

Comparison of Attachment Styles and Personality Characteristics in Mothers of Normal and ADHD Students

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Article information	Abstract
<p>Article history: Received: 24 Apr 2012 Accepted: 12 May 2012 Available online: 17 Nov 2012 ZJRMS 2014 Sep; 16(9): 22-25</p> <p>Keywords: Attachment styles Personality characteristics ADHD</p> <p>*Corresponding author at: Department of Psychology, Isfahan University, Isfahan, Iran. E-mail: sh.ghalamzan@yahoo.com</p>	<p>Background: The present study has done with the purpose of comparing secure attachment styles and personality characteristics in normal boy student mothers and ADHD students mothers in Isfahan city.</p> <p>Materials and Methods: The present study has done with ex-Post facto method. Two groups of mothers (30 normal students mothers and 30 ADHD students mothers), were selected using cluster sampling method for normal group and simple sampling method for ADHD group. Participants completed the attachment styles of Hazan and Shaver, NEO five-factor Inventory (NEO-FFI), and conners questionnaire. Data was analyzed using multi variance analysis (MANOVA).</p> <p>Results: The results of this study showed that significant differences were evident between normal group and ADHD group in ambivalent insecure and secure ($p < 0.01$); also the results showed that there was a meaningful difference among the neuroticism and conscientiousness in these 2 groups.</p> <p>Conclusion: The results were indicating that in comparison with normal group mothers the ADHD student mothers were more endangered with insecure attachment. It was also important to mention that the ambivalent insecure attachment style was more in the groups with ADHD. The results were also indicating that neuroticism was more in the group with ADHD, and conscientiousness was more the normal group.</p>

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Introduction

Attention deficit/hyperactivity disorder (ADHD) is the most common neuro-behavioral disorder of the childhood period [1]. The majority of these children have problems concerning the attention. These children are also characterized by disability in controlling their impulsive behavior [2]. This disorder is related with a wide range of performance disorders including educational problems, academic failures and having social problems with peers [3]. In general, it can be stated that ADHD is one of the most prevalent causes of children's referrals to psychological and psychiatric centers [4]. ADHD is developed due to various reasons. One of these factors is the social one. One cannot deny the role played by the family as the first educational environment in the development or non-development of behavioral disorders, the emergence of diseases and mental disorders as the family's environment paves the way for personality development and the mental and social balance of an individual [5]. This disorder greatly affects a child and parents-children interaction [6]. Sometimes, the existence of a tension existing in a family leads toward severity of symptoms of this disorder [7]. Thus, it can be stated that these inappropriate relationships and a tension existing between parents and their child occurs as a vicious circle [8]. The studies conducted on this field shows that there is a close relationship between parent's characteristics including their attachment style and the attention deficit/hyperactivity disorder [9]. The type of attachment

between a mother and a child results from the mother's type of attitude, behavior and personality traits from one hand and the mother's interaction with the child on the other hand. This indicates that if a problem happens in the type of the mother's relationship or type of the child's interaction and child's responses to mother's expectations, it may create problems for this relationship. Venijendoron stated that in 80% of the cases, it is possible to also anticipate the children's attachment style by identifying the parents' attachment styles [10]. He believes that secure parents have secure children [11]. Marvin and Cassidy also demonstrated that mothers of secure children usually have a close and intimate relationship with their own child [12]. Vanwagner states that any failure in forming a confident attachment during the life's early months may have negative impacts on one's treatments during childhood and also adulthood [13]. In this regard, in a research, Nofel and Shaver demonstrated that there is theoretically a great and significant relationship and consistency between attachment styles and personality traits; however, attachment styles better anticipate the quality of a relationship than sizes of five important personality traits [14, 15]. In general, the studies show that parents' insecure attachment style causes the development of attachment problems, behavioral disorders, academic problems, memory and learning dysfunctions and a low self-confidence in their children [16]. In fact, developing

secure attachment patterns depends on the sensitivity of parents and responding to these patterns depends on children's inherent tendencies which results in the formation of a self-regulation capacity in them [17, 18]. Parents of children affected by attention deficit/hyperactivity disorder mostly have problems concerning controlling their children's behavior and often have an insecure attachment style [19]. In addition, because of having plenty of behavioral problems in relation with children affected by the attention deficit/hyperactivity disorder, these parents have more parental tensions in comparison with normal children's parents [20]. Out of the fulfilled studies and researches, it may be deduced that mothers of students affected by the attention deficit/ hyperactivity disorder are different from normal students' parents in terms of attachment styles and personality traits. This study was also conducted aiming at reviewing and making a comparison of attachment styles and personality traits of mothers of students affected by the ADHD with mothers of normal students.

Materials and Methods

From the standpoint of methodology, the above research is of descriptive type and the causal-comparative is used among descriptive methods. The research's society consists of all mothers of normal and hyperactive male elementary school students of city of Isfahan who were studying during 2010-2011. The sample required for this study included 60 persons and 30 mothers of normal students were selected by a multi-stage cluster method in such a manner that first of all, one elementary school was selected from each educational district of Isfahan (city of Isfahan has five educational districts) namely, five elementary schools were chosen and after that, five classes were selected out of five elementary schools. Finally, taking the informed consent of parents and the school into account, students' parents were given inventories of attachment styles and personality traits. Then, 30 mothers of the students affected by ADHD who during 2010-2011 referred to psychological clinics of Isfahan were chosen by simple random sampling method. Lastly, parents of students, who achieved more than 1.5 score at Conner's test, filled out attachment styles and personality traits inventories taking ethical considerations into account.

Hazen and Shaver's attachment styles inventory (Adult Attachment Inventory): This inventory measures three secure, insecure and ambivalent attachment styles in adults. This test is comprised of 15 questions in which each style is assessed by 5 questions. The method used for answering this Likert's 5 point scaling test (never: 0, by accident: 1, sometimes: 2; most often: 3, almost: 4). Hazen and Shaver achieved 0.81 as the total retesting reliability of this inventory and using Cronbach's alpha test, they achieved a reliability equal to 0.78. In a

research, Besharat reported the Cronbach's alpha of this test equal to 0.75 [21].

NEO-FFI Personality Traits Inventory: This inventory consists of 60 questions which measures five personality traits of neuroticism, extroversion, openness to experience, agreeableness and conscientiousness. Each trait is measured by 12 questions. In this inventory, the subject is requested to determine the amount of his or her agreement or disagreement on Likert's five point scaling considering his or her own self-perception: (1: completely disagree, 5: completely agree). Mac cera and costa reported the retest's reliability of this test from 0.86 to 0.90 for these five scales [22].

Conner's Inventory: This inventory includes 27 cases and it is used for measuring attention deficit/hyperactivity disorder's symptoms. Scoring this inventory's questions is done by means of Likert's 4 point scaling (from never to most often). In a study conducted by Shahaeian et al. for the purpose of standardization, the reliability coefficient of the retest for the total score of 0.58 and Cronbach's alpha coefficient for the total score of 0.73 were achieved and its validity was verified [23]. For data analysis, both descriptive statistics and inferential statistics were used. Considering the design of research and the type of hypotheses, a multi-variable variance analysis method has been applied and data were analyzed using SPSS-16 software application. The significance level of findings was considered equal to $p \leq 0.05$.

Results

In table 1, the average and standard deviation of two groups of normal children's mothers and hyperactive children's mothers in areas of attachment styles and personality traits are presented. There is a significant difference between attachment styles and personality traits of normal students' mothers and attention deficit/hyperactive students' mothers. As the results of table 2 shows, the difference between the scores of attachment styles of two groups is significant in the secure attachment style and subscales of the ambivalent insecure attachment style and considering Eta-square, from 10 to 25% of differences can be explained.

Table 1. Statistical indices of attachment styles and personality traits hyperactive and normal children's mothers

	ADHD Number (Mean±SD)	Normal Number (Mean±SD)
Secure attachment	30 (81.3±83.14)	30 (10.80±3.24)
Insecure attachment	30 (72.3±23.6)	30(39.4±8.06)
Ambivalent attachment	30 (78.3±80.5)	30(80.3±8.33)
Neuroticism	30 (87.7±80.30)	30 (56.6±38.23)
Extroversion	30 (49.5±30.40)	30 (43.8±37.76)
Openness to experience	30 (45.3±66.37)	30 (62.5±36.26)
Agreeableness	30 (20.4±93.42)	30(46.4±45.83)
Conscientiousness	30 (37.6±56.46)	30 (71.10±53.44)

Table 2. The results of multi-variable variance analysis (Manova) of attachment styles and personality traits of normal and hyperactive children's mothers

	Total of squares	Square's average	F-statistics	p-Value	Eta	Test's power
Secure attachment	244.01	244.01	19.46	0.01	0.25	0.99
Insecure attachment	50.41	50.41	3.04	0.08	0.05	0.4
Ambivalent attachment	96.26	96.26	6.68	0.01	0.10	0.82
Neuroticism	828.81	828.81	15.76	0.01	0.21	0.97
Extroversion	77.06	77.06	1.52	0.22	0.02	0.22
Openness to experience	29.40	29.40	1.34	0.25	0.02	0.20
Agreeableness	126.15	126.15	6.70	0.01	0.10	0.82
Conscientiousness	62.01	62.01	0.79	0.37	0.01	0.14

Also, the power of the test indicates the sufficiency of the sample's volume. However, the difference of two groups is significant in the avoidant insecure attachment's subscale. The second hypothesis of the study states that there is a significant difference between personality traits of normal students' mothers and personality traits of mothers of students affected by the attention deficit/hyperactivity disorder.

The difference between both groups' scores of personality traits in subscales of neurosis and agreeableness is significant at $p=0.01$ based upon data of table 2. In other words, it can be stated that there is a significant difference between both groups' personality traits with respect to subscales of neurosis and agreeableness and between 10 to 21% of differences can be explained in view of the eta-square and the test's power indicates the sufficiency of the sample's volume. However, the difference of both groups is not significant concerning personality traits of extroversion, openness to experience and agreeableness.

Discussion

The study was conducted aiming at studying and comparing attachment styles and personality traits of normal students' mothers and mothers of children affected by the attention deficit/hyperactivity disorder. The first hypothesis states that there is a difference between attachment style of normal students' mothers and mothers of children affected by attention deficit/hyperactivity disorder. Results of the research demonstrate that the attachment style of mothers of children affected by the attention deficit/hyperactivity disorder is more of an ambivalent insecure type in comparison with normal children's mothers. These findings are explainable using theoretical basics of the research. In a research conducted by Kissgen et al., the relationship between a mother's attachment styles and the attention deficit/hyperactivity disorder in children was reviewed. Results showed that the evident increase of referrals to centers depends on the low prevalence of secure attachment and also the increased avoidant insecure attachment of mothers [23].

In other research, Cormier reported that parents of children affected by the attention deficit/hyperactivity disorder are faced with the problem of controlling the behavior of their child and most often they have avoidant insecure attachment style [19]. Taking findings of various studies into account, it seems that children, adolescents

and young people with special needs undergo many types of misbehavior due to having more limitations than the other people. In such individuals' families, birth of a child affected by specific disabilities bears the parents a burden of mental pressures which results in disturbing their piece and their adaptability in life [24, 25]. Therefore, matters such as the child's temperament, defective and unfledged dependency, attachment styles of parents and the lack of parent's educational skills have an important affect on the relationship of parent-child. Developing a natural attachment between a mother and her child will lead toward the child's overall health including his or her mental health. On the other hand, the lack of a suitable attachment between a mother and a child may bring about growth's negative consequences for both the child and the society, as it can even lead to subsequent psychiatric problems [26]. The second hypothesis of the research states that there is a difference between the personality traits of normal children's mothers and mothers of children affected by the attention deficit/ hyperactivity disorder. The results of the research demonstrate that the significant difference between two neurosis and agreeableness groups is evident. These findings are explainable by theoretical basics of the research. Maunder and Panzer reported that the mother-child's relationship is considered as an important and effective factor for a child's health [25]. Allen et al. in an extensive research studied personality traits in a mother-child's relationship. They studied a large group of children out of various socio-economic samples. Results indicated that the type of mother-child's relationships and the level of mother's protection and support effective affected the mental health of a child. In other words, a child's mental health depends on his/her mother's personality traits [26]. In another research, Nofel and Shaver showed that there is a theoretically great and significant relationship and consistency between attachment styles and personality traits; however, attachment styles anticipate the quality of relationship better than sizes of five great personality traits [14].

Results of the research also show a difference between attachment styles and personality traits of students affected by ADHD in comparison with mothers of normal students. Today, the attachment style of parents (the spouses) and their psychological traits is one of the most important psychological characteristics studied in the counseling and family therapy which has a crucial and fundamental role in the stability and sustainability of a family. On the other hand, the parent-child interaction is

also important concerning the growth of children as it affects mental, social and educational performances of a child. Since mothers of children affected by the attention deficit/ hyperactivity disorder are faced with several challenges in comparison with normal children's mothers, it can be stated that this, by itself, leads toward the formation of more psychological problems in a mother. In other words, the presence of a child who is affected by ADHD results in mothers' anxiety and depression. The existence of this anxiety has a negative impact on behaviors, emotions, thinking, physical health and social relationships of the mother with other people including her own child. In general, the research's results show that attachment styles and personality traits of a mother can anticipate mental disorders in children including those affected by ADHD. The research has also some

limitations including impossibility of arriving at a conclusion concerning causal-comparative studies, the gender of students and selecting the research's sample; however, it is recommended that taking a disorder's type, gender, age and also demographic attributes into consideration, this research can be conducted concerning mothers of all other children affected by psychiatric disorders.

Authors' Contributions

All authors had equal role in design, work, statistical analysis and manuscript writing.

Conflict of Interest

The authors declare no conflict of interest.

Funding/Support

Isfahan University.

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Please cite this article as: Ghalamzan S, Moradi M. Comparison of attachment styles and personality characteristics in mothers of normal and ADHD students. *Zahedan J Res Med Sci*. 2014; 16(9): 22-25.