

# Developing and Validating an Educational Model for Women to Cope with Maternal Stress based on the Coping Methods of Satisfied Women and its Effectiveness in the Cognitive Emotion Regulation

DOI: [10.22098/JPC.2023.11874.1141](https://doi.org/10.22098/JPC.2023.11874.1141)

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## Abstract

**Aim:** The present research was conducted to develop an educational model for women to cope with maternal stress based on the coping methods of satisfied women and their effectiveness in their cognitive emotion regulation. **Method:** The research design was mixed methods. The participants in the qualitative phase of the study included the women (living in Tehran in 2021), who were satisfied with their lives and had at least one 6-year-old child. In the first phase, after the initial screening, among 51 women, 11 women whose level of satisfaction with life was above the mean were selected through the purposive sampling method. Using in-depth interviews, an educational model for women to cope with their maternal stress was prepared in 10 sessions. In the second phase, the validity of the educational model was confirmed using the Content Validity Ratio (CVR) index of Lawshe (1975). In the third phase, the population and the statistical sample were selected and using the multi-baseline design, the educational model was implemented. Through the available sampling method, the mothers who met the inclusion criteria were provided with Cognitive Emotion Regulation Questionnaire; they were asked to fill out the questionnaire. Finally, among the 14 mothers who were examined, three mothers who both had the inclusion criteria and were volunteers participated in the study and were trained in 10 sessions. **Findings:** The results showed that the educational model of women's coping with maternal stress based on the coping methods of satisfied women was effective in their cognitive emotion regulation. **Conclusion:** Since the training in the present study was prepared and verified by the researcher based on the protocol based on the socio-cultural context of the participants, it can play an important role in the

effectiveness of those emotion regulation strategies. psychologists and family counselors can use the developed and standardized educational model of the present study to reduce maternal stress and cognitive emotion regulation.

**Keywords:** Maternal stress, cognitive emotion regulation, women, multi-baseline design.



## Introduction

A family is an emotional unit, an organized system, and the most fundamental institution of society, which plays a significant role in the survival and growth of mankind. Family, with its optimal function, purifies the atmosphere of society and provides the basis for the growth and the prosperity of its members; it is the most effective institution in the formation of human personality (Capuzzi & Stauffer, 2021; Gottfried, 2021; Rodriguez et al., 2021). Family is the first system in which an individual starts his growth process. The success of this emotional system is influenced by various causes and factors, among which the stability of the marital bond is more functionally important (He et al., 2018). Various factors provide the basis for disrupting the structure of the family system, among which is family stress (Griffin et al., 2019; Abzug, 2016). One of the sources of family stress can be the stages of the family life cycle.

Similar to an individual, the family goes through a process of growth and development, and the relationships among its members change significantly over time. Many families, regardless of their structural and compositional differences, go through certain predictable events and stages. Each stage is achieved as a result of a specific event that requires change and re-adaptation (Goldenberg & Goldenberg, 2013). These events often require a reorganization of roles and rules so that the family continues functioning. This reorganization can be made possible through a series of developmental tasks for each stage of the family life cycle (Midori & Brown, 1995).

The family's developmental tasks are similar to Erickson's psychological crises (Bigner, 1994). The concept of the family's developmental tasks refers to the change of expectations and norms that the family as a whole is expected to undergo to satisfy the biological needs, cultural requirements, personal aspirations, and prosperity of the members and the society (Levant, 1984).

The concept of the family life cycle focuses on the changes which families experience in their structure and relationships over time; families go through various transitions and stages which lead to the creation of new relationships among the members (McCarthy, 2006). The family life cycle is a term that is generally used to describe and explain the developmental process of the family over time and emphasizes how families and couples show certain changes over time (Carter & McGoldrick, 1998, cited in Hosseini, 2010). Families go through certain predictable events and stages regardless of their structure and composition. Each stage occurs as a result of a specific event and requires changes and re-adaptation (Goldenberg & Goldenberg, 2013). In these pivotal events, families often need to reorganize roles and rules to continue functioning. This reorganization can be made possible through developmental tasks in each stage of the family life cycle (Midori & Brown, 1995).

Family stress is a process of family change, rather than just an event or a situation that happens in a family (i.e., positive and negative experiences in the family) (Bas, 2002). Lavie et al. (1987) consider a stressful event in the family as a situation that can change the family system. Based on the existing theoretical literature, Nelson and Norm (1981) considered the dimensions of changes caused by stress in the family as internalization, externalization, pervasiveness, speed of change, intensity, predictability, reversibility,

scope, and level of stress. Families which face stress and damage have some characteristics including ineffective problem-solving (i.e., lack of effective identification of stressful factors), weak relationships based on blame rather than solution-orientation, structural defects (i.e., lack of solidarity, inflexibility in roles, and tendency to exaggerate, and focus on the individual problems rather than on the family system and all members), using weak resources, and using problem-producing strategies such as using violence and drug abuse instead of solving the problem (Lorenz & Melby, 2020; Kanger & Elder, 2020).

In the last decade, many research studies have been conducted on family life and the incidence of various forms of mental illnesses. They investigated the effects of stressful events in family life (e.g., sudden death, loss of one of the parents due to divorce, severe illness or accident as well as larger external events such as war, forced migration, and other unexpected disasters), the meaning of these events for family members and the effect of this meaning on one situation and the following choices (Colucci, 2021; Nelson, 2020). One of the psychological dimensions of stress is the disruption of cognitive emotion regulation.

Cognitive emotion regulation refers to all cognitive styles that individuals use to increase, decrease or maintain emotional experiences. Cognitive emotion regulation strategies are generally divided into two categories: positive cognitive emotion regulation strategies and negative cognitive emotion regulation strategies. Positive strategies include acceptance, re-attention to planning, positive re-attention, positive re-evaluation, and adoption of adaptive strategies in dealing with stressful events. They lead to improvement of self-esteem, social competencies, etc. On the contrary, negative strategies include self-blame, other-blame, rumination, and catastrophic thoughts. They lead to stress, depression, and other psychological damages (Domaradzka & Fajkowska, 2018; Garnefski & Kraaij, 2006). Carlson et al. (2012) showed that individuals who used the reappraisal strategy to regulate their emotions in their daily lives had more resilience against stress. Moreover, Saadati et al. (2019) investigated the effectiveness of a systematic effective parenting training program in maternal stress, emotion regulation, and cognitive flexibility of the mothers of adolescent boys. The results showed the impact of the parent training program on maternal stress, emotion regulation (and cognitive flexibility) in the post-test phase and the stability of these effects in the follow-up phase.

Hill's theory (1947) about family stress is significant. This theory, which is called ABCX, is based on the meaning that the family assigns to the stressful event (A) at one moment, and this meaning can lead to family crises. Of course, the extent of this created crisis depends on the strength of external support forces (B) and the perception of the family, and the adequacy of the parents (C), which determine the extent of the crisis (X). Although this model has been accepted for years, it is not accepted systematically due to the attention to linear causality.

In many cases, couples or families face many crises and stresses in the life cycle which may cause disharmony and imbalance in their relationships with each other (Ghanbari Panah et al., 2013). The analysis of the development of marital satisfaction shows that the development of marital satisfaction is accompanied by high marital satisfaction in the first years of life (i.e., before parenthood), the maximum decrease in

marital satisfaction in the middle years (i.e., parenthood) and an increase in marital satisfaction in the following years. Furthermore, the relationship between life cycle and marital satisfaction follows a U-shaped curve (Carr, 2000; cited in Abbasi et al., 2019; Walsh, 1999; Carter & McGoldrick, 1989).

Despite the widespread belief in this curvilinear relationship (Van Laningham et al., 2001, cited in Abbasi et al., 2019), some studies show other patterns, either a continuous decrease or an increase in marital satisfaction. In some other cases, no relationship can be seen. Due to such limitations, the curvilinear relationship in the life cycle is ambiguous, and the current research study sought to partially answer these ambiguities.

Based on the existing theories, models, and research studies, intra-individual, inter-individual, and socio-cultural stress play a role in family stress in the life cycle. Thus, the current study sought to find out what strategies satisfied women used to deal with their maternal stress. It is worth pondering that the stresses of the family life cycle are influenced by ideas, beliefs, myths, and patterns of family, ethnicity, religion, friends, work, society, and political, social, and cultural issues and unpredictable events (Carter & McGoldrick, 1980, cited in Nazari, 2018). Therefore, they can be different in different societies, and since this issue has not been examined in Iranian society, there was a knowledge gap in this field. The present study sought to answer the following questions:

1. What are the indicators and components of the educational model of satisfied women dealing with maternal stress?
2. Is the educational model of satisfied women coping with maternal stress effective in positive cognitive emotion regulation strategies?
3. Is the educational model of satisfied women coping with maternal stress effective in negative cognitive emotion regulation strategies?

## Methods

The current study was applied in terms of purpose. Concerning the research nature, it had a multiple baseline single-subject experimental design using different individuals with a follow-up phase. The sample included three married women with at least one less than the 6-year-old child in Tehran in 2021. They were selected through the available sampling method. The inclusion criteria were willingness to participate in the study, having at least one less than the 6-year-old child, being in the age range of 30-40 years, and not applying for a divorce.

### Data collection procedure

The research study was conducted in two phases. In the first phase, the content of the intervention was prepared and validated. The researchers prepared the educational model by examining 14 satisfied women. Then, to check its validity, the Content Validity Ratio (CVR) index of Lawshe (1975) was used. The opinions of 10 experts and specialists in the field of Family Counseling were used. These experts were faculty members of some universities in Iran and had Ph.D. degrees in Counseling. The content of the educational model was set in a specific questionnaire prepared by Porsline software. Then, the survey



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The first participant	Baseline phase 2 weeks 2 sessions	Intervention phase 4 weeks 8 sessions	Follow-up phase 4 weeks 4 sessions				
The second participant	Baseline phase 4 weeks 4 sessions		Intervention phase 4 weeks 8 sessions	Follow-up phase 4 weeks 4 sessions			
The third participant	Baseline phase 6 weeks 6 sessions		Intervention phase 4 weeks 8 sessions	Follow-up phase 4 weeks 4 sessions			

Data were analyzed through visual analysis, within-situational analysis (i.e., median, mean, stability chamber, range of changes, relative and absolute change), inter-situational analysis (i.e., trend changes), and Mean Baseline Reduction (to show improvement). Numerical calculations were done using SPSS software (version 25), and graphs were drawn using Excel. Values above 50% of improvement indicated a high effect of the intervention; values between 25 and 49% indicated the moderate effect of the intervention, and values less than 25% indicated the ineffectiveness of the intervention (Ogles et al., 2001). Ethical considerations including scientific honesty and trustworthiness, informed consent to participate in the study, the right of anonymity of the forms, the anonymity of the participants, and the confidentiality of the information were taken into consideration. Moreover, this research study had the ethical approval of Allameh Tabatabai University with the ethics code of IR.ATU.REC.1400.039.

#### Instrument

Cognitive Emotion Regulation Questionnaire (CERQ): This questionnaire is an 18-item instrument that measures cognitive emotion regulation strategies in response to life-threatening and stressful events. Each item is scored on a Likert scale ranging from 1 (never) to 5 (always). Cognitive emotion regulation strategies in this questionnaire are divided into two general categories of adaptive strategies (compromised) and non-adaptive strategies (non-compromised). Compromised strategies include the subscales of putting into perspective, positive refocusing, positive reappraisal, acceptance, and refocusing on planning. In addition, non-compromised strategies include the subscales of self-blame, other-blame, focus on thought/rumination, and catastrophizing. The minimum and the maximum scores in each subscale are 2 and 10, respectively; a higher score indicates an individual's greater use of that cognitive strategy (Garnefsky et al., 2001; Garnefsky & Kraij, 2006). Test-retest reliability showed that cognitive regulation strategies had relative stability and the internal consistency of the subscales was confirmed through Cronbach's alpha coefficients of 0.80.



First, the Cognitive Emotion Regulation questionnaire was translated into Persian. Then, the translated version was reviewed and modified with the cooperation of an expert on Psychology. To be sure about the accuracy of the translation and the compatibility of English and Persian versions, two English language experts were asked to translate it into Persian using the reverse translation method.

Correlation coefficients between the scores of 108 participants on two occasions with an interval of two to four weeks were calculated to test the test-retest reliability of the Cognitive Emotion Regulation questionnaire. These coefficients were significant at the  $p > 0.001$  level considering self-blame ( $r = 0.70$ ), acceptance ( $r = 0.81$ ), rumination ( $r = 0.74$ ), positive refocusing ( $r = 0.77$ ), planning ( $r = 0.83$ ), and positive reappraisal ( $r = 0.76$ ), putting into perspective ( $r = 0.78$ ), catastrophizing ( $r = 0.72$ ), and other-blame ( $r = 0.80$ ) (Besharat, 2018; Besharat, 2013). Furthermore, Cronbach's alpha coefficient (1970) was used for estimating the internal consistency of the Cognitive Emotion Regulation questionnaire. In addition, the content validity of the questionnaire was examined based on the judgment of ten psychologists, and Kendall's agreement coefficients for each of the subscales of self-blame, acceptance, rumination, positive refocusing, planning, positive reappraisal, putting into perspective, catastrophizing and other-blame were 0.73, 0.80, 0.77, 0.75, 0.86, 0.81, 0.79, 0.85, and 0.87, respectively (Besharat, 2018; Besharat, 2013).

## Results

### The first question: What are the indicators and the components of the educational model of satisfied women dealing with maternal stress?

Table 3. The educational model of strategies to cope with maternal stress

Steps	Sessions	Objectives	Content
Premeditation	One	Examining the causal factors of stress after the birth of the first child	Discussions on: -stress created after the birth of the first child -concern about the child's physical growth -financial pressure after the birth of the first child -weakness in regulating emotions/depression after the birth of the child -the stress state of satisfied women after the birth of their first child
	Two	Examining the underlying factors of	Discussion on: -harmony/difference in spouses' training methods



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Meditation		stress after the birth of the first child	-dynamism and activism (responsibility and concern for education) -modeling and gaining experience, continuity, and perseverance/ feeling of self-inefficiency in training
	Three	Examining the underlying factors of stress after the birth of the first child	Discussions on: -the normal sense of stress after the birth of a child for all families -areas of stress after the birth of the first child -realism/ perfectionism and its role in stress -mother's independent character/ feeling of loneliness and its role in stress -living in the present/ worrying about the future and its role in stress
Planning	Four	Realistic goal setting	development of clear and transparent goals regarding the results of the training program
Preparation	Five	Examining stress-facilitating factors after the birth of the first child	Discussions on: -mother's openness to experience and its role in stress -mother's personal space and attention to recreation and its role in stress -child's calmness and its role in stress -spouse and families support and its role in stress
	Six	Examining the intervening factors of stress after the birth of the first child	Discussion on: -unwanted pregnancy/ spouse's unwillingness to have children and its role in stress

			<ul style="list-style-type: none"> <li>-comparison of the child's and peers' growth and its role in stress</li> <li>-worrying about the provision of facilities for the child's growth and its role in stress</li> <li>-density of the role and its role in stress</li> </ul>
Action	Seven	Teaching the strategies of: <ul style="list-style-type: none"> <li>-preventing the spread of the problem</li> <li>-changing position</li> <li>-self-reinforcement in processing negative emotions</li> </ul>	Teaching: <ul style="list-style-type: none"> <li>-timely and decisive action</li> <li>-ignore the inappropriate behavior of the child</li> <li>-avoiding marginalization</li> <li>-changing procedures and conditions</li> <li>-increasing tolerance threshold</li> <li>-trusting in God</li> </ul>
	Eight	Teaching the strategies of: <ul style="list-style-type: none"> <li>-activism in communication</li> <li>-educational activism</li> </ul>	Teaching: <ul style="list-style-type: none"> <li>-father's companionship with the child</li> <li>-relationship management and conversation with a spouse</li> <li>-allocating time, talking and empathizing with the child</li> <li>-managing relationships with others</li> <li>-increasing educational knowledge</li> <li>-providing proper supervision and control</li> <li>-providing growth opportunities for the child</li> <li>-providing verbal and practical encouragement/ highlighting strengths</li> <li>-educating the child</li> <li>-strengthening the child's social interaction</li> </ul>

	Nine	Teaching the strategies of: -conscious problem solving -seeking professional help -evaluation and feedback	Teaching: -focusing on the solution, not the problem -reducing role density / changing contribution -satisfying your unmet needs for your children -realism instead of perfectionism -seeking help from experienced people -the sufficient effort to assess and diagnose the problem -standard care /treatment measures
Maintenance and termination	Ten	Evaluation and feedback	Reviewing the sessions, summarizing the learning materials, expressing the most important experiences of the members, expressing feelings

**The second question: Is the educational model of women's coping with maternal stress effective in positive cognitive emotion regulation strategies?**

The raw scores of the baseline and the follow-up sessions after the intervention of positive cognitive emotion regulation strategies of the participants are presented in Table 4. As it is evident, there was a difference between the measurement values.

Before conducting, the authorization of the protocol was checked using the formula of Lawshe (1975). Lawshe's (1975) formula for determining the validity ratio is  $CVR = (N_e - N/2) / (N/2)$ , in which  $N_e$  is the number of experts indicating "essential" and  $N$  is the total number of experts.

The interpretation of the accepted CVR value based on the number of experts who have evaluated the strategies has been determined by Lawshe (1975), which is 0.62 for 10 experts. The results of the CVR investigation for preventing the spread of the problem, 0.80, changing the situation was 0.80, self-empowerment in processing negative emotions was 0.80, activism in communication was 0.80, educational activism 0.80, conscious problem solving 0.100 and Seeking professional help was 0.100, therefore, according to the Lawshe (1975) formula criterion for 10 people, which is 0.62, all indicators and protocol sessions have content validity.

Table 4. Scores of positive cognitive emotion regulation strategies of the participants in the baseline and the follow-up phases

Baseline	The first participant	The second participant	The third participant
The first baseline	21.3	17.3	36.2
The second baseline	22.3	16.3	36.2
The third baseline	-	15.3	32.2
The fourth baseline	-	21.3	32.2
The fifth baseline	-	-	34.2
The sixth baseline	-	-	36.2
The first follow-up	44	26	34
The second follow-up	39	29	40
The third follow-up	39	29	40
The fourth follow-up	35	35	40

The values of the improvement percentage of positive cognitive emotion regulation strategies scores in Table 5 showed that the educational intervention was effective in positive cognitive emotion regulation strategies in women. In addition, its effect was sustained in the follow-up phase. Since values above 50% of improvement indicate a high effect of the intervention, values between 25 and 49% show a moderate effect of the intervention, and values less than 25% indicate the ineffectiveness of the intervention (Ogles et al., 2001), it can be stated that the educational intervention had a high effect on increasing the positive cognitive emotion regulation strategies of the first and the second participants; however, it did not affect the third participant. Moreover, the total improvement percentage showed that the educational intervention had a moderate effect on the positive cognitive emotion regulation strategies of the participants.

Table 5. Mean, standard deviation, and improvement percentage of the scores of positive cognitive emotion regulation strategies of the participants in the baseline and the follow-up phases

Participants	Baseline phase		Follow-up phase			
	Mean	Standard deviation	Mean	Standard deviation	Improvement percentage	Total improvement percentage
First	21.80	.70	29.25	3.65	80.04	



chamber						
3. Balance change						
4.1. relative balance change	0	+5	+5	0	0	0
3.2. Absolute balance change	0	+5	+5	0	0	0
4. Trend						
5.1. orientation	Flat	Flat	Flat	Ascent	Ascent	Ascent
4.2. Stability	Stable	Stable	Stable	Variable	Variable	Variable

The results of mean, relative balance change, absolute balance change, and direction in the within-situational analysis of the participants (see Table 6) indicated that all three participants improved in terms of positive cognitive emotion regulation strategies.

Cross-situational analysis of the participants in terms of positive cognitive emotion regulation strategies is presented in Table 7. As it is evident, teaching positive cognitive emotion regulation strategies was effective.

Table 7. Cross-situational analysis of the participants in terms of positive cognitive emotion regulation strategies

Cross-situational	The first participant	The second participant	The third participant
1. Situational comparison	Baseline/ intervention	Baseline/ intervention	Baseline/ intervention
2. Trend changes			
2.1. Direction change	Ascend	Ascend	Ascend
2.2. Target-dependent effect	Positive	Positive	Positive

**The third question: Is the educational model of women's coping with maternal stress effective in negative cognitive emotion regulation strategies?**

The raw scores of the baseline and the follow-up sessions after the intervention of negative cognitive emotion regulation strategies of the participants are presented in Table 8. As it is evident, there was a difference between the measurement values.

Table 8. Scores of negative cognitive emotion regulation strategies of the participants in the baseline and the follow-up phases

Baseline	The first participant	The second participant	The third participant
The first baseline	29	28	20
The second baseline	32	31	23
The third baseline	-	30	20
The fourth baseline	-	31	23
The fifth baseline	-	-	20
The sixth baseline	-	-	23
The first follow-up	25	20	15
The second follow-up	27	15	15
The third follow-up	25	18	19
The fourth follow-up	26	13	18

The values of the improvement percentage of negative cognitive emotion regulation strategies scores (see Table 9) showed that the educational intervention was effective in negative cognitive emotion regulation strategies of women. Since values above 50% of improvement indicate a high effect of the intervention, values between 25 and 49% show a moderate effect of the intervention, and values less than 25% indicate the ineffectiveness of the intervention (Ogles et al., 2001), it can be stated that the educational intervention had a moderate effect on decreasing the negative cognitive emotion regulation strategies of the second participants; however, it did not affect the first and the third participants. Moreover, the total improvement percentage showed that the educational intervention had a moderate to low effect on the negative cognitive emotion regulation strategies of the participants.

Table 9. Mean, standard deviation, and improvement percentage of the scores of negative cognitive emotion regulation strategies of the participants in the baseline and the follow-up phases

Participants	Baseline phase	Follow-up phase
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range of the stability chamber						
3. Balance change						
4.1. relative balance change	0	+.5	+.5	0	0	0
3.2. Absolute balance change	0	+.5	+.5	0	0	0
4. Trend						
5.1. orientation	Flat	Flat	Flat	Descend	Descend	Descend
4.2. Stability	Stable	Stable	Stable	Variable	Variable	Variable

The results of mean, relative balance change, absolute balance change, and direction in the within-situation analysis of the participants (see Table 10) indicated that all three participants improved by a small percentage in terms of negative cognitive emotion regulation strategies.

Table 11. Cross-situational analysis of the participants in terms of negative cognitive emotion regulation strategies

Cross-situational	The first participant	The second participant	The third participant
1. Situational comparison	Baseline/ intervention	Baseline/ intervention	Baseline/ intervention
2. Trend changes			
2.1. Direction change	Descend	Descend	Descend
2.2. Target-dependent effect	Negative	Negative	Negative

Cross-situational analysis of the participants in terms of negative cognitive emotion regulation strategies is presented in Table 11. As it is evident, teaching negative cognitive emotion regulation strategies was effective.

## Discussion

The present study was conducted to develop and validate an educational model for women to cope with maternal stress based on the coping methods of satisfied women and its effectiveness in cognitive emotion regulation. The results showed that the educational model of women's coping with maternal stress based on the coping methods of satisfied women was effective in cognitive emotion regulation. Psychologists and family counselors can use the developed and standardized educational model of the present study to reduce maternal stress and reduce the cognitive emotion regulation of women. This result is in line with the studies of Carlson et al. (2012) and Saadati et al. (2019).

This finding can be explained by referring to the definition of emotion regulation (Gratz & Romer, 2008) which is a process by which people influence their emotions and how they experience or express these emotions. Emotion regulation is defined as the process of initiating, maintaining, modulating, or changing the occurrence, intensity, or continuity of inner feelings and emotions related to social-psycho-physical processes in achieving one's goals (Daros et al., 2018). In the training sessions, topics such as the normal state of stress after the birth of a child for all families, the areas of stress after the birth of the first child, realism/ perfectionism and its role in the stress of the independent personality, mother's feeling of loneliness and its role in the stress of the current life/ being worried about the future and its role in stress, mother's openness to experience and its role in stress, mother's personal space and attention to recreation and its role in stress, child's calmness and its role in stress, support of the spouse and the families and its role in stress, taking timely and decisive actions, ignoring the inappropriate behaviors of the child, avoiding sidestepping, changing the procedures and the conditions, increasing the threshold of tolerance, trusting in God, managing the relationship and talking with the spouse, devoting time, talking and empathizing with the child, managing relationships with others, increasing educational knowledge, proper monitoring and control, providing growth opportunities for the child, verbal and practical encouragement/ highlighting the strengths, educating and informing the child, strengthening the child's social interaction, focusing on the solution and not the problem, getting help from experienced people, sufficient effort to evaluate and diagnose the problem were discussed. The above-mentioned areas were explained to the mothers and were taught to them in the sessions. The careful inspection of the above areas shows that each of them, separately and in combination, can be effective in regulating the mothers' emotions.

In the explanation, I can say equal level communication, open communication, listening to the child's words, decision and exchange of opinions, empathy with the child, decision-making with the child, problem-solving, paying responsibility for the child, and participation. The child in indoor and outdoor activities, comprehensive care, internalization of appropriate behavioral habits in the child taught in sessions to mothers, positive regulatory strategies seem to be active in them and other cases. Preventing the spread of the problem, one's position, strengthening the understanding of negative

emotions, taking timely and decisive action, ignoring the child's inappropriate behavior, and avoiding the sidelines on negative emotion regulation strategies will reduce them, perhaps these results are not far from expected.

## Conclusion

The effectiveness of parenting education in improving emotion regulation can also be explained by the role of this method in controlling maternal stress and preventing extreme responses to children's negative behaviors. It reduces problems between parents and children, and increases successful experiences in terms of children's behavior management, improving successful family interactions, achieving interpersonal success, and promoting management ability and positive social effects on children's actions (Badiie et al., 2021). Therefore, it can be concluded that having such an experience can reduce negative emotional strategies.

One of the limitations of the current research included the sole participation of mothers; it limited the generalizability of the results to the parents. Thus, it is suggested that further studies examine fathers. In addition, it is suggested that further studies compare the effectiveness of parenting training programs with other parenting methods such as positive parenting, and parenting based on behavior management. Finally, counselors and family psychologists can use the results of this research study to manage the emotion regulation of mothers with young children.

## Disclosure Statements

The present study is a part of a dissertation (with the ethics code number IR.ATU.REC.1400.039 on 11 Sep. 2021) on Counseling at Allameh Tabatabai University. The authors thank and appreciate all the women who participated in the present study. Moreover, it should be noted that it was possible to conduct the study with their very sincere cooperation. The authors of this study declare that they have not been supported by any organizations. And, there is no conflict of interest in this study.

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