar, Parvin. (2004). Educational Psychology. Tehran: Samet.
  27. Mazrae Shahi, Davood (2005). Studying the relationship between attachment quality and consistency of middle school students. MA Thesis, Islamic Azad University, Central Tehran Branch.
  28. Moslehi, Marziyeh. (2004). Studying the personality status of girls without parents in compare to girls under parental supervision based on MMPI test. Teacher Training College.
  29. Mansour, Mahmoud. (2005). Genetic Psychology. Tehran: RoshedPublication
  30. Nazem, Fatah (2009). Managers' thinking style and its components in Islamic Azad university. Journal for new thoughts in Educational Sciences, fourth year, second edition. Spring.
  31. Van Fanjeh, Ojen. (1995). The art of creative in technology and industry. (Translated by Hassan blessing). Tehran: Amir Kabir Publications.
  32. HashemianNejad, Farideh. (2001). Providing a theoretical framework based on critical thinking curriculum in the elementary school emphasizing curriculum of social studies. Ph.D. Thesis, Islamic Azad University, Science and Research Branch.
  33. Ainsworth, M. D. S. (1967). *Infancy in Uganda: Infant care and the growth of love*. Baltimore: Johns Hopkins University Press.
  34. Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall. (1978). *Patterns of attachment: A Psychological Study of the Strange Situations*. Hillsdale, NJ: Erlbaum.
  35. Ainsworth, M. D. S., & Bowlby, J. (1991). An ethological approach to personality development. *American Psychologist*, 46, 331-341.
  36. Albaili, M. (2007). Differences in thinking styles among low average and high-achieving college students. *Educational Psychology*, 20, 323-339.
  37. Bernardo, A. C., Zhang, L. F. (2002). Thinking styles and Academic Achievement Among Filipino Students, B. I. Carmelo M. *The Journal of Genetic Psychology*, 163(2), 149-163.
  38. Bowlby, J. (1951). Maternal care and mental health. *World Health Organization Monograph* (Serial no. 2.).
  39. Bowlby, J. (1953). Some pathological processes set in train by early mother-child separation. *The British Journal of Psychiatry*, 99(415), 295-272.
  40. Bowlby, J. (1969). *Attachment and loss*, vol: 1: Attachment. New York: Basic Books.
  41. Bowlby, J. (1973). *Attachment and loss*, vol. 2: Separation. New York: Basic Books.
  42. Bowlby, J. (1979). *The making and breaking of affectional bonds*. London: Tavistock.
  43. Bowlby, J. (1980 a). *Attachment and loss*, Vol. 3: Loss, Sorrow and depression. New York: Basic Books.
  44. Bowlby, J. (1982). Attachment and loss: Retrospect and prospect. *American Journal Orthopsychiatry*, 52(4), 664-678.
  45. Bowlby, J. (1980 b). By ethology out of psychoanalysis: An experiment in interbreeding. *Animal Behavior*, 28, 649-656.
  46. Collins, N. L., & Read, S. J. (1990). Adult Attachment Scale, retrieved from: [www.gse.uci.edu/childcare/pdf/Adult%20Attachment%20Scale.pdf](http://www.gse.uci.edu/childcare/pdf/Adult%20Attachment%20Scale.pdf).
  47. Elhammer, D., & Cederblad, M. (2004). Genetic and environmental influence on mothering of adolescents: A comparison of two samples. *Dev Psychol.* 40:335.
  48. Ford, C. (1999). Interpretive style, motivation ability & context as predictors of creative performance. *Black Well Publisher Ltd*, PP. 188-19.
  49. Freud, S. (1955). The Psychogenesis of a case of homosexuality in a woman in S. Strachey (Ed. and Trans). *The standard edition of the complete psychological works of Freud* (Vol. 18, PP. 145-172). London: Hogarth Press. (Original work published 1920).
  50. Grigorenko, E. L., & Sternberg, R. J. (1995). Thinking styles in D. Saklofske & M. Zeidner O (Eds.), *International handbook of personality and intelligence* (PP. 205-230). New York: Plenum Press.
  51. Grigorenko, E. L., & Sternberg, R. J. (1997). Styles of thinking, Abilities and academic performance. *Exceptional Children*, 63(7), 295-312.
  52. Grossmann, K. F., & Grossmann, K. (1990). The wider concept of attachment in cross-cultural research. *Human Development*, 13, 37-47.
  53. Hazen, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*.
  54. Horak, E., Tiot, J. W. Du. (2002). *A study on the thinking styles and academic performance of civic engineering student*. CSIR, Butek, PO Box 395, Portoria, Ovol, South Africa.
  55. Main, M. (1983). Exploration, play and cognitive functioning related to infant-mother attachment, *Infant Behavior and Development*, 6, 167, 174.
  56. Main, M., Kaplan, K., & Cassidy, S. (1985). Security in infancy, childhood and adulthood: A move to the level of representation. In I. Bretherton & E. Waters (Eds.), *Growing points of attachment theory and research, Monographs of*

- the Society for Research in Child Development*, 50(1-2, Serial No. 209), 66-104).
57. Ney, D. S., Ernst, M., & Pine, D. S. (2003). Adolescent immaturity in attention-related brain engagement to emotional facial expressions. *Neuroimage*, 20:420.
  58. Ozer, E. J. (2005). The impact of violence on urban adolescent: Longitudinal effects of perceived school connection and family support. *Journal of Adolescent Research*, 20(2):167-192.
  59. Robertson, J., & Bowlby, J. (1952). Respond of young children to separation from their mother. *Courrier du centre international de l'Enfance*, 2, 131-42.
  60. Salovey, P., Mayer, J. D., & Caruso, D. R. (2000). Emotional intelligence meet traditional standards for an intelligence. *Intelligence*, 27, 267-298.
  61. Sternberg, R. J., & Wagner, R. K. (1992). *Thinking styles Inventory*. Yale University. Unpublished test.
  62. Sternberg, R. J. (1994). Thinking Style: Theory and assessment at the interface between intelligence and personality. In R. J. Sternberg *Cambridge University Press*.
  63. Sternberg, R. J. (1997). *Thinking style*. New York: Cambridge University Press.
  64. Sternberg, R. J. (1998). Mental self-government: A theory of intellectual styles and their development. *Human Development*, 31, 197, 224.
  65. Sternberg, R. J., & Zhang, L. F. (2005). Style of thinking as a basis of Differentiated instruction. *Proquest educational journals*.
  66. Warren, S. L. (1997). Child and adolescent anxiety academy and early attachment. *Journal of The American Academy of Child & Adolescent Psychiatry*, PP 637-644.
  67. Waters, E. (1978). The reliability and stability of individual differences in infant-mother attachment. *Child Development*, 49, 520-616.
  68. Weiss, R. S. (1982). *Attachment in adult life*. In C. M. Parkes & J. Stevenson Hinde (Eds.). *The place of attachment in human behavior* (PP.111-184). New York: Wiley.
  69. Weiss, R. S. (1991). *The attachment bond in childhood and adulthood*. In C. M. Parkes, J. Stevenson-Hind, & P. Marris (Eds.), *Attachment across the life cycle* (PP. 66-76), London: Routledge.
  70. Wolff, P. H. (1998). The orphans of Eritrea: *A comparison Study Journal of child psychology and psychiatry*, 36, 633-644.
  71. Zhang, L. F. & Sternberg, R. J. (1998). Thinking styles, abilities, and academic achievement among Hong Kong university students. *Hong Kong Educational Research Association*, 13, 41-62.
  72. Zhang, L. F. (2001). Do thinking style contribute to academic achievement beyond self-rate abilities? *The Journal of Psychology*, 135(6), 621-637.
  73. Zhang, L. F., & Postiglione, G. A. (2001). Thinking styles, self-esteem, and socioeconomic status. *Personality and Individual Different*, 31, 1333-1346.
  74. Zhang, L. F. (2002 a). The Role of thinking styles in social Development. *Journal of Genetic Psychology*, 136(1), 34-48.
  75. Zhang, L. F. (2002 b). Thinking styles and modes of thinking: Implication for education and research. *Journal of genetic psychology*, 136(3), 254-263.
  76. Zhang, L. F. (2002 c). Thinking styles and cognitive development. *Journal of Genetic Psychology*, 163(2), 179-195.
  77. Zhang, L. F. (2002). Thinking styles and big five personality traits. *Educational Psychology*, 1, PP. 17-31.
  78. Zhang, L. F. (2002). Thinking style and the big five personality traits. *Educational psychology*, Volume 12, number 1, PP. 17-31.
  79. Zhang, L. F. Stenberg, J. R. (2002). Are learning approaches and thinking styles related? A study in two Chinese population. *Journal of psychology*, Vol 34, PP. 464-490.
  80. Zhang, L. F. (2010). Thinking styles: Teaching and learning styles in graduate education students. *Educational Psychology*, 837-848.

5/10/2014