

The Effectiveness of Barkley's Parenting Training Program on Resiliency and Life Quality of Mothers of Children with Attention Deficit/Hyperactivity Disorder in Isfahan

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Abstract

This study aims to determine the effectiveness of parental education based on Barkley's approach on the resilience and quality of life of mothers of children with hyperactivity disorder (ADHD) in Isfahan. The research method is semi-experimental, with pre-test-post-test design and with two groups of experimental and control. The statistical population of this study was all mothers with children aged 7-12 years who referred to counselling centers in Isfahan. Among them, 34 mothers whose children received higher scores in the Conner's Questionnaire (Parent Form), were selected as sample individuals and randomly assigned to two experimental and control groups (each group of 17). In this design, the experimental group was exposed to interventions during eight 90-minute group sessions under parental guidance based on Barkley's approach. There was no intervention in the control group. The instrument for collecting data was Conner & Davidson Resiliency Questionnaire and SF-36 Quality of Life Questionnaire. The results showed that Barkley's-based parenting education increased the resilience and increased life quality of the experimental group compared to the control group ($p < 0.01$). Also, parental education in Barkley's approach increased all components of resilience and improved quality of life components (except for three components of role disorder due to emotional health, social function and pain) of mothers with ADHD children ($p < 0.01$). As well as parental education based on Barkley's approach to improve two dimensions of physical health and mental health of quality of life in mothers with ADHD children was effective ($p < 0.05$).

Keywords

Barkley Parenting, Resiliency, Quality of Life, Hyperactivity Disorder, Attention Deficit

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1. Introduction

The family environment is one of the main factors in the formation of the child's personality and the first seed of the development of the individual and the foundation of the personality of the person. In most cases, the child is the parent's mother and their behaviour [2]. Most emotional and behavioural disorders are due to lack of attention during childhood sensitive periods; this neglect leads to a lack of

accommodation with the environment and emotional and behavioural problems for the child [4]. The presence of a child with ADHD (due to the particular behavioural problems of these children) for mothers who are more likely to be affected by children than children with other children is a source of tension and affects their mental health and compatibility. [1]. Attention Deficit/Hyperactivity Disorder is the most common neurodegenerative disorder during childhood [3], of which 7 percent of children and 3 percent of adults have been reported [5]. DSM-5 has defined ADHD as

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a developmental disorder which manifests in three domains; combined, dominantly inattentive and dominantly hyperactivity-impulsive, and has defined specific symptoms for its diagnosis and differentiation [1]. In the meantime, the influence of the family on the growth process is very evident; parenting is not an easy task. The condition of children with hyperactivity disorder causes the mothers to feel weak and inferior to their parental role and thus experience low levels of relief [4]. Resilience is an important concept of positive psychology and refers to the dynamic process of positive matching with bitter and unpleasant experiences [7]. Conner also defined survival as a way of measuring one's ability to deal with stressors and factors that threaten the mental health of the individual [4]. Considering that resilience is considered as a two-dimensional concept of grave importance and positive adaptation, resilience can affect the quality of life and its dimensions. Therefore, in addition to life responsibilities, the role of care and education of the affected child can affect the quality of life of the mothers of these people [5]. Quality of life is defined as the result of the interaction between the personality of individuals and the continuity of events of life, and the events of life occur in a multidimensional set of domains of life such as freedom, knowledge, economics, social relations, security, religion, environment and recreation. And the quality of life affects the whole of the constituent parts of life [3]. It is evident that these problems for parents and families cannot be documented for attention deficit hyperactivity disorder - a lack of direct attention to this issue. But there is strong evidence that the burden of taking care of these children on parental parents distorts the parental normal process that negatively affects their educational performance [11]. Hence, attention to psychosocial treatments such as parental behavioural training has been highly regarded due to its unique characteristics. In clinical behavioural therapy in the form of parental education, modest behaviour is done in the home and by the parent. Also, this type of treatment increases the various aspects of parental and family functioning, and in the light of new information that parents find in their treatment of their child's problems, they can better support and support their child's treatment. [3]. and parent-parenting relationships in these families have improved considerably [16].

2. Method

The design of the present research is applied in terms of its purpose and in terms of data collection method it is a part of experimental studies. The research design is a semi-experimental and pre-test-post-test with control group.

Statistical Population

The statistical population of this study was all mothers with children aged 7 to 12 years old who referred to Isfahan counselling centers, which have been diagnosed as ADHD.

In this study, 45 children aged 7 to 12 years who were diagnosed with a child and adolescent psychiatrist with attention deficit hyperactivity disorder (ADHD) were selected. The Conner's questionnaire (parental form) was completed by the mothers of the 45 infected children. Subsequently, 34 children with attention deficit hyperactivity disorder (ADHD) who scored higher were selected. The mothers of these 34 children were selected as random samples and randomly divided into two groups (17 in the experimental group and 17 in the control group).

Research tool

Two questionnaires were used to collect information in this research:

(1) Conner & Davidson Resiliency Questionnaire

This scale is provided by Conner and Davidson (2003) by reviewing the research resources from 1991 to 1979 to measure the power of coping with pressure and tension. Conner and David Sowing's resonance scale contains 25 questions. For each question, the grading spectrum is considered to be five (completely incorrect to always correct) grading from zero (totally incorrect) to four (always correct).

(2) Quality of Life Questionnaire

Many questionnaires have been devised for assessing quality of life, most notably the Quality of Life Questionnaire (SF-36 questionnaire), a form 36 phrases designed by Weir and Sherborne in 1992 in the United States. The quality of life questionnaire has proved its worth for clinical use, health policy assessment, and public health research and studies.

(3) Conner's Parents Rating Scale

This test was developed by Kate Conner's (1960). The distinction between normal children and children with behavioural problems is regulated.

Initially, questions from this test were obtained through the unofficial collection of information from parents who referred their children to the Hopkins University Center. In the 1970s, according to this information, a 93-item parental rating was provided by Connor.

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Data analysis tool

Descriptive statistics (frequency tables, percentage, mean)

and inferential statistics were used to analyze the data. Before performing the tests, the data were normalized using the Kolmogorov–Smirnov test t. And because the data were

normal, parametric tests (covariance analysis) were used. SPSS software was used for statistical analysis.

3. Result

Table 1. Mean and standard deviation of quality of life components before and after parental education in Barkley.

Time measurement	Variable	Control group		examination Group	
		Average	standard deviation	Average	standard deviation
pre-exam	Physical function	40.00	19.27	34.67	27.68
	Disorder Role Due to Physical Health	50.00	25.00	50.00	34.07
	Disruptive role due to emotional health	60.00	31.37	55.56	39.17
	Energy / fatigue	52.33	11.16	49.00	19.10
	Social function	54.17	21.48	64.17	14.84
	the pain	58.83	12.85	57.50	32.92
	general health	54.00	12.85	47.00	17.09
	Emotional well-being	54.67	15.98	51.71	18.46
	Physical health	202.83	41.93	189.17	57.29
	mental health	221.17	51.32	221.89	58.02
Post-test	Quality of Life	424.00	77.31	410.29	92.58
	Physical function	36.07	11.12	19.00	16.28
	Disorder Role Due to Physical Health	58.93	31.9	26.67	34.68
	Disruptive role due to emotional health	55.56	20.57	31.11	36.66
	Energy / fatigue	53.33	12.34	36.67	17.49
	Social function	48.33	21.58	70.00	16.23
	the pain	55.00	20.13	69.50	26.29
	general health	53.33	11.29	31.67	9.00
	Emotional well-being	50.13	12.64	38.67	15.39
	Physical health	202.88	44.68	146.83	45.39
mental health	207.36	38.35	176.44	55.82	
Quality of Life	413.91	74.48	323.28	78.08	

Default checking Normal:

The results of the assumption of the normalization of the components of the quality of life of mothers are as follows:

Table 2. Results of the assumption of the normalization of the components of the quality of life of mothers.

Variable	Time of study	Kolmogorov-Smirnov test	
		Z Statistics	Significance level
Physical function	Pre test	0.742	0.641
	After the test	0.690	0.728
Disorder Role Due to Physical Health	Pre test	1.095	0.181
	After the test	1.067	0.205
Disruptive role due to emotional health	Pre test	1.047	0.223
	After the test	1.473	0.026
Energy / fatigue	Pre test	0.613	0.847
	After the test	0.477	0.977
Social function	Pre test	1.115	0.166
	After the test	1.064	0.208
the pain	Pre test	0.467	0.981
	After the test	0.431	0.992
general health	Pre test	0.619	0.838
	After the test	0.730	0.661
Emotional well-being	Pre test	0.864	0.444
	After the test	0.695	0.719
Physical health	Pre test	0.650	0.792
	After the test	0.752	0.624
mental health	Pre test	0.538	0.935
	After the test	0.536	0.936
Quality of Life	Pre test	1.030	0.239
	After the test	0.557	0.916

Table 3. The Definitive Analysis of the Uniqueness of Group Variations Using Levin's Test.

Scale	sub scale	Levine test			
		F statistics	df1	df2	Significance level
Quality of Life	Physical function	0.127	1	28	0.725
	Disorder Role Due to Physical Health	0.347	1	28	0.561
	Disruptive role due to emotional health	0.081	1	28	0.778
	Energy / fatigue	4.097	1	28	0.054
	Social function	0.013	1	28	0.910
	the pain	0.834	1	28	0.370
	general health	1.153	1	28	0.293
	Emotional well-being	1.548	1	28	0.225
	Physical health	0.225	1	28	0.639
	mental health	0.732	1	28	0.400
Resilient	Quality of Life	0.314	1	28	0.580
	The idea of individual competence	1.017	1	28	0.322
	Trust in individual instincts-Tolerance of negative emotions	0.588	1	28	0.449
	Positive acceptance of change and safe relationships	0.809	1	28	0.376
	Control	1.789	1	28	0.192
	Spiritual Effects	0.185	1	28	0.671
	Resilient	2.616	1	28	0.117

Table 4. Results of covariance analysis on the effect of Barkley-based parenting education on the quality of life of ADHD mothers with pre-test control.

Variable	Average squares	Degrees of freedom	F statistics	Significance level	Statistical power	Beta
The quality of life before the test	42325.367	1	9.323	0.005	0.834	0.466
Treatment	46246.984	1	10.187	0.004	0.865	-83.06
Error	4539.827	24				

Table 5. Analysis of Multivariate Covariance in Assessing the Effect of Barkley-based Parenting Education on Quality of Life in Mothers with Hyperactivity Disorder (ADHD) with pre-test control.

title of exam	amount	F statistics	df hypothesis	error df	Significance level	ETA	Statistical power
Pilay effect	0.718	3.179	8	10	0.045	0.718	0.730
Lambda wilks	0.282	3.179	8	10	0.045	0.718	0.730
Hoteling effect	2.543	3.179	8	10	0.045	0.718	0.730
The biggest root on	2.543	3.179	8	10	0.045	0.718	0.730

Table 6. Results of single-variable variance analysis in the text of Mancova on the components of quality of life in the test and control groups.

Variable	Average squares	Degrees of freedom	F statistics	Significance level	Statistical power	Beta
Physical function	1310.835	1	7.468	0.014	0.731	-16.21
Disorder Role Due to Physical Health	4853.646	1	5.875	0.027	0.628	-31.19
Disruptive role due to emotional health	1329.225	1	3.195	0.092	0.392	-16.32
Energy / fatigue	1496.600	1	21.652	<0.0001	0.992	-17.32
Social function	1039.962	1	3.667	0.130	0.427	14.44
the pain	1289.252	1	3.676	0.072	0.440	16.08
general health	1886.700	1	26.654	<0.0001	0.998	-19.45
Emotional well-being	501.483	1	7.120	0.016	0.711	-10.03

4. Discussion

Second hypothesis: Barkley-based parental education improves the quality of life in mothers with hyperactivity disorder children.

As we observed, the effect of parental education in Barkley's way on improving the quality of life of mothers with hyperactivity disorder (ADHD) was effective in improving the quality of life in mothers of the experimental group compared to the control group ($p < 0.01$).

In the study of research, the study did not find the impact of the program on the quality of life of mothers, but studies that aimed at mothers' mental health point to the effect of this program on increasing the mental health of this group of mothers. In this regard, various studies can be pointed out, including, in their research, the relationship between resilience and quality of life in Showed mothers. also concluded that the parent education program had improved maternal parenting practices and reduced symptoms of childhood disorder. showed that parenting awareness and parental involvement affect the quality of parenting and

parenting relationships.

Kennett showed that group-based interventions based on parent-child relationships improved family functions in terms of adaptation, cohesion and family relationships, and parental behavior improved and parental stress was reduced. Fiona found that the parents of the education group had a marked decrease in the severity of child abuse and child abuse, and in the development of child-rearing capabilities, increased self-confidence and self-confidence, and reduced conflict between couples and life satisfaction compared to The control group reported significant differences. Therefore, it could be concluded that Chatin concluded that the Parenting Program in Barkley's way, by increasing parental parenting abilities, addresses behavioural problems that excite mothers, thereby increasing the behavioural, emotional and physical performance of mothers and children , They can ultimately see an increase in their quality of life. Also concluded that the parent education program had improved maternal parenting practices and reduced symptoms of childhood disorder. Result showed that parenting awareness and parental involvement affect the quality of parenting and parenting relationships.

In explaining this, can say that since resiliency enables the individual to adapt to difficulties and challenges and challenges, based on the results of this research and similar studies on the relationship between vibration and Quality of life seems to increase the quality of life if the parents with a child with ADHD can increase their attention. Therefore, based on the results of the hypothesis tests and their related tables in the present study, the parental education program in Barkley's manner in which parents behave in the right way with children such as: forgiveness of the child and proper attention to the child's desirable behaviours and the neglect of behaviours Was undesirable, which led mothers to become involved with some effective strategies in this field and to adopt appropriate methods, which would create appropriate behaviours in these children, which resulted in mental relaxation of their mothers' fear and depression Also, with increased maternal resilience, there is a better chance of growing and rejuvenating They were provided with their training experiences.

Second hypothesis: The treatment based on parental education in the Barkley way improves the components of quality of life (physical function, role disorder due to physical health, role impairment due to emotional health, energy-fatigue, emotional well-being, social function, pain and General health) in mothers with a child with ADHD.

5. Conclusion

As that observed, the effect of parental education in Barkley's way on improving the components of quality of

life (except for the three components of role impairment due to emotional health, social function and pain) of mothers with hyperactivity disorder (ADHD) was effective and Improvement of the components of physical function, role impairment due to physical health, energy-fatigue, emotional well-being and general health in subjects in the experimental group was significantly higher than the control group ($p < 0.05$). Many studies have not done about the effect of parental education in the Barkley way on improving the components of quality of life, but the quality of life of mothers has been defined as having a chat status that addresses the social, emotional and physical functions of mothers. Take up In this regard, can mention the researches of [17, 23, 26, 1, 14], in their research, behavioural education for parents is associated with the management of mothers' behaviour in reducing the anxiety, depression and maternal parenting stress. Also, [9], pointed out that the results of this study showed that Mindfulness training significantly influenced the stress reduction of mothers of overactive children.

[19], in their research showed that parent-child relationship therapy has a significant effect on reducing the symptoms of attention deficit hyperactivity disorder (ADHD), but it does not affect the social skills of children with attention deficit hyperactivity disorder. [20], concluded that although family life education program has not been able to reduce maternal depression as part of the parenting source of parental stress, it has been able to sensitize mothers with overactive children to negative feelings of competence, Role limitation, and social isolation, relationship with spouse, attachment and health. According to the results of this study, in explaining this finding it can be stated that parenting education empowerment to parent's skills, their familiarity with the effects that parenting practices can have on their child's behaviours, and the reduction of tensions that may be Between parent and child, and all of this can increase self-esteem in the parents themselves. The duration of the training is more effective as a result of treatment. This means that the longer the training period is, the greater the therapeutic effects, the shorter the duration of the training in 8 sessions can be effective in the results of this study.

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