

# The Effect of De-Stress Training Program on the Stress of Mothers With Slow Paced Children

Leila Charmfroush Jalali,<sup>1</sup> Saeed Hasanzadeh,<sup>2,\*</sup> Mehdi Davaee,<sup>3</sup> and Gholamali Afrooz<sup>2</sup>

<sup>1</sup>Department of Exceptional Children Psychology, Science and Research Branch, Islamic Azad University, Tehran, IR Iran

<sup>2</sup>Department of Exceptional Children Psychology, Tehran University, Tehran, IR Iran

<sup>3</sup>Department of Training Sciences, Central Tehran Branch, Islamic Azad University, Tehran, IR Iran

\*Corresponding author: Saeed Hasanzadeh, Department of Exceptional Children Psychology, Tehran University, Tehran, IR Iran. E-mail: shasanzad@ut.ac.ir

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## Abstract

**Background:** Handicap is a critical factor with significant effects on family. Stress is the main result of such effects on parents. As a classical procedure, mothers have the major caregiving role to the child; therefore, they experience more stress than other members. Then, development program for stress management is essential.

**Objectives:** The current study aimed to develop and assess a de-stress training program on decreasing the stress of mothers with mentally retarded children.

**Materials and Methods:** The current study was a semi-experimental research with Follow-up. Study subjects included 20 mothers with slow paced children connected to a non-governmental organization (NGO) of show paced children in Tehran, Iran. Mothers were randomly divided into experimental and control groups (10 cases in each group). All mothers responded to the parental stress scale used to measure mothers' stress. Experimental group received de-stress training program for 13 sessions. Post-test was administered in session fourteenth and after one month the results were followed-up. Data were analyzed by univariate analysis of covariance ( $P < 0.01$ ).

**Results:** Data presented a significant difference between the control and experiment groups. Also, results did not show a significant difference between the post-test and follow up. It means that the effect of training was persistent.

**Conclusions:** De-stress training program significantly decreased the stress of mothers with show paced children, and the training effect was persistent.

**Keywords:** Slow Paced Children, Parenting Stress, De-Stress Training Program

## 1. Background

Families with slow paced children (slow paced innovation which has a term equal to the term mental retardation, this term has been established by Dr. Afrooz. This has a common term in Iranian except children psychologists) encounter challenges. The first steps toward acceptance and growing the child and necessities of special caregivers have different effects on families. All parents are positive about bringing up a new child, but none of them expect a disable child. The birth of a child with disability is unexpected for parents and has special consequences. The stages of grief for parents of children with special needs are as follows: shock, denial, guilt, anger, depression, frustration, anxiety and acceptance (1).

The birth of a slow paced (mentally retarded) child is not out of this rule. Slow paced children have special characteristics such as: under average intelligence quotient, limitation of memory, word storage, abstract thinking, visual and auditory deficit and immovability. These signs make adjustment of children with Down syndrome, micro-

cephaly and macrocephaly more difficult (2).

Social stigma is addressed by some researches (3). It is the extreme disapproval of (or discontent with) a person or group on social characteristics that are perceived, and serve to distinguish them from other members of a society. Stigma may then be affixed to such a person, by the greater society, who differs from the cultural norms. Experiences can be affected by stigma and others who have direct relationships with this person can be affected. Relatives may be internalizing the received stigma and then their lives will be affected., Mothers' perception about internalized stigma increases the stress of child more than their responsibility to bring up a child with disability (4).

Fulfilling the needs of these children requires patience and scarification of their parents. It leads to forgetting themselves, inattention to other children and incompatibility (5). Moreover, difficulty in marriage, relationship with siblings, relatives and neighbors are results of the birth of a child with mental retardation (6).

The birth of child with disability arouses a wide range

of sensitive responses in parents. It is a critical subject for some parents that needs mental regulation. For others, it is a regretful event and initial response to such events is the affective collapse (7). The birth of child with mental retardation can have deep effects on the whole family (parents and children) and extended family members (grandfather and grandmother). It is a common experience among all members of the family and will affect all aspects of family functions (8).

Stress is the consequence of having a slow paced child. Stress starts when demands are more than abilities (9).

Parental stress can be perceived as challenges between parental duties and the existing capacities of parents (10). Stress has various effects on life. Stress impairs the social, psychological and physical functions. Parental roles are limited by stress and they may increase the chronic diseases such as blood pressure and heart disease (11). Some researchers estimate the parental role (12, 13). Finally, most of the studies show that stress correlates with decrease of mental health (14), low life satisfaction (15), behavioral problems in children (16) and economic and wellbeing challenges (17).

Coping with stress is mostly attended by psychologists. Some therapists believe that changing cognition and behaviors lead to decrease of stress (18). Psychologists believe that evaluation of an event is a useful coping skill against stress. Evaluation or cognition of an event is different among people behave based on these cognitions (19).

Studies about stress management started in 1930 when Hill presented his ABC-X model about family stress management. This model is designed to cope with stress in families and specifically in families with mentally retarded children (19).

## 2. Objectives

According to the importance of family in bringing up children with mental retardation, parental stress management is necessary. Then, the current study aimed to design and assess the effects of de-stress training programs on the stress of mothers with slow paced children.

## 3. Materials and Methods

The current study was an applied research. It was a semi-experimental method with follow-up.

Population of this study included all mothers with slow paced children in Tehran, Iran. The study subjects were randomly selected from one of the slow paced children associations. Twenty mothers were selected based on the study criteria and randomly divided into experimental and control groups.

Inclusion criteria included mental retardation diagnosis, age under 16 years, with normal mothers who at least finished high school. Mothers signed a written letter of consent to participate in the research; all responded to the Berri and Jones parental stress scale in pre-test, post-test and follow-up stages.

After selecting the sample group and performing the pre-test, the experimental group received the de-stress training program for 13 sessions. This program is designed based on the stress inoculation training of Donald Meichenbaum. Also, the Jacobson progressive relaxation training is used. Jacobson suggested that anxiety leads to tension in muscles; when tension is removed, anxiety will be removed (20). Each session started with review of the past session and responding to questions. Mothers had enough time to express themselves.

### 3.1. Parental Stress Scale (Berri and Jones, 1995)

This scale is used to assess parental stress. This self-report scale has 18 items which have to be completed by parents. Expressions are paying attention to positive and negative aspects of parental duties.

For instance, the first item of the scale is: "I'm happy for my role as a parent" or the fourteenth item is: "If I could have a new possibility, I wouldn't decide to have a child". Parents were requested to answer each expression, based on normal relationship, which they had with their children.

The parents could declare their opinions in one Likert scale including: completely disagree, disagree, no idea, agree and completely agree. Seven expressions, namely 1, 2, 5, 6, 7, 17 and 18 were scored reversely, and the rest were directly scored. In this scale, the minimum and maximum scores were 18 - 90. Higher scores indicated greater stress. Berry and Jones (1995) reported the test internal validity and test-post-test validity 0.83 and 0.80, respectively. To verify and assess the validity of the translated version of the scale, it was performed on 23 mothers and the obtained test-post-test validity was 0.78, with one week interval. The relative advantage of this scale compared with similar tools is pertaining to its fewer expressions, thus the scale becomes shorter, and accordingly parents can use it more comfortably (21).

Data were analyzed by univariate analysis of covariance ( $P < 0.01$ ) using SPSS ver. 16.

### 3.2. Stress Management Training Program

Post-test was performed in session fourteen and after one month follow-up. Obtained data analyzed by descriptive and inferential statistics.

**Table 1.** Description of Each Session

Sessions	Brief Description of Sessions
1, 2	Introducing, presenting goals, method and performance
3	The Jacobson progressive relaxation training, analysis of environment, response to questions, homework
4	Parenting skills training, the Jacobson progressive relaxation training, homework
5	Self-monitoring, information about mental retardation, anger management, the Jacobson progressive relaxation training, homework
6	Anger management, facilitating communication, response to questions, the Jacobson progressive relaxation training, homework
7	Parenting skills training with focus on healthy environment, facilitating communication of sibling, the Jacobson progressive relaxation training, homework
8	Finding false thoughts, following up the rehabilitation periods, the Jacobson progressive relaxation training, homework
9	Recognizing negative thoughts and replacing the positive thoughts, having real expectations, considering the feedback and demands of parents and children, the Jacobson progressive relaxation training, homework
10	Self-caring, focus on present, reasonable demands (self and others), the Jacobson progressive relaxation training, homework
11	Self-talking technique, considering anger management, assertiveness, considering needs of children, the Jacobson progressive relaxation training, homework
12	Considering self-attention, problem solving skills, considering mothers reaction to stress, the Jacobson progressive relaxation training, homework
13	Review of the past session, response to questions, considering feedback during trainings
14	Post-test
15	Follow-up

#### 4. Results

Descriptive characteristics of experimental and control groups are presented in Table 2; in the experimental group: in pre-test  $M = 46.90$ ,  $SD = 7.19$ , in post-test  $M = 35.10$ ,  $SD = 7.65$ ; in the control group: in pre-test  $M = 47.90$ ,  $SD = 10.05$ ; in post-test:  $M = 47.60$   $SD = 9.80$ .

According to the obtained differences between the groups, univariate analysis of covariance was used to demonstrate the significant differences.

According to Table 3, there was a significant difference between the experimental and control groups. There were also significant differences after covariance analysis and omission of initial differences ( $F = 11.03$ ;  $P < 0.01$ ).

Based on the obtained results, the mean of maternal stress decreased in post-test. Therefore, it can be concluded that de-stress training program significantly decreased stress in mothers.

According to Table 4, there was no significant difference between the post-test and follow-up points of maternal stress. It means that effectiveness of de-stress training program on decreasing stress was persistent (stress was reduced in post-test and this reduction continued). Thus, there was no difference between the mean of post-test and that of the follow-up test)

#### 5. Discussion

Results of the study showed that the de-stress training program had significant effects on decreasing stress, which was persistent.

One reason for effectiveness of this program was active participant of mothers in sessions. In other words, mothers were not just listeners; they had time to describe their feelings and thoughts. Therefore, it did lead to empathy and releasing emotions. Moreover, mothers shared their experiences and it helped them solve problems and manage their stress.

An existing problem for mothers was the differences between normal and slow paced children. Usually, mothers with favoritism toward slow paced child increased the family challenges. In this program, strategies to cope with challenges were trained to mothers. Also, the necessary information about slow paced children was presented in sessions.

In this program, the stress inoculation training designed by Meichenbaum was used. This method is not focused just on an especial technique, individual differences are also considered (20, 22). Attention to critical needs of mothers with slow paced children guided the sessions toward clear and real needs.

Overall, identifying slow paced children, sharing experiences, training strategies to cope with stress and all other factors led to controlling stress and coping with the problems that are followed by stress.

Results of the study showed that the de-stress training program had significant effects on decreasing stress. It was accommodated with the studies in this field: effectiveness of coping skills training programs on decreasing psychological signs of mothers who have a child with Down syndrome (23), effectiveness of stress management with cognitive-behavior therapy on decreasing anxiety and depression of parents with mentally retarded children (24), effectiveness of decreasing anxiety treatments (25), effectiveness of primary intervention on improving social supports (26), effectiveness of coping skills training on maternal stress (27), effectiveness of coping skills training and stress management on decreasing anxiety and depression of mothers with disabled child (28).

**Table 2.** Descriptive Characteristics of Dependent Variables in the Experimental and Control Groups<sup>a</sup>

Variables	Experimental Group		Control Group	
	Pre-Test	Post-Test	Pre-Test	Post-Test
Maternal stress	46.90 ± 7.19	35.10 ± 7.65	47.90 ± 10.05	47.60 ± 9.80

<sup>a</sup>Values are expressed as mean ± SD.

**Table 3.** Brief Results of Univariate Analysis of Covariance

Variable	SS	df	MS	F	P Value	$\eta^2$
Pre-test	1288.95	1	122.95	214.09	0.01	0.93
Group	662.45	1	662.45	110.03	0.01	0.87
Error	102.35	17	6.02	-	-	-

**Table 4.** Descriptive Characteristics and Dependent T-Test

Group/Variable	Post-Test	Follow-Up	Dependent T-Test		
			t	df.	P Value
<b>Experiment</b>					
Maternal stress	35.10 ± 7.65	43.50 ± 12.89	0.55	9	0.59
<b>Control</b>					
Maternal stress	47.60 ± 9.80	52.60 ± 10.08	-1.21	9	0.22

Results of the current study did not match with the findings of Kaveh et al. (29). They used resiliency program against stress. The study showed that the program was not effective on decreasing stress. They suggested that their inconsistent findings could be due to using general questions in the questionnaire (29).

The content of the de-stress training program used in the current study was according to other methods such as cognitive-behavioral (23, 24, 27), and progressive relaxation therapy (23, 27).

Anger management was a factor that focused on stress management. This factor was important in other programs (23). It seems that using cognitive-behavior therapy, relaxation and anger management are very effective in decreasing stress. This study approves the latter findings.

The current study showed that effectiveness of the program was persistent. Other studies presented the same results (30).

### 5.1. Limitations

One of the limitations was the difficulty to have access to mothers for a long time. Physical conditions such as heat, small room, noise and long distance for mothers was noticeable.

Ethical Issues Ethical issues were as follows: satisfaction of mothers participating in the study, conducting the program on the control group, confidentiality regarding participants name and personal information.

### 5.2. Conclusions

It can be concluded that the de-stress training program was significantly effective on decreasing maternal stress. It features the necessities of regular and continuous training to mothers. In other hand, empowerment of families with slow paced children should be regarded beside other rehabilitation strategies.

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