

# Original Article: The Effect of Emotional Intelligence Components on Maternal Parenting Stress

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**Citation** M. Karimi. The Effect of Emotional Intelligence Components on Maternal Parenting Stress. *Int. J. Adv. Stu. Hum. Soc. Sci.* 2021; 10(3):161-170.

**doi** 10.22034/ijashss.2021.277594.1045



## Article info:

**Received:** 05 January 2021

**Accepted:** 09 May 2021

**Available Online:** 13 May 2021

**Checked for Plagiarism:** Yes

**Peer Reviewers Approved by:**

Dr. Amir Samimi

**Editor who Approved Publication:**

Professor Dr. Mohammad Haghghi

## Keywords:

Parenting Stress, Emotional Intelligence Training, Physical-Motor Disability, Mothers.

## ABSTRACT

The present study investigated the effectiveness of emotional intelligence training on parenting stress of mothers of children with physical disabilities. The mothers who had high stress scores and minimum secondary education were selected by simple random assignment and grouped into experimental and control groups. The measuring instrument for measuring maternal parenting stress was the Parental Stress Index (PSI) with a reliability coefficient of 0.81. After collecting data, independent t-test was used for statistical analysis. The results showed after examining the pre-test scores of parenting stress, a significant difference was observed between the means of the post-parenting stress test of the two control and experimental groups of mothers of physically active children and after examining the pre-test scores of children, parenting and life stress, a significant difference was observed between the mean post-test of child, parenting and life of the two control and experimental groups of mothers of physical children. Therefore, considering the ability of emotional intelligence as a factor effective in reducing parenting stress of mothers of physical children, this intervention should be considered and emphasized by counselors and therapists.

## Introduction

**D**ifferent events occur in people's lives that can have a great impact on the person and the dimensions of his life. How people deal with and adapt to these changes in their lives is important. One of the most important events in a person's life is accepting the role of parent, which makes a big

difference in a person's life and puts a lot of stress on him. This parenting stress that is created coupled with the responsibilities and expectations of this role is different from other stresses in a person's life [1-3].

Parenting stress is higher in parents with children with disabilities than in other parents. Due to their special problems, children with disabilities create expectations that lead to a lot of stress. Among the

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parents of children with disabilities, parents with children with physical disabilities are part of a group that suffers from a lot of stress [4-6].

And their stress is high. The children of these mothers are people who cannot use their body parts effectively and are constantly dependent on their parents, so the parents of these children, especially their mothers, suffer from certain limitations and the same limitations and work pressures. Daily activities lead to stress in them. In connection with this parenting stress, parents can use a range of cognitive, emotional and behavioral strategies to reduce their stress responses. The frequency and variety of adaptation mechanisms is as great as the frequency and range of problem behaviors in children. Parents in the same situation show adaptation mechanisms in different ways, and others perform better. This explains why some parents who have had their child with chronic illness for years show milder stress reactions. While others are more deeply affected, it can be raised. Some adaptation mechanisms work in a preventative way, in which they work to reduce the stress response [7].

On the other hand, the emotional, cognitive, and behavioral resources of the person that are used during a stressful event increase. An example of this can be preparing and planning to become a parent. Adults who have reported that they were preparing and planning to become parents and that they were planning to become pregnant have shown lower levels of stress than those who reported that their parenting was unexpected and unintentional. Similarly, there is a difference between adults who feel ready, emotionally, physically and maternally well prepared for a new and stressful childcare job, and people who are not [8-10].

They feel ready and confident about their parenting abilities, for example, adequacy of parenting. They are more likely to be effective in the role of parenting and to be satisfied with the role of parenting. Other strategies can be applied when a stressful event happens or the thought of a stressful reality arises. In the face of difficult living conditions, specific ways of thinking about experiences can strongly affect the resilience and severity of the emotional turmoil that follows an accident [11].

Adults who use passive, emotion-focused coping strategies are more likely to experience

parenting stress. Emotionally focused thinking about stressful experiences is a state in which the person considers himself/herself as a passive recipient of experiences, or people who use the denial mechanism or people who have previously been preoccupied with unpleasant emotions such as fear or unhappiness also experience signs of emotional problems such as anxiety and depression. Conversely, strategies focused on solving problems are more likely to enhance problem-solving ability. Unlike emotion-centered strategies, problem-solving strategies do not focus attention on negative emotions arising from the stress response [12].

Excellent problem-solving adaptations reduce parenting stress in a variety of situations. Stress can be managed among adults who have strong self-confidence in their ability to be a parent, and those who manage stressful situations with their children in a way that focuses on identifying sources of difficulty. Problem-based, flexible, positive coping strategies have not only been effective in reducing the stress response, but also in mitigating the destructive effects of stress on parents' behavior toward their children [13].

### *Significance of research*

In the past, mothers played a very important and key role in mental health in the family due to their duty of care, and their mental health has had a great impact on the mental health of family members. Research shows that there is a direct link between mothers' mental health and that of their children, and that mothers' mental disorders, as a result of stress from their caregiver role, can negatively affect their children and even be transmitted to them when they are children [14].

She is born with a disability. This stress doubles the mother's stress and puts her at risk for a variety of mental disorders. Researchers also believe that the rate of mental disorders in mothers of children with disabilities is higher than normal mothers and in some cases is not even comparable. They believe that many mothers of children with disabilities suffer from problems such as depression, anxiety, isolation, and marital problems [15-17].

On the other hand, children with disabilities, especially children with physical disabilities, are dependent on their caregivers, especially their mothers, for their daily tasks due to their disability,

and if their mothers are not in good mental health, they cannot take good care of their children. Their unhealthy mental health can negatively affect their children's mood and endanger their mental health. According to the statistics on people with physical disabilities in the country (11 per thousand people), it seems necessary to rehabilitate their family members, especially their mothers. On the other hand, new approaches to providing rehabilitation services, including community-based rehabilitation and family-based rehabilitation believe that the best way to provide services to people with disabilities is to use the capacities of the family, especially primary caregivers [16-19].

This means that instead of providing rehabilitation services to people with disabilities, it is better for family members, especially caregivers who have been with him for a long time, to receive the necessary training and skills and to provide rehabilitation services. Paying attention to this issue is of special importance for the mental health of family members, especially mothers.

Therefore, it is possible to prevent mental disorders and improve the mental health of the

mothers of these children with a variety of strategies.

*Research method*

The method used in this study is quasi-experimental with a pre-test-post-test design with a control group. In the design, the subjects were randomly selected and placed in different groups by the same method. Then, before performing the independent variable, the selected subjects and the pre-test in both groups were performed by measuring instruments. The role of the pretest in this scheme was to apply variance control (uniformity of variance) and as a result of determining whether the change was due to the implementation of an experimental variable or other factors. As for the sample size and sampling method, 70 members of the subjects were assigned to the control and experimental groups through coding and lottery of codes by random assignment so that the members of the groups were similar. Exemplary individuals were selected from the population.

**Table 1.** Sample size and sampling method

Percent	Abundance	Divided	Subjects
.016	5	20-30	<b>Mothers age</b>
.066	20	30-40	
6	2	40-50	
10	3	50-60	
323.	19	Secondary	<b>Mother's education</b>
10	1	Diploma	
25.3	4	Bachelor	
100	30	housewife	<b>Job</b>
0	0	Employee	

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After selecting the topic and stating the problem, a statistical population was identified and a sample was selected. Then the research instrument was prepared and after confirming its validity and reliability, the researcher collected data. In order to collect the data, the Parental Stress Index (PSI) was used. After this step, the researcher fed the data into SPSS software to analyze them.

**The Parental Stress Index (PSI)**

It is a self-report questionnaire developed by Abidin (1995), based on which the importance of stress in

the parent-child system is evaluated. The questionnaire is based on the principle that parental stress can arise from certain characteristics of the child, some parental characteristics, or a variety of situations that are directly related to parenting. The parental stress index in this study is the revised form of the previous forms, which is easier to correct and the amount of material is less. This revision reduced the material of the parental stress index from 150 items to 101 items and 19 optional items as "Life Stress Scale 27" were added to it. The subscales related to each area and also the number of cases are child area (47 items), adaptability (11 items),

acceptance (7 items), extravagance (9 items), Mood (5 items), inattention/ hyperactivity (9 items), reinforcement (6 items), parenting (54 items), depression (9 items), attachment (7 items), role limitations (7 items), Sense of competence (13 articles), social isolation (6 articles), relationship with spouse (7 articles), parent health (5 articles) and stress of life (optional scale) (19 articles). Based on Cronbach's alpha results in Khorramabadi and Et al. (2009) for parents of children with autism, the overall score in the parent field was 0.83 to 0.86, respectively, and the overall score in the childhood domain was 0.8 to 0.84, respectively. In a study conducted by the prosecutor, Azghandi and Hassanabadi, (2019) the internal consistency reliability coefficient of this instrument for the whole scale was 0.88 and the reliability coefficient of the test was reported with a distance of 10 days by 0.94. The researcher in the present study

performed the scale on 30 subjects as a pilot group. The reliability obtained using Cronbach's alpha method was 0.81 which was acceptable.

**Procedure and scoring of Parental Stress Index (PSI)**

The scoring method was done using the Likert method according to answers 1 to 5 (from strongly agree to strongly disagree). After that, the results of the subscales in the field were analyzed based on a soft table. The sum of the sub-scores gives the overall score.

In this study, descriptive and inferential statistics (parametric tests) were used to analyze the data using SPSS software. Also, independent t-test was used to examine the research questions.

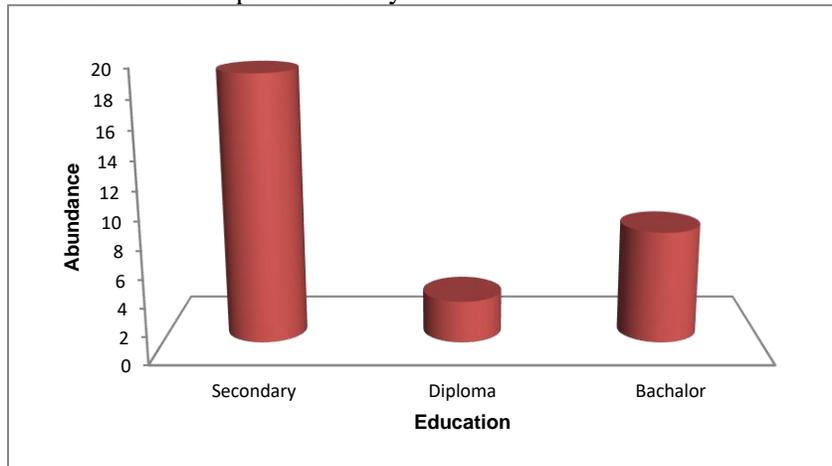


Figure 1. Education level of the subjects

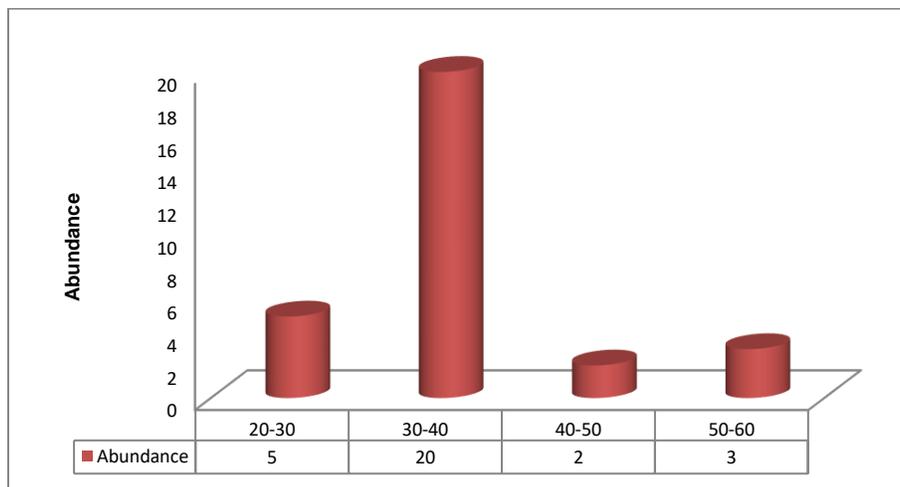


Figure 2. Graph of mothers' age in the sample size

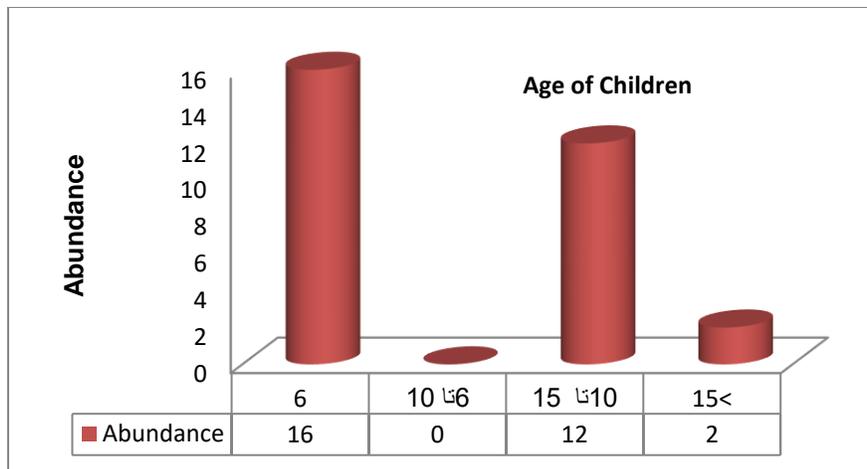


Figure 3. Children's age in the sample size

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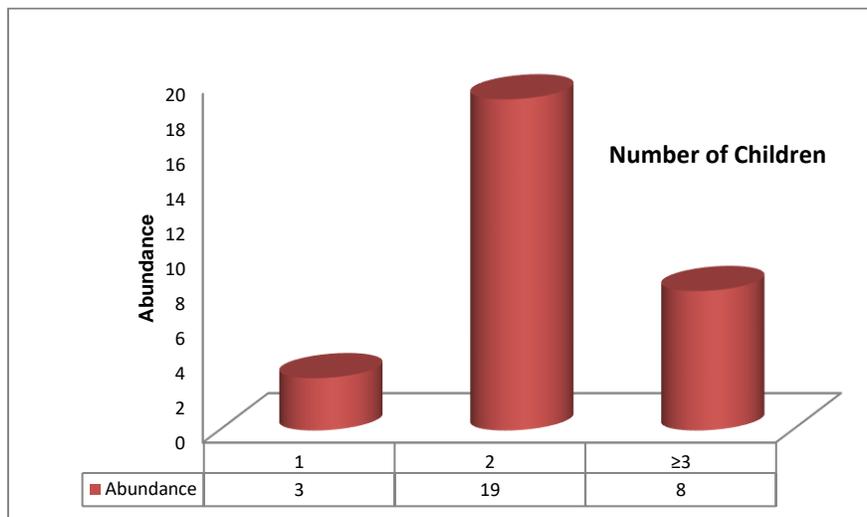


Figure 4. Number chart in sample size

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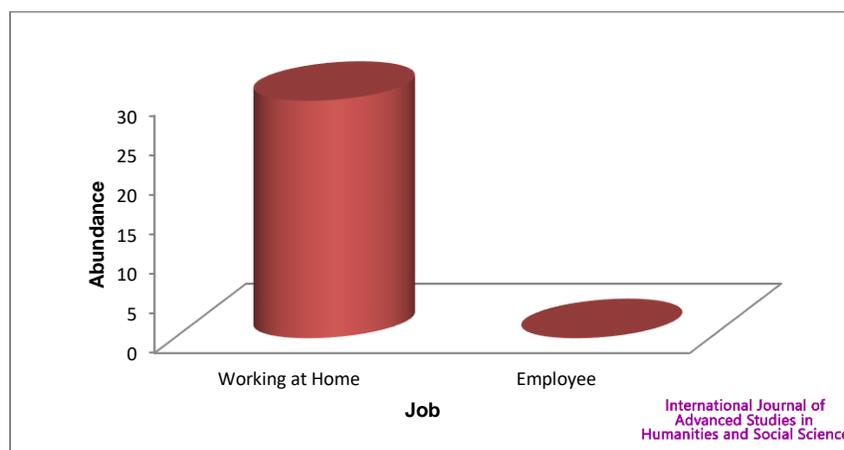


Figure 5. Job chart in sample size

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*Checking the normality of data distribution***Table 2.** Kolmogorov-Smirnov test

Sig	d.f2	d.f1	F	Variable
0/917	28	1	1/275	Parenting stress test
0/047	28	1	2/301	Parenting stress test

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Sig	d.f2	d.f1	F	Variable
0/917	28	1	1/275	Parenting stress test
0/047	28	1	2/301	Parenting stress test

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Table 3 above shows the results of the Loon test to examine the homogeneity of variance within the subjects in the parenting stress variable before and after the test. Given that the F-index at the alpha level of 0.05 was not significant in any of the cases, the assumption of homogeneity of variances is established

**Hypothesis 1:** Teaching the components of emotional intelligence has a significant effect on reducing parenting stress of mothers of children with physical disabilities.

**Table 4.** Results of T-TEST test of the first hypothesis.

Significance level	Degrees of freedom	T	Mean standard error	Standard deviation	Average	Number	group	Test	Variable
0/91	28	0/105	8/26 9/61	31/99 37/25	337/46 334/79	15 15	experiment <b>Control</b>	pre-exam	Parenting stress
0/04	28	-2/075	4/17 8/51	19/25 32/98	288/93 312/40	15 15	experiment <b>Control</b>	Post-test	

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Table 4 above shows the information about the experimental and control groups in the parenting stress variable. The results of independent t-test in the pre-test showed no significant difference between the experimental and control groups (T: 0/105d.f: 28 P = 0.05, but the results of independent t-test in the post-test showed a significant difference between the experimental and control groups (P = 0.05, df: 28, T: 2/075). It is due to the effect of the

independent variable, teaching the components of emotional intelligence. Therefore, the null hypothesis is rejected and the research hypothesis is confirmed.

**Hypothesis 2:** Teaching the components of emotional intelligence has a significant effect on reducing the stress of mothers in the field of children with physical children.

**Table 5.** Results of T-test of the second hypothesis

Significance level	Degrees of freedom	T	Mean standard error	Standard deviation	Average	Number	group	Test	Variable
0/95	28	058/0-	41/6 52/6	24/82 25/28	145 146	15 15	experiment Control	pre-exam	Children
0/89	28	137/0	65/4 99/4	18/04 19/33	138 137	15 15	experiment Control	Post-test	

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The table above shows the information about the two experimental and control groups in the child domain variable. The results of the independent t-test showed no significant difference between the experimental and control groups in the pre-test (T: -0/058 df: 28, P = 0 /05,). And the results of independent t-test in the post-test also showed no significant difference between the experimental and

**Table 6.** Results of T-TEST test of the third hypothesis

Significance level	Degrees of freedom	T	Mean standard error	Standard deviation	Average	Number	group	Test	Variable
0/59	28	0/540	6/16 5/51	23/88 21/34	180/60 176/13	15 15	experiment Control	pre-exam	Parents
0/02	28	-2/43	6/87 7/51	26/60 29/10	140/93 165/73	15 15	experiment Control	Post-test	

Table 6 above shows the information about the two experimental and control groups in the parent domain variable. The results of the independent t-test showed that there was no significant difference between the experimental and control groups in the pre-test (T: 0.540 df: 28, P = 0). The results of the independent t-test in the post-test also showed a significant difference between the experimental and control groups (5% P = , =, df: 28, T: -2/43). And this difference is due to the effect of the

**Table 7.** Results of t-test test of the fourth hypothesis

Significance level	Degrees of freedom	T	Mean standard error	Standard deviation	Average	Number	group	Test	Variable
0/60	28	0/528	1/60 1/61	6/20 6/24	11/86 10/66	15 15	experiment Control	pre-exam	Life
0/85	28	-0/185	1/43 1/60	5/57 6/22	9/66 10/06	15 15	experiment Control	Post-test	

Table 7 above shows the information about the two experimental and control groups in the life variable. The results of the independent t-test showed no significant difference between the experimental and control groups in the pre-test (T: 0.528 df: 28, P = 0). The results of independent t-test in the post-test also showed no significant difference between the experimental and control groups (P = 0.05, df: 28, T: -0/185), indicating the confirmation of the null hypothesis and the rejection of research hypothesis.

control groups (P = 0.05, df: 28, T: 0/137), indicating the confirmation of the null hypothesis and rejection of the research hypothesis.

**Hypothesis 3:** Teaching the components of emotional intelligence has a significant effect on reducing stress in the parental domain of mothers with physical children.

independent variable, i.e. teaching the components of emotional intelligence. Therefore, the null hypothesis is rejected and the research hypothesis is confirmed.

**Hypothesis 4:** Teaching the components of emotional intelligence has a significant effect on reducing stress in life of mothers with physical children.

## Discussion

In this study, the effectiveness of group training of emotional intelligence components in reducing parenting stress of mothers of children with physical disabilities was studied. This study applied a quasi-experimental method, using PSI to measure the construct. The pre-test was performed between the control and experimental groups and the experimental group was exposed to the effect of independent variable, training of emotional intelligence components, for 12 sessions, two sessions per week.

**Hypothesis 1:** Teaching the components of emotional intelligence has a significant effect on reducing parenting stress of mothers of children with physical disabilities. The first hypothesis of the study was to examine the differences between the experimental and control groups in the parenting stress variable. Independent t-test showed that the difference between the two groups was significant at the 5% level. That is, the intervention of teaching the components of emotional intelligence was effective. Therefore, the first hypothesis was accepted with a 95% confidence level. This result goes in line with those of Sharifi Daramadi *et al.* (2005), Jordan *et al.* (1993), Emami Moghadam *et al.* (2013), and Osanloo *et al.* (2011) because emotional intelligence training affects mental health factors and reduces mental disorders. However, it is important to note that although the intervention has been effective, it has not been able to bring parenting stress below the standard level (260 and above) and they are still among the people with high parenting stress. Parental stress can come from within or without them and can be overcome by internal and external supportive sources. Internal factors of stress can be needs, desires, feelings, type of looking at issues, a person's attitude to stress, and external factors can be job stress, other children, financial problems and others.

Emotional intelligence training can be considered as a kind of internal source of support by changing one's attitude towards issues by regulating emotions and feelings, proper self-expression, and unleashing one's potentials. In this study, we saw that emotional intelligence training has been an effective intervention, but the parenting stress of mothers in the study has not fallen below the standard and they are among the most stressed people. To account for this issue, it should be noted external factors of stress need to be controlled to reduce the parenting stress of these mothers to an ideal level. One of the external stressors that has a very significant impact on these parents, especially mothers, is economic problems. These children often need medical care and rehabilitation, including physiotherapy. On the other hand, some parents of these children are forced to leave their jobs due to daily care of their children, which causes financial constraints for them.

Therefore, for better effectiveness of these interventions, external support resources should be provided by the relevant authorities.

**Hypothesis 2:** Teaching the components of emotional intelligence has a significant effect on reducing the stress of mothers having children with physical-motor disability. The second hypothesis of the study investigated the effect of teaching emotional intelligence components on the stress of mothers' children with physical-motor children. The results of independent t-test showed that there was no significant difference between the mean of the experimental and control groups at the level of 5%. In other words, teaching the components of emotional intelligence has not been able to reduce the stress of asking about the problems of a child with a physical disability. This result is not consistent with those of Sharifi Daramadi *et al.* (2005), Sharifi Daramadi (2008), and Osanloo *et al.* (2011). To explain this finding, it should be noted that the problems that children with physical disabilities have are much more than other children with other disabilities. For example, most of them suffer from certain limitations which hinders them to do tasks related to daily life. It is considered a miracle, for example, learning to walk may lead to a celebration. This disability may affect a person's ease of movement, coordination, and balance, as well as his or her ability to communicate, learn, and adapt, so all of these problems cause many limitations. In the daily work of their mothers, many of them withdraw from social interactions, jobs, leisure and other things, and eventually the stress of caring work increases their stress and strain. Comparing the stress of mothers of children with disabilities, the researchers reported that mothers of children with physical disabilities have more stress than other children with disabilities such as hearing, vision and mental retardation. Therefore, in addition to parents of these children, children with disabilities themselves, must undergo psychological interventions and the chains of the rehabilitation service chain must be fully implemented to achieve the desired goal.

**Hypothesis 3:** Teaching the components of emotional intelligence has a significant effect on reducing stress in the parental domain of mothers with physical children. The third hypothesis of the study was to examine the differences between the experimental and control groups in the stress variable of the parental domain. Independent t-test showed that the difference between the two groups was significant at the level of 5%. Therefore, the first hypothesis was accepted with a 95%

confidence level. The result of this finding is consistent with those of Sharifi Daramadi Vaghademi (2013), Osanloo, Pour Mohammad Reza Tajrishi and Sarvari (2011). To account for this finding, it can be said that parental stress has a strong relationship with issues and problems in the parents' own functional area, including indicators of parental competence, depression, parent-spouse relationship, and degree of social support. The limitations created by the parent due to the role of parent and the health of the parent was found. Emotional intelligence training has been able to help mothers in creating effective communication and good interpersonal relationships by regulating the undesirable emotions and feelings of mothers, thus improving their relationships with their spouses and also making them able to use effective interpersonal relationships. Further, it attracted social support, in addition to increasing emotional intelligence, through the control of emotions and desirable emotions to reduce mental disorders such as depression and anxiety and other cases. Emotional intelligence training has been able to increase the level of parental competence of mothers by enhancing the emotional intelligence of the individual. In other words, emotional intelligence by self-fulfillment and realization of individual potentials, gaining independence changes the parent's perspective and increases his confidence as a result, leads to an increase in his sense of parenting competence. As mentioned in the second chapter, the type of parents' assessment of their parenting adequacy and competence is a very important factor in their stress level. Emotion is very important in this factor.

**Hypothesis 4:** Teaching the components of emotional intelligence has a significant effect on reducing stress in the life of mothers with physical children. The fourth hypothesis of the study was to investigate the effect of teaching emotional intelligence components on the stress of mothers' lives with physical children. The results of independent t-test showed that there was no significant difference between the mean of the experimental and control groups at 5%. In other words, emotional intelligence training has not been able to have a significant effect on the variables of parenting stress life. The results of this study are different from those of Jordan *et al.* (2002), Slaski *et al.* (2003), Emami Moghadam *et al.* (2013), and Yar Mohammadian *et al.* (2011). The sphere of life

includes events that occur during a person's life and affect the person according to the type and severity of the event, such as marriage, the death of a close family friend, and a dispute with a superior at work as well as the location of relatives, exams and other items. Although emotional intelligence training can increase emotional intelligence, help to manage and regulate the emotions of each of these events and reduce the impact of their negative emotions and create emotional balance. However, we do not see any effect in this study. The reason for this lack of effect can be found in questions related to the life domain of the Parenting Stress Questionnaire. The questions related to the field of life do not assess the views and emotions of the events that are mentioned in the questionnaire and only a score is given for each of the events that happened, and this is the reason why emotional intelligence training has not been able to do this. The domain is influential.

## Conclusion

The birth of a disabled child at any age and under any circumstances carries a burden of small and large problems. And with these problems comes a stream of negative emotions that lead to destructive behavioral reactions in the parent and child. These negative emotions, which start from the stage of understanding the issue of the child's disability and reach their peak in the process of mourning, if not controlled and managed, they will become morbid and lead to physical and mental illnesses.

As mentioned, several factors were mentioned in the stress level of maternal parenting, including: parents' financial resources, available services such as educational services and rehabilitation services, i.e. home nursing services, speech therapy, physiotherapy, hearing training, occupational therapy, etc. But in the end, the most important factor influencing parenting stress was the unique look of parents. In fact, these parents, especially mothers, who with their own way of thinking to the expectations and responsibilities of the role of parenting, even in the role of parenting a disabled child can determine how their physical and mental health also affect the mental health of their children.

Parents can respond to the demands of parenting role in three ways in dealing with feelings and emotions: Self-awareness, self-deprecation, submission. In the first case, parents are aware of their moods and are fully aware of their emotional

life. Such people act autonomously and are confident in their limits and have good mental health. When they are in a bad mood, they do not think and do not occupy their minds and are able to do so soon. In short, their thinking helps them manage their emotions. But in the second case, parents are often caught up in emotions and cannot find a way out of it. Unstable people who are not very aware of their emotions and drown in their emotions without any foresight, they have no control over their emotional life, and they do not make any effort to get themselves out of that bad mood.

In the third case, although the parents are often aware of their feelings, still they tend to accept the same spirits, so they do not try to change them. Such people are divided into two groups: The first group are people who are usually in a good mood and therefore have little motivation to change it. The second group are people who are prone to bad moods and do not make any effort to change it, and are like depressed people who are in despair. According to Mayer, Salovi, and Karso (2004), teaching emotional intelligence components is one of the types of psychological interventions that can make parents, especially stressful mothers, aware of the first adaptation method, in other words, by teaching emotional intelligence components. Emotion will not only affect the content of cognition and behavior, what we think and do, but will also influence the process of cognition, how to think.

## References

- [1] I. Fletcher, P. Leadbetter, A. Curran, H. O'Sullivan, *Patient education and counseling*, **2009**, *76*, 376-379.
- [2] M. Gallucci, F. Ongaro, S. Meggiolaro, P. Antuono, D. Gustafson, G. Forloni, *et al.*, *Archives of gerontology and geriatrics*, **2011**, *52*, 309-316.
- [3] M. Goodarzi, H. Ahamadian, K. Pourmaveddat, M. Amani, *International Letters of Social and Humanistic Sciences*, **2014**, *1*, 7-13.
- [4] A. Guyard, S.I. Michelsen, C. Arnaud, A. Lyons, C. Cans, J. Fauconnier, *Research in developmental disabilities*, **2012**, *33*, 1594-1604.
- [5] M. Hamidi, S.M. Kalantarkousheh, A. Mohammadi, *International Journal of Current life Sciences*, **2013**, *3*, 126-131.
- [6] M. Ketelaar, M. Volman, J. Gorter, A. Vermeer, *Child: care, health and development*, **2008**, *34*, 825-829.
- [7] R. Lucas-Carrasco, E. Eser, Y. Hao, K.M. McPherson, A. Green, L. Kullmann, *Research in developmental disabilities*, **2011**, *32*, 1212-1225.
- [8] J.D. Mayer, P. Salovey, D.R. Caruso, *Psychological inquiry*, **2004**, *15*, 197-215.
- [9] J. McKenna, *International Journal of Therapy and Rehabilitation*, **2007**, *14*, 551-556.
- [10] A. Colver, *Developmental Medicine & Child Neurology*, **2011**, *53*, 815-821.
- [11] D. Ruiz-Aranda, R. Castillo, J. M. Salguero, R. Cabello, P. Fernández-Berrocal, N. Balluerka, *Journal of Adolescent Health*, **2012**, *51*, 462-467.
- [12] M. Slaski, S. Cartwright, *Stress and health*, **2003**, *19*, 233-239.
- [13] I.C. Tekinarslan, B. Sucuoglu, *International Journal of Special Education*, **2007**, *22*, 7-18.
- [14] R.K. Abadi, H. Pouretamad, *et al.*, *Journal of Adolescent Health*, **2009**, *5*, 387-399.
- [15] R.R. Abidin, *Journal of clinical child psychology*, **1992**, *21*, 407-412.
- [16] J.S. Ambikile, A. Outwater, *Child and adolescent psychiatry and mental health*, **2012**, *6*, 1-11.
- [17] S.J. Bartlett, J.A. Krishnan, K.A. Riekert, A. M. Butz, F.J. Malveaux, C.S. Rand, *Pediatrics*, **2004**, *113*, 229-237.
- [18] K.D. Bendell, W. Stone, T. Field, S. Goldstein, *Topics in Early Childhood Special Education*, **1989**, *8*, 58-71.
- [19] R.L. Brown, R.J. Turner, *Journal of aging and health*, **2010**, *22*, 977-1000.