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The Effect of Cognitive-Behavioral Training Of Mother- Child Relationship on Reducing Obsessive-Compulsive Symptoms in Children

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#### ABSTRACT

The studies conducted in recent decades on the effects of attachment-based relationships and the way of training caregivers and its effects have shown that parenting style and the quality of parent-child relationship has a significant role in the formation of anxiety in children. The purpose of this study is investigating the efficacy of cognitive-behavioral training of mother-child relationship on reducing obsessive-compulsive symptoms in children. In an experimental clinical study, available sampling method was used to collect 30 mothers whose children had been diagnosed to have obsessivecompulsive disorder based on DSM-IV-TR criteria, as sample. Then, they were randomly assigned to an experimental group which received intervention and cognitive-behavioral training on mother-child relationship without the presence of their children in 12 two-hour sessions and a control group which received no intervention. Yale-Brown scale was used before the course, after completing the course, and 30 days later in both groups in order to compare the results. The collected data were then analyzed by using SPSS 20 software and the analysis of variance with repeated measures. The experimental and control groups were significantly different in their pretest, posttest, and follow up scores, which means oppressive-compulsive thoughts and actions of the experimental group reduced in terms of time, interference, resistance, and control. cognitive-behavioral training on mother-child relationship has been effective in reducing the symptoms of obsessive behavior in children.

Keywords: Obsessive-Compulsive Disorder, Cognitive-Behavioral Training, Mother, Child.

#### **INTRODUCTION**

Anxiety and anxiety disorders are among symptoms in children that could affect all stages of life. The studies conducted on normal and clinical samples

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reveal that obsessive-compulsive disorder (OCD) is one of the most common psychological disorders in childhood<sup>1</sup>. The symptoms of OCD in children grow over time and mostly become chronic. The disorder gets worse in times of stress, disease, or changes in life. 40% of children with obsessive-compulsive disorder still have this diagnosis up to 15 years after the onset of symptoms<sup>2</sup>.

Various factors are involved in causing obsession including biological factors, psychological factors, and environmental factors. Among these factors, family factors have been reported as one of the strongest predictors of obsession in children<sup>3</sup>. Some researchers believe the character of the parents and relatives of children with -compulsive disorder has a role<sup>4</sup>. There is evidence that shows parents who have properties such as having too much support, high expectations, and high sensitivity have children with high levels of symptoms of obsession and anxious thoughts<sup>5</sup>. Uncertainties of parents, as well as the existence of strict regulations and disciplines have significant impact on children's anxiety<sup>6</sup>. Incorrect interaction of parents with children and parental anxiety can cause children to feel unsafe and lose their ability to face risky situations<sup>7</sup>. The parents of children with obsessive behavior behave like the parents of children with other anxious patients<sup>8</sup>. Wrong interaction of parents with their children exacerbates their obsessive-compulsive symptoms and if this interaction is with criticism to obsession symptoms, the intensity or frequency of obsessive behavior increases<sup>9</sup>. According to some research studies, the group with obsession benefitted from less emotional support and intimacy compared to the control group. Conflict is an important phenomenon in such families. All of these play the role of facilitator in deteriorating the conditions of people with obsessive-compulsive disorder 10.

Given that behavioral training on parent-child interaction is one of the most common and successful approaches in relation to disruptive behavior of children and most parents are satisfied with these programs<sup>11</sup>, and considering the fact that family and the quality of family ties can predict future behavior of children, this study aims at investigating the effect of cognitive-behavioral training of mother-child interaction on reducing the symptoms of OCD in children.

#### **METHODOLOGY**

The method of the present study is experimental with pre-test, post-test, and follow-up stages. The population of this study consists of all mothers with children between 6 to 12 years old who suffered from obsession and referred to Khorshid Hospital and Golestanezendegi psychological and counseling center in Isfahan. To collect the sample, available sampling method was used and 30 mothers whose children had been diagnosed to have obsessive-compulsive disorder through interviews with psychotherapist, based on DSM-IV-TR criteria, were chosen as sample. after justification of the objective of the study and filling a consensus form, 15 mothers were randomly assigned to the experimental group and received intervention and cognitive-behavioral training about mother-child relationship without the presence of their children in 12 two-hour sessions. The other 15

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mothers were assigned to the control group and received no intervention. Yale-Brown scale was used before the course and after completing the course in both groups in order to compare the results. 30 days after completion of the course, the scale was used again for follow up investigations. Children Inclusion criteria were: being between 6 to 12 years old, being diagnosed with obsessive-compulsive disorder, consensus of mothers for participation in treatment and the study. Mothers' exclusion criteria were having more than 2 absences in treatment sessions and having an educational degree of at least diploma.

In order to assess and score the symptoms of obsessive-compulsive disorder in children, Yale-Brown scale was used. The scale was first designed in 1989 to measure and score obsessive-compulsive symptoms in children and adolescents between 6 and 17 years old<sup>12</sup>. The test has two separate lists for assessment of obsessive thoughts and actions. Reliability coefficient of the scale has been estimated 0.91 by Cronbach's alpha and the correlation between the two halves is 0.85 <sup>12</sup>. This questionnaire has been normalized in Iran by Mozaffari and Abedi. The validity of the scale is proved by evidence such as high correlation between its micro-scale tests in the past and present<sup>13</sup>. Research has shown that the scale has good reliability and validity<sup>14, 15</sup>. Group training of mothers was designed and run in 12 two-hour sessions using Abedi and Panson Vostanis's method<sup>16</sup>.

Table 1. The specifications of the sessions are provided

First session	Changing the lifestyle of mother and family members: exercise, sleep hygiene, and					
	proper nutrition					
Second session	Increasing joint family activities such as playing games, having fun and					
Third session	Behavior modeling of non-compulsive Esfahan children for the mothers through film.					
Fourth Session	Teaching parental methods; identifying and reducing stress levels in different age periods.					
Fifth Session	Teaching parental methods and the way to deal with children with obsessive-compulsive behaviors: playing the role of a spectator and reinforcing positive behaviors without paying attention to compulsive behaviors and punishing compulsive behaviors.					
Sixth Session	Emphasizing the role of environment in raising children's spirit and mood: trying to meet physical needs of children and increasing social relationships of family members					
Seventh session	Reviewing the best method of child raising: giving unconditional acceptance and love to children.					
Eight session	Investigating the factors contributing to obsession using a cognitive-behavioral model, making a list of things to avoid, and repetitions.					
The ninth to eleventh sessions	Intervention in factors of obsessive disorder including thought control, high risk, responsibility, not showing compulsive behaviors by mothers in the presence of children, and extraction of security-seeking behaviors of mothers and reducing them.					
Twelfth Session	Evaluation of Preventive pattern: not showing compulsive behaviors in the presence of children and paying attention to warning signs and relapse prevention.					

#### **RESULTS**

To analyze the data, descriptive and inferential statistical methods were used. This research has been conducted through pretest, posttest, and follow up. Data obtained from different stages were analyzed using SPSS 20 software and the analysis of variance with repeated measures.

		Control group			Experimental group		
	Variable	Retest	Posttest	Pretest	retest	posttest	pretest
		M±SD	M±SD	M±SD	M±SD	M±SD	M±SD
thought	Time	3.33±0.81	3.27±0.88	3.07±1.03	2.6±0.91	2.66±0.81	3±0.84
	Interference	3.6±0.63	3.47±0.91	3.2±1.08	0.74±2.86	2.86±0.74	3.06±0.79
	Sadness	3.2±0.94	3.07±1.1	3±1.19	2.53±1.12	2.83±1.12	2.73±0.09
	Resistance	3.67±0.72	3.33±1.05	2.93±1.16	3.06±0.88	2.06±0.88	3.2±0.94
	Control	3.53±0.99	3.53±1.91	3.4±1.12	3.2±0.94	3.26±0.96	3.4±0.98
	Total	17±2.87	16.53±4.02	5.05±15.6	14.27±3.49	14.4±3.39	15.4±3.24
Actions	Time	3.47±0.74	3.53±0.74	3±1	3.2±0.77	3.2±0.77	3.33±0.81
	Interference	3.47±0.76	3.47±0.91	3.13±1.12	3.26±0.7	3.26±0.7	3.6±0.63
	Sadness	3.47±0.92	3.4±1.05	3.27±1.1	2.86±1.12	2.8±1.2	3.13±1.12
	Resistance	3.67±0.73	3.67±0.72	3.33±1.04	2.3±0.67	3.13±0.74	3.4±0.73
	Control	3.53±0.98	3.53±0.98	3.2±1.2	3.4±0.73	3.53±0.63	3.6±0.61
	Total	17.6±3.31	17.06±3.68	15.93±4.98	15.93±2.21	15.93±2.28	17.13±2.2

The results of data analysis showed the mean of all subscales of Yale-Brown test of the experimental group in pretest, posttest, and follow up stages has decreased compared to that of the control group. In Table 2, using repeated measures analysis, the mean scores of both groups in subscales of Yale-Brown test were analyzed.

**Table 2.** The sum of the results of variance analysis with repetitive measures of pretest, posttest, and follow up in the experimental and control groups

Variable		significance	Df	F	Mean of squares	Sum of squares
Thoughts	Time	0.001	2	8.64	0.93	1.86
	Interference	0.003	2	6.55	0.74	1.48
	Sadness	0.017	2	4.4	0.31	0.62
	Resistance	0.036	2	3.54	0.47	0.95
	control	0.009	2	5.15	0.31	0.62
Actions	Time	0.01	2	5.01	1.01	2.02
	Interference	0.006	2	5.6	1.21	2.22
	Sadness	0.02	2	1.62	0.54	1.08
	resistance	0.013	2	4.7	0.81	1.62
	Control	0.02	2	3.78	0.74	1.48

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At the level  $^{\alpha}$  <0.05, the observed F shows significant differences in the control and experimental groups in pretest, posttest, and follow up stages for all the variables, which means obsessive compulsive thoughts and actions of the experimental group has decreased. Based on the results obtained, cognitive-behavioral training of mother-child interaction has been effective in reducing the symptoms of OCD in children.

#### **CONCLUSION**

The aim of this study was to evaluate the efficacy of training cognitivebehavioral relationship between mother and child on reducing obsessivecompulsive symptoms in children. According to the results, teaching cognitivebehavioral relationship between mother and child is effective in reducing OCD symptoms.in obsessive thoughts, based on the mean scores presented in table 1, this effect is felt more strongly in the duration of time the children's mind is busy with obsessive thoughts. In obsessive actions, the training has decreased the level of sadness (feeling guilty) and the interference of obsessive behaviors in routine activities of the children while it has increased their resistance against obsessive behavior. However, since the domains of time and controlling obsessive actions require direct intervention by the therapist, based on the results of Table?, no significant change is seen in average scores of these. This finding is consistent with the results of studies which generally emphasize on the effectiveness of interventions, cognitive-behavioral family therapy in reducing behavior problems of children<sup>17</sup> and depression in adolescents<sup>18</sup>. The results of this study are also consistent with the studies that specifically consider family - based treatments effective in reducing OCD symptoms in children 19. In a study, children with obsessive behavior showed 80% improvement after receiving family cognitivebehavioral training<sup>20</sup>. In another study, significant decrease was reported in the symptoms of obsession in children through involving the families in the process of treatment<sup>21</sup>.

In addition to the studies which consider family-based cognitive-behavioral therapy effective in the treatment of anxiety disorders<sup>22</sup>, the results of this study are also consistent with the studies which emphasize on the effect of attachment-based therapy on preventing exacerbations of symptoms<sup>3</sup> as well as the studies which consider family-based cognitive-behavioral therapy more effective than sole cognitive-behavioral therapy in reducing anxiety<sup>22</sup>.

In addition, the results of the present study are consistent with some studies which say 70% of children who receive family-based therapy show no signs of obsessive behavior after a 24-month follow up<sup>24</sup>. Reduced obsession in children with cognitive-behavioral training on mother-child relationship can be justified in different ways. Mothers showed more sympathy to their children, reduced their blaming, and reduced their children's feeling of guilt when they changed their view

about obsessive behavior of their children. They learnt some behaviors are natural response to a stimulus and they also learnt how a simple behavior can change to a habit. As a result of trainings, the relationship between mothers and children changed. Active games were added to the lifestyle of such children, and mothers learnt to play a passive role toward inappropriate behavior, which means mothers stopped growling, advising, comparing, and judging their children and tried to encourage positive behavior of them regardless of their obsessive behavior.

In addition, mothers' level of expectations (such as writing beautifully and observing discipline) decreased in this new relationship. When mothers became familiar with characteristics such as sensitivity, perfectionism, and conscientious in their children, they realized the role of these characteristics in excessive responsibility. Then, they questioned some training methods mentioned in books, schools and so on which emphasize the importance of discipline and hygiene. They learnt in choosing the method of upbringing, physical, mental, and personality features of the child should be taken into account. It seems the changes occurred in child-parent relationships have reduced children's mental pressure and the length of time obsessive thoughts attack them. In addition, appropriate mother-child relationship has reduced the sadness of children after having obsessive behavior, has increased their tendency of children to resist against such behaviors, and has decreased the level of interference of obsessive actions in daily activities of children.

### Limitations and recommendations

Limitations of this study include: limitation of the population, which makes generalization difficult; and the constraints in controlling the variables that can be involved in the signs of OCD in children such as parental psychological disorders. In addition, the present study just had one follow-up test done one month after the end of the treatment; therefore, we should be cautious about judging long-term outcomes of the treatment. It is suggested that the same study should be done on other age groups. Also, given that in the present study, group training was conducted, it is recommended that the same method should be used in case studies. Adding variables such as parental psychological disorders and socioeconomic status of families can be fruitful for the development of more efficient treatments. It is also advisable to involve fathers as well as mothers in treatment in next studies and the effects be investigated. Finally, several follow-up tests can be used after treatment to examine long-term effects.

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#### REFERENCES

- 1. Kashani, J. H., Orvaschel, H., Rosenberg, T. K., Reid, J. C. (1989). Psychopathology in community sample of children and adolescents: A developmental perspective. *Journal of American Academy of Child and Adolescent Psychiatry*, 28: 701-706.
- 2. Stewart, S. E., Geller, D. A., Jenike, M. A., Pauls, D., Shaw, D., Mullin, B., Faraone, S. V. (2004). Long term outcome of pediatric obsessive compulsive Disorder: A Meta-Analysis and Qualitative Review of the Literature. *Acta Psychiatrica Scandinvica*, 110(1): 4-13.
- 3. Rezvan, S. h. (2011). Attachment-Based Intervention And Cognitive Processing Based On Structural Equations Model Of Related Variables And The Study Of The Effective Of This Model On Obsessive Compulsive Symptoms And Cognitive Bias In 10-12 Girl Children In Esfahan .Ph.D. 2011. Esfahan University. [Persian]
- 4. Hettema, J. M., Neals, M. C., Kendler, K. S. A. (2001). Review and meta-analysis of the genetic epidemiology of anxiety disorders. *American Journal of Psychiatry*, 158: 1568-1578.
- 5. Barrett, P. M., Healy-Farrell, L., Piacentini, J., March, J. S. (2004). Obsessive-Compulsive Disorder in childhood and adolescence: Description and treatment. *Handbook of interventions that work with children and adolescents*, 187–216.
- 6. Cartwright-Hatton S, McNally D, White C. (2005). A New Cognitive Behavioral Parenting Intervention for Families of Young Anxious Children: A Pilot Study. *Behavioral and Cognitive Psychotherapy*, 33: 243-247.
- 7. Gallagher B, Cartwright-Hatton S. (2008). The Relationship between Parenting Factors and Trait Anxiety: Mediating Role of Cognitive Errors and Meta Cognition. *Journal of Anxiety Disorders*, 22: 722-733.
- 8. Salkovskis, P., Shafran, R., Rachman, S., Freeston, M. H. (1999). Multiple Pathways to Inflated Responsibility Beliefs in Obssessional Problems: Possible Origins and Implications for Therapy and Research. *Behavioral Psychotherapy*, 37: 1055-1072.
- 9. Steketee G. (1993). Social Support and Treatment Outcome of Obsessive Compulsive Disorder at 9-Month Follow-Up. *Behavioral Psychotherapy*, 21: 81-95.
- 10. Zadegholi, H., Birami, M., Farnam, A. R., Eimani, M., Pirzadeh, J. (2010). The Comparison Familial Functioning Of Patients with Obsessive-Compulsive Disorder and Healthy Individuals. *The Journal of Medicine*, 21(4): 354-360. [Persian]
- 11. Self-Brown, S., Fredrick, K., Binder, S., Whitaker, D., Lutzker, J., Edwards, A., Blankenship, J. (2011). Examining the Need for Cultural Adaptations to an Evidence-Based Parent Training Program Targeting the Prevention of Child Maltreatment. *Childeren and youth. Services Review*, 33(7): 1166-1172.
- Goodman, W. K., Price, L. H., Rasmussen, S. A., Mazure, C., Fleischmann, R. L., Hill, C. L., Heninger, G. R., Charney, D. S. (1989). The Yale-Brown Obsessive-Compulsive Scale: I. Development, Use, and Reliability. *Archives of General Psychiatry*, 46: 1006-1011.
- 13. Mozafari, M., Abedi M. R. (2003). Norming Yale-Brown Obsession Compulsion Scale for Children II to Select OCD Students in Esfahan in 2002-2003. *A research plan in Education in Esfahan*. [Persian]
- 14. Schahill, L., Riddle, M. A., McSwiggin-Harding, M., Ort, S., King, R. A., Goodman, W. K., Cicchetti, D., Leckman, J. F. (1997). Children's Yale-Brown Obsessive Compulsive Scale: Reliability and validity. *Journal of American Academy of Child and Adolescent Psychiatry*, 36: 844-852.
- 15. Storch, E. A., Murphy, T. K., Geffken, G. R., Soto, O., Safid, M., Allen, P., Roberti, J. W., Killiany, E. M., Goodman, W. K. (2004). Psychometric Evaluation of the Children's Yale-Brown Obsessive Compulsive Scale. *Psychiatry Research*, 129: 91-98.

- 16. Abedi, M. R., Vostanis, P. (2010). Evaluation of Quality Of Life Therapy for Parents of Children with Obsessive—Compulsive Disorders in Iran. *European Child Adolescent Psychiatry Journal*, 605-613.
- 17. Glading, S. (2003). Family therapy: Theory, History and Application. Translated by Bahari F. et al. Tehran: Tazkiyeh. [Persian]
- 18. Curry, J. F., Wells, K. C., Loch Man, J. E., Craighead, W. E., Nagy, P. P. (2001). Group and Family Cognitive Behavior Therapist for Adolescent Depression and Substance Abuse. *Cognitive and Behavioral Practice*, 367-376.
- 19. Rynn, S., Diamond, G. S. (2005). Cognitive Behavioral and Attachment Based Family Therapy for Anxious Adolescents. *Journal of Anxiety disorders*, 19: 361-381.
- 20. Storch, E. A., Geffken, G. R., Merlo, L. J., Mann, G., Duke, D., Munson, M., et al. (2007). Family-Based Cognitive-Behavioral Therapy for Pediatric Obsessive-Compulsive Disorder: Comparison of Intensive and Weekly Approaches. *Journal of the American Academy of Child and Adolescent Psychiatry*, 46: 469-478.
- 21. Grunes, M. S. (1999). Family Involvement in the Behavioral Treatment of Obsessive-Compulsive Disorder. *Dissertation Abstract International*. *University o Microfilms International*, 59(9): 65-83.
- 22. Pirjalilian, M. (2006). *The Abstract Articles of the 2th Congress of Family Pathology in Iran*. Shahid Beheshti University .Tehran: Evin Pub.[Persian]
- 23. Northey, W. F., Wells, K. C., Silvermen, W. K., Wailey, C. E. (2003). Childhood Behavioral and Emotional Disorders. *Journal of Marital and Family Therapy*, 29: 523-545.
- 24. Barret, P. M., Healy Farrell, L., March, J. S. (2004). Cognitive-Behavioral Family Treatment in Childhood Obsessive- Compulsive Disorder: A Controlled Trial. *Journal of American Academy of Child and Adolescent Psychiatry*, 43: 46-62.