



Development of an Educational-Psychological Manual for Parenting After Divorce Based on Positive Parenting and Investigating the Effectiveness of the Developed Manual on Children's Emotion Regulation

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ABSTRACT

This study aimed to develop an educational-psychological manual for parenting after divorce based on positive parenting and to investigate its effectiveness on emotion regulation. The research employed a mixed-method approach, incorporating qualitative phenomenology. The study population consisted of 16 custodial parents selected through purposive sampling from visitors to a family court complex in Tehran, employing semi-structured interviews. Data were analyzed using the seven-step process by Colaizzi. The quantitative section of the research was a quasi-experimental pre-test and post-test design. The statistical population was 177 parents, of whom 26 were selected through convenience sampling from parents who responded to the Shields and Cicchetti Emotion Regulation Questionnaire (1997) and whose children scored lower. These participants were randomly assigned to experimental and control groups and analyzed using multivariate analysis of covariance (MANCOVA). The qualitative research findings led to 7 main themes and 46 sub-themes. The quantitative findings showed that the developed educational-psychological manual has a significant effect on the emotion regulation of children of divorce ($p < 0.001$). Therefore, the educational-psychological manual based on positive parenting can be used for the emotional regulation problems of children after divorce.

Keywords: Divorce, Children of Divorce, Emotion Regulation, Positive Parenting, Educational-Psychological Manual.

1. Introduction

Recent data indicates that Iran is among the countries where the divorce rate is increasing, such that in the

first half of the year 2023, 65,354 divorce cases were reported nationwide, of which 10,769 cases were in Tehran (1-3). Divorce, meaning the dissolution of marriage under specific legal, religious, and customary conditions, results in

the couple having no rights or obligations towards each other post-divorce (4). Couples may end their relationship for various reasons, sometimes involving their children. Studies have shown that early childhood is a critical period in development because rapid achievements in physical, cognitive, and socio-emotional domains form the "building blocks" for children's subsequent growth (5), deserving of effective and sensitive upbringing and a secure family environment (6).

Parenting is a dynamic process that begins at birth and continues until children become independent. Parents must create conditions for the proper social, intellectual, physical, and emotional development of their child, which is impacted by divorce and can affect emotion regulation in children of divorce (7). Emotion regulation can be defined as a fundamental domain in cognition, behavior, motivation that can be regulated, monitored, and controlled by learners, according to some references in self-regulated learning models (8). Emotion regulation skills play a significant role in predicting and coping with children's problems and dealing with stressful situations. Studies have shown that children of divorce are more involved in less adaptive emotion regulation strategies such as reappraisal, rumination, and suppression (9). Parents' emotional response to their children's emotions plays a key role in the quality of the parent-child relationship, emotion regulation, and internalized problems (10), and the more negative emotional responses from parents, the weaker the emotion regulation in their children; hence, parents' negative emotional responses predict their child's self-regulation (11). Divorce can affect children's sense of emotional security, thereby impacting their effective coping (12). Longitudinal studies have shown that disruption in emotion regulation (e.g., rumination, deficits in emotional understanding, irregular emotional expression) predicts symptoms of internalization in children (13).

Positive parenting is a dimension of parenting that can be impacted by divorce (14). The premise of intervention with positive parenting is that the parent-child interaction is a significant predictor in the context of the onset and maintenance of children's behavioral and emotional problems, and interactions filled with mutual hostility, pessimism, excessive control, and severe aggression play a crucial role in the pathology of childhood (15). Training in

positive parenting skills changes the parenting experience compared to standard care (16, 17) and focusing on strategies for reappraising parental performance leads to improvements in parenting skills, child behavioral improvements, and enhancement of the parent-child relationship and emotion regulation (18, 19). Indicators of positive parenting contribute to better child self-regulation, including compliance, effortful control, and effective emotion regulation, resulting in increased positive emotion regulation and reduced negative emotion regulation in children of divorce (20). Based on a model presented about emotion regulation (11), child self-regulation is influenced by various factors of the family emotional climate (such as positive parenting, emotional expression) and observation and modeling of behaviors, parents' specific behaviors related to emotional socialization. The parenting style and the perceived quality of the parent-child relationship are one of the main components that have a direct impact on the formation and growth of emotional regulation, as they are an integral part of the environment in which the child grows and develops (10). The combination of parents' parenting styles creates an emotional climate that also determines their attitude towards their responsibilities, conveyed through body language, tone of voice, their emotions, and the quality of attention to the child (5). Therefore, parenting stresses after divorce, parents' awareness of parenting styles after divorce, parents' psychological state like their anxiety and depression (21, 22), their relationship with non-custodial parents (23), parents' economic and social situation and reduction of financial resources after divorce (24), parents' relationship with the child, living in different structures such as remarriage and living with grandparents (25), or other relatives, strategies that parents use for child emotion regulation after divorce can affect how they care for children and their parenting styles. Family conflict, parents' emotion regulation, and parents' psychological pathology play a crucial role in children's emotion regulation and internalized child problems (26). So much so that parents' own emotional mismanagement and disorder may affect how they perceive and discuss emotional events with their children (26).

Parents unable to process emotions appropriately may place children in difficult situations that can affect the children's emotion regulation and are more likely to use negative parenting, associated with specific emotion

regulation strategies (suppression, reappraisal) as a protective factor (27), leading to emotional neglect and abuse of children after divorce (28). Another factor in children's emotion regulation learning is that parents prone to experiencing negative emotions may struggle with emotion regulation, which in turn may be transmitted to their children through observational learning. Children observe behavioral models and internalize parents' behaviors. Observing or modeling emotion regulation means that children are able to observe and model others' emotional reactions and use the same ways to deal with their own situations. This can be manifested, for example, through emotional contagion, social referencing, or explicit modeling (11); which is manifested as child abuse after divorce. Children who are abused, compared to non-abused children with similar demographic characteristics, show weaker adaptive emotion regulation and more instability/negativity (29). In fact, parents involved in a hostile relationship are not only verbally and/or physically aggressive but have also emotionally distanced themselves; therefore, their relationship can be devoid of any warmth or affection (30). On the other hand, with the occurrence of divorce, the quality of attachment between parents and child changes. Divorce, by creating insecure attachment in children, causes problems in children's emotion regulation. In general, findings show that higher quality of parental attachment to the child is associated with higher emotion regulation abilities in children (31). Parents who themselves make sufficient use of emotion regulation can transfer this method to their children (32). Given that parents play a fundamental role in raising children, therefore, parental education is a significant and promising preventive step towards enhancing children's mental health in the dimensions of emotion regulation after divorce; however, the ability to regulate others' emotions only occurs when the individual is aware of their own emotion regulation (13, 33). Therefore, developing an educational-psychological manual for parenting after divorce based on positive parenting to reduce emotion regulation problems in children of divorce, according to the standards of the positive parenting program, can be an essential step to reduce emotional problems in children after divorce. It can have better effectiveness than applying treatments separately for improving emotion regulation in children of divorce, which play a primary role

in children's emotional dysregulation, and since the target population in this study are parents who have divorced; therefore, increasing parents' emotional awareness and reducing their own negative emotions can prevent the spill-over of negative emotions to children and create an environment for reducing children's negative emotions; and increase children's emotional adaptability. In addition, most research has examined effective interventions for children and parents unidimensionally, a study that can serve as an educational and psychological manual for parenting after divorce according to the norms present in the culture and parents' experiences of parenting after divorce towards reducing children's negative emotions in a qualitative way with a phenomenological method has been less conducted; therefore, the present study aims to develop an educational-psychological manual for parenting after divorce based on positive parenting and its effect on the emotion regulation of children of divorce, seeking to answer these questions: What is the educational-psychological manual for parenting after divorce based on positive parenting? And at the end of the study, it answers the question of whether the educational-psychological manual for parenting after divorce is effective in regulating children's emotions?

2. Methods and Materials

2.1. Qualitative Part

The research method in the qualitative part was descriptive phenomenology, and in the quantitative part, it was a quasi-experimental method using a pre-test-post-test design with an experimental group and a control group. The statistical population for the qualitative part included all divorced custodial parents (both men and women) who visited a family court complex in Tehran during 2021-2022 CE. Sampling was performed purposively. After conducting semi-structured interviews with 16 custodial parents until data saturation was reached. The criteria for participation in the current study were having been divorced for at least one year, having custody, having at least one child aged 7 to 12 years, and having a minimum of a high school diploma. Criteria for exclusion were unwillingness to cooperate, participation in similar programs, and absence from two sessions.

For interpreting and analyzing the interview data, open coding and Colaizzi's method were used, which is carried out in seven stages. Firstly, after recording each interview, converting it to text, and transcribing each interview on paper, the main meaning intended by the participant and the ambiguous points of each interview were identified. In the second stage, a general review of the data was conducted with the goal of reflecting on the participants' statements, and important phrases relevant to the research objectives were extracted. In the third stage, data coding was performed, leading to the grouping of sections and writing a word that represents the meaning of that phrase. Then, the obtained phrases were formulated as semantic units. In the next stage, the actual words and language of the participants were used for labeling sentences, paragraphs, and sections. In the fourth stage, similar semantic units in interviews were categorized. In the fifth stage, based on the similarity of semantic units, important phrases for categorizing meanings were used, leading to the identification of sub-themes. In the sixth stage, these sub-themes were used to write what the participants had experienced, covering the themes. Finally, the themes were placed in a broader scope named domain for explaining and interpreting the findings obtained from the table, and then in the seventh stage, validation was carried out. To evaluate qualitative validity, member checking, briefing sessions with experts, and an external listener were used (Creswell & Clark, 2017). In member checking, sub-categories and descriptions based on the educational and psychological needs of parents from parenting after divorce were presented to participants, and their opinions on the accuracy and precision of findings were reviewed. In briefing sessions with experts, besides the researcher and the advisor, experts in the field of phenomenology of this study reviewed it and raised questions. In the external listener method, a review of the entire research by a psychologist colleague objectively reviewed different aspects of the study (accuracy of interview typing and analysis of data obtained from coding and description of codes) for evaluation. The content of the educational-psychological parenting after divorce sessions was developed based on the sub-categories and main categories obtained from open coding, tailored to the educational-psychological needs of parents after divorce and the educational objectives of the positive parenting program (triple) suitable for parents whose children had

problems with emotion regulation. For this purpose, in this section, the researcher validated the educational-psychological manual by evaluating the themes and components obtained during the qualitative analysis process. The aim in this process was that the components and themes obtained precisely represent the statements emphasized by the interviewees (parents with divorced children). To ensure this matter, the themes and components resulting from the interviews were presented to the interviewees after extraction and placement in the educational-psychological manual, and their accuracy was confirmed. Once the parenting styles of divorced parents were determined and the educational-psychological manual was designed. Considering the experience of divorced parents in parenting, the researcher identified similar cases to positive parenting and selected themes that had the most similarity in terms of nature, technique, and process with his educational-psychological manual. Positive parenting, which serves as a basis for placement for validation, is comprehensively explained in the second chapter, presenting all its dimensions, including content, objectives, and treatment process. After completing these stages, the educational-psychological manual was finalized in terms of content, process, and the techniques used, and this manual was presented for comprehensive evaluation to the guide teachers, advisor, and 10 specialists active in the field of counseling and psychology who had experience working with divorced children and positive parenting. These specialists comprehensively studied the educational-psychological manual of positive parenting and expressed their opinions about its alignment with the themes extracted in the qualitative phase, the comprehensiveness of its content, process, and also the efficacy of the techniques used. The suggestions and opinions of these individuals were the basis for further revision of the work, and the educational-psychological manual was presented to them again and finalized after their final confirmation. The title and content of the sessions of the educational-psychological manual for parenting after divorce based on positive parenting are presented below.

2.1.1. *Intervention Protocol*

Session 1: Awareness for Parents Post-Divorce

Introduction to group members, setting expectations.

Educating parents about the importance of participating in post-divorce educational and psychological sessions and their objectives.

Discussing common pitfalls in parenting post-divorce and conducting a pre-test.

Session 2: Teaching Skills to Reduce Psychological Problems of Parents Post-Divorce

Educating custodial parents on the negative impacts of psychological issues on parenting.

Training on essential skills for effectively dealing with negative emotions post-divorce.

Focusing on individual needs post-divorce and self-care methods.

Session 3: Teaching Effective Communication Between Parents After Divorce

Employing appropriate strategies for effective communication with the non-custodial parent.

Assessing relationship needs and the extent of parents' communication post-divorce.

Establishing parents' expectations in parenting post-divorce and setting boundaries for interactions.

Session 4: Addressing Conflicts Between Parents Post-Divorce

Identifying conflicts between parents post-divorce and strategies to handle them.

Presenting models related to conflict and different response styles to custodial parents.

Training in conflict resolution skills for discussions with the ex-partner.

Session 5: Continued Focus on Effective Communication Between Parents After Divorce

Identifying and explaining issues related to parenting post-divorce.

Setting stable and clear rules for parenting and their implementation considering parenting challenges.

Session 6: Teaching Effective Communication Between the Custodial Parent and Children Post-Divorce

Assessing communication needs according to the child's developmental age.

Focusing on children's abilities in tasks.

Aligning rules governing both households post-divorce and fostering positive interaction between parent and child by setting clear boundaries to prevent the child from becoming a messenger.

Session 7: Further Teaching on Effective Communication Between the Custodial Parent and Children Post-Divorce

Empowering the custodial parent for effective communication with the child post-divorce.

Reorganizing and restructuring the family, spending quality time with the child tailored to their age, and creating an environment for open and honest conversations.

Session 8: Implementing Strategies for Children's Adaptation Post-Divorce

Familiarizing parents with psychological problems children face post-divorce.

Teaching practical strategies for managing problematic behaviors of the child with related tasks.

Session 9: Implementing Adaptation Strategies for Children Post-Divorce

Informing children through parents about post-divorce issues.

Establishing stable rules and behaviors to build more trust in children post-divorce.

Session 10: Addressing Parental Roles with Changes in Family Structure Post-Divorce

Introducing parents to new structures post-divorce and their role in parenting.

Identifying common mistakes in parenting across different post-divorce structures, matching parenting styles across these structures, and presenting useful methods in parenting suitable for post-divorce family structures.

Session 11: Implementing Beneficial Strategies for Parenting Post-Divorce

Educating parents to recognize and understand the emotions of children post-divorce and employing effective coping skills to reduce these emotions by encouraging children to express negative emotions, emotional involvement of parents, and educating parents about the consequences of excessive punishment and reward post-divorce.

Session 12: Implementing Beneficial Strategies for Parenting Post-Divorce

Avoiding the transfer of emotions (threats, humiliation, exclusion, inducing guilt), reviewing past sessions, strategies for maintaining change, concluding the sessions, and conducting a post-test.

This protocol is designed to assist parents in navigating the complex landscape of post-divorce parenting, focusing

on positive parenting strategies, effective communication, conflict resolution, and emotional regulation, to ensure the well-being of both parents and children.

2.2. Quantitative Part

The next step in conducting the research in this section is to assess the content validity ratio (CVR) and the content validity index (CVI) of the sessions outlined in the educational-psychological manual for parenting after divorce. For content evaluation in this study, 10 experts in psychology and counseling, who held doctoral degrees and resided in Tehran, with at least 5 years of experience in teaching and therapy related to divorce and parenting, responded to a questionnaire that determined the content validity ratio (CVR) and the content validity index (CVI) (34); the overall mean CVR for the 12 sessions of parenting after divorce based on positive parenting was calculated as 0.96; and the overall mean CVI in this research was 0.94. After the development and internal validation (content validation) of the educational-psychological manual for parenting after divorce was confirmed by experts, the next step, which was the quantitative phase of the research, was carried out. This involved the implementation of the educational and psychological parenting after divorce manual. For this purpose, a statistical sample of 117 custodial parents with divorced children was selected from visitors to a family court complex in Tehran for identifying emotion regulation in divorced families according to the research participation criteria. The research questionnaires in this section were provided to the participants for response. Then, after collecting and analyzing the relevant questionnaires, in this section, among the parents whose children had received higher or lower average scores than the norm in response to the questions of the Shields and Cicchetti Emotion Regulation Checklist (ERC) filled out by the parents (1995) (35), considering that the research design was quasi-experimental, 30 people were randomly selected and invited for cooperation. Ultimately, 26 expressed willingness to participate and were placed in two groups of 13, experimental and control. The intervention for the experimental group was conducted over 12 sessions of 120 minutes each, over 6 weeks from June to July 2023. The theme of the educational sessions had a clear and step-by-step structure for all sessions. The teaching method involved

providing practical techniques for parents based on positive parenting, explaining the parent-child relationship and parenting methods, and offering practical exercises for reducing parent-child relationship problems, emotion regulation, and behavioral problems for children of divorce with the presentation of tangible examples and repetition and practice in the educational session, and feedback from the experimental group members was implemented, and the control group received no intervention. The results of the analysis in this section are presented using multivariate analysis of covariance and SPSS software version 26.

2.2.1. Tool

The Emotion Regulation Checklist designed by Shields and Cicchetti (1997) is widely used for assessing children aged 6 to 12 years. It aims to evaluate the level of children's emotion regulation through two subscales, namely, Emotion Regulation (ER) and Lability/Negativity (L/N). Emotion Regulation estimates the expression of emotions, empathy, and emotional self-awareness, and Lability/Negativity evaluates inflexibility, disruption in anger regulation, and mood instability. The Lability/Negativity subscale is correlated with problematic behavioral standards, and the Emotion Regulation subscale is positively correlated with social skills standards (Henricks, Rice et al., 2016). This checklist consists of 24 items. Scoring is done using a four-point Likert scale (1 = never; 2 = sometimes; 3 = often; 4 = almost always) and can be responded to by adults who are well acquainted with the child, such as a parent, caregiver, or teacher. The checklist includes two scales: one scale consists of 8 items for assessing adaptive Emotion Regulation (ER) (child's emotional self-awareness and constructive emotional expression). Higher scores indicate a better capacity in modulating and arousal that maintains the individual at an optimal level of engagement with the environment, and another scale includes 16 items measuring Lability/Negativity (L/N), including inflexibility, emotional activation, reactivity, disruption in anger regulation, and mood instability. Shields and Cicchetti reported Cronbach's alpha coefficients for internal consistency of the test and the subscales of adaptive emotion and lability/negativity as 0.83 and 0.96, respectively. These two scales are significantly correlated, $r = -.50$, $p < .001$, with a composite score of 0.89 created from the total scores on both scales (35).

3. Findings and Results

3.1. Qualitative Part

From the qualitative analysis of the interviews and data, 364 phrases and sentences were extracted as initial codes from the transcribed interview texts, ultimately forming 7 main themes and 46 subthemes. The main themes of this

research were children's maladjustment after divorce, psychological problems of parents, challenges between parents, challenges between parents and children, parents' unawareness of parenting after divorce, changes in family structure after divorce, and parents' ineffective solutions; these are referred to in [Table 2](#) and [Table 3](#).

Table 1

Main Themes, Subthemes, and Initial Codes of Parental Problems with Divorced Children

Main Theme	Subthemes	Codes
Child Maladjustment Post-Divorce	Increased severity of psychological issues, low awareness, distrust towards parents, refusal to contact one parent, mistreatment of the other parent.	Depression, anxiety, hyperactivity, disobedience, fear, crying, sleep problems, lying, self-esteem issues, nutrition problems, smoking, low awareness, distrust towards parents, refusal to contact a parent, mistreatment of the other parent.
Parents' Psychological Issues		Parents' depression, anxiety, aggression, psychological fatigue.
Parental Challenges with Each Other		Slandering each other, blackmailing each other, conflict in parenting, intrusion in parenting, lack of child support, lack of unity in parenting, lack of cooperation in parenting, non-responsiveness, lack of parental coordination for contact, cutting off contact, minimal contact, lack of time for parenting, instability in parenting, reduced parental authority, lack of control over child's behavior, parents lying, parents' ethical issues, parents lacking support, financial and legal issues related to custody, lack of job and sufficient income, lack of housing, failure to pay alimony, legal issues related to custody, property seizure issues.

Table 2

Main Themes, Subthemes, and Initial Codes of Challenges and Ineffective Strategies by Parents of Divorced Children

Main Theme	Subthemes	Codes
Parental Challenges with Children	Transmitting messages to parents (tattling), lack of independence in performing tasks, children extorting parents, the child's gender influencing the behavior.	Tattling to parents, lack of independence in performing tasks, children extorting parents, lack of skills in controlling children, greater need for a same-sex parent.
Parents' Unawareness of Post-Divorce Parenting	Lack of education in schools, lack of education in courts, not using educational packages, not taking advice from counselors and psychologists.	Lack of education in schools, courts, not using educational packages, ignoring counselors' and psychologists' advice, no mandatory court education, unawareness of post-divorce parenting methods.
Changes in Family Structure Post-Divorce	Parents' remarriage, living with maternal or paternal grandparents, living with other relatives.	Positive relationship with step-parent, negative relationship with step-parent, non-custodial parent's interference post-remarriage, non-acceptance of the child, increased belittlement by parents, instability in parenting, neglect of children's needs, over-control by step-parents, non-response to children's needs, interference in parenting, denigration of custodial parent in child's presence, badmouthing the other parent in front of the child, lack of communication with the child, decreased parental independence in managing family affairs, lack of response to children's needs, excessive indulgence, over-control of children, lack of stability in parenting, lack of authority in parenting, better acceptance of the child, lack of parenting skills.
Parents' Ineffective Strategies	Physical punishment, verbal punishment, excessive rewarding of children.	Pacifying children with excessive gifts, physical punishment, verbal punishment, neglecting the child, not considering the child's age for communication.

3.2. Quantitative Part

The findings of this section indicated that the educational-psychological manual for parenting after divorce based on

positive parenting has an effect on children's emotion regulation. Demographic information in this section, based on the age and gender of the children, education of the parents, and custody with fathers and mothers, showed that the average age of children in the experimental group was 9

years with an average of 5.82 years, 39% were boys, and 61% were girls. Occupation-wise, 46.2% were self-employed, 38.5% were employees, and 15.4% were engineers. Regarding custody, 46.2% was with the fathers,

and 52.8% was with the mothers. Educationally, 39% had a diploma, 46% had a bachelor's degree, and 15% had a master's degree. Descriptive statistics information is presented in [Table 3](#).

Table 3

Descriptive Statistics for Emotional Regulation of Two Groups at Different Measurement Levels

Variable	Group	Pre-test Mean (M)	Pre-test Standard Deviation (SD)	Post-test Mean (M)	Post-test Standard Deviation (SD)
Adaptive Regulation	Emotional Control	14.31	3.06	14.15	3.21
	Emotional Experimental	14.69	3.90	19.62	4.73
Instability/Negativity	Emotional Control	43.54	7.68	43.54	7.68
	Emotional Experimental	43.77	6.20	40.38	7.19

Levene's test results showed that the F-value for all research variables was not significant at an error level of less than 0.50, in other words, the null hypothesis based on the equality of variances in groups for all variables is confirmed.

The results in [Table 4](#) show that the observed F-value for the adaptive emotion regulation variable for the group variable, controlling for the pre-test effect, was 29.601, and its significance level was also 0.001, indicating a significant difference between the post-test scores in the experimental and control groups. Thus, the main effect of the group variable is significant, showing that there is a significant difference between the control and experimental groups after the intervention. For the variable of emotion regulation instability, the observed F-value for the group variable, controlling for the pre-test effect, was 35.270, and its

significance level was also 0.001, indicating a significant difference between the post-test scores in the experimental and control groups. Thus, the intervention effect is significant, showing that there is a significant difference between the control and experimental groups after the intervention.

Furthermore, according to the results in [Table 3](#), which show an upward trend in adaptive emotion regulation in the experimental group from the pre-test to the post-test, and a downward trend in emotion regulation instability in the same period, it can be concluded that the education provided by the educational-psychological manual for parenting after divorce based on positive parenting had an effect on the emotion regulation of children of divorce.

Table 4

Results of the Covariance Analysis for Examining the Effect of the Intervention on Adaptive and Instability Emotional Regulation

Variable	Source	Sum of Squares	Degrees of Freedom (df)	Mean Square	F Value	Significance Level (p)	Effect Size (Eta)
Adaptive Regulation	Emotional Between Groups	168.538	1	168.538	29.601	0.001	0.574
	Error	125.261	22	5.694			
	Total	586.654	25				
Instability Regulation	Emotional Between Groups	74.361	1	74.361	35.270	0.001	0.616
	Error	46.383	22	2.108			
	Total	1394.962	25				

4. Discussion and Conclusion

This research aimed to develop an educational-psychological manual for parenting after divorce based on

positive parenting and to investigate its effectiveness on emotion regulation. The qualitative findings of the research led to 7 main themes and 46 subthemes, showing that parents consider parenting after divorce a challenging task. Parental

communication, psychological problems of parents after divorce, their awareness of parenting styles, and the use of effective methods in parenting considering the change in family structure can impact children's adjustment.

The quantitative findings demonstrated that the developed educational-psychological manual has a significant impact on the emotion regulation of children of divorce. The current study examined two aspects of children's emotional self-regulation, adaptive emotion regulation, and instability/negativity. The results indicated that after the intervention, there is a significant difference in adaptive emotion regulation and emotional instability regulation in the experimental group, with an upward trend in adaptive emotion regulation from the pre-test to the post-test and a downward trend in emotion regulation instability over the same period. Thus, it can be concluded that the education provided by the educational-psychological manual for parenting after divorce based on positive parenting had an effect on the emotion regulation of children of divorce. The results of this research are consistent with other studies on the impact of positive parenting on children's emotion regulation (16, 18-20).

Research conducted by David et al. (2017) on online coaching for emotion regulation showed the effectiveness of positive parenting on parents' emotion regulation strategies, indicating that positive parenting is effective in improving mothers' emotions, attitudes, self-efficacy, and distress and has positive outcomes for parent-child interactions (18). Also, indicators of positive parenting contribute to better child self-regulation, including support for the child, effortful control, and emotion regulation (18). It can be said that using the educational-psychological manual for parenting after divorce, which is theoretically based on positive parenting, can affect children's emotion regulation by reducing parenting stresses after divorce, increasing parents' awareness in relation to children, helping custodial parents for effective communication with the former spouse, removing communication barriers between parents and children, and teaching useful strategies for children's emotion regulation. Therefore, parents were transmitting their experiences to children. For example, one of the factors that can affect children's emotion regulation is parental communication after divorce, where children are harmed in interactions between parents, leading to children's emotional

dysregulation. For instance, when parents victimize the child with their anger and rage and are unable to regulate their emotions (7, 36), they can expose children to harm. When parents after divorce ask the child to suppress their emotions and forbid mentioning the other parent in the house and use them as intermediaries in their conflicts, it can expose them to emotional dysregulation (37). Therefore, parents' emotional response to their children's emotions plays a crucial role in the quality of the parent-child relationship; child's emotion regulation (10). On the other hand, parents who do not live together after divorce have less commitment to parenting and are less aware of their parenting duties and may be less accessible, which can affect the level of post-divorce parental responsiveness and expose children to emotional dysregulation, which is determined by the form of attachment to both parents or one of the parents after divorce and with the avoidance of meeting with parents, internalize their emotions, and this emotional suppression can lead to internalized behavioral problems (38). Therefore, parents learn emotional coaching through the educational-psychological manual for parenting after divorce. They allow the child to talk about their negative and positive emotions and help with emotional discharge by providing clear explanations regarding the child's feelings. Studies have shown that from an attachment perspective, this can provide a secure context for children to remember their emotions and events around them and reflect on them (25). Also, learning emotion regulation was related to acceptance and awareness of one's emotions. Therefore, parents recognizing their emotions are able to face hidden emotions accompanied by anger and guilt, and their feelings change.

This research aligns with other studies that learning emotion regulation, considering parents' internal perceptions of emotions (acceptance, awareness), can affect their use of emotion regulation strategies, and the application of emotional knowledge considering the internal state of parents can help use the same methods for children (32) and since parents' psychological problems can indirectly affect the parent-child relationship and parent-child conflict, teaching positive parenting methods predicts their emotional confusion (22), which plays a crucial role in children's emotion regulation. Teaching the educational-psychological manual for parenting after divorce by encouraging parents to express emotions and cognitive reappraisal provides parents

with a new understanding of parenting after divorce that increases parenting competence and reduces caregiving helplessness (39). Also, by reducing parenting stresses using stress management techniques like mindfulness, deep breathing, and planning for tasks and daily routines (16), it helps in children's emotion regulation. Another factor that affects children's emotion regulation after divorce is parental communication. Open and covert conflicts of parents after divorce (23) can affect parenting and with the creation of a negative atmosphere in the family affect parent-child interactions and affect children's emotion regulation. Conflicts between parents over child custody, financial and legal issues, non-responsiveness to children's needs, conflict in parenting, interference in parenting, lack of unity in parenting can change parents' attitudes towards parenting skills due to distrust; and cause conflict between parents and children and affect children's emotion regulation (26).

The educational-psychological manual for parenting after divorce by teaching methods to reduce conflicts between parents and problem-solving and effective communication to non-custodial parents with emphasis on the roles of each parent in parenting was able to take a fundamental step in reducing negative emotions of custodial parents and by creating realistic expectations and a definition of communication between parents after divorce and its role in parenting and children's emotion regulation, paved the way for parents towards better emotion regulation for children, therefore, parents by learning child-focused skills and self-management skills (such as goal setting, self-monitoring, and evaluation of strengths and challenges, setting personal goals and parenting plan for change, planning, and preparation for risks) are trained to face challenging situations (16). Problem-solving training for parents can lead to a reduction in parents' use of other ineffective parenting styles such as advice without explanation and punishment and blaming children; therefore, understanding and regulating parents' emotions can determine their situational assessment and affect their parental behaviors; and the use of cognitive reappraisal strategies for regulating difficult emotions is related to more responsive parenting and respect for children's needs (36). Another factor that affects children's emotion regulation after divorce is parent-child relationships, which can affect children's emotion regulation after divorce. The quality of parent-child attachment can

affect children's emotion regulation (31). Children who are mistreated after divorce are more likely to have problems in regulating their emotions, and this can lead to children's emotional instability, which is related to parenting styles. Unfavorable parenting styles such as punitive discipline, inconsistent parenting styles, insufficient supervision, and inefficient parent-child interactions are triggers for the emergence of externalizing behaviors (such as aggression) and internalizing problems with symptoms, depression, anxiety, these behavioral manifestations create more stress for caregivers, parents of these children may use more negative parenting styles, their children tend to exhibit more behavioral and emotional problems (33).

The findings of this research are consistent with those of Spinrad et al. (2012), indicating that teaching positive parental behaviors with responsiveness, support, and autonomy is effective for children's emotion regulation (40). Therefore, the educational-psychological manual for parenting after divorce, by creating a secure attachment environment, enhances the parent-child attachment and reduces negative interactions between parent and child, and by fostering intimacy between parents, reducing conflict between parent and child, and improving healthy dependence, it aids in the emotion regulation of children after divorce. Research results have shown a positive correlation between positive parenting and secure child attachment (17). A parent's positive parenting can reduce parent-child conflicts, facilitate effective communication, and strengthen parent-child attachment relationships, creating a secure family environment that reinforces the feeling of warmth and support and facilitates the growth of a healthy parent-child attachment (41). Parents who learn emotion regulation themselves, by recognizing their own and their children's emotions, provide an opportunity for discussion with their child about emotions; thereby aiding in the child's emotion regulation. The results of this study align with those of Gottman, Fainsilber Katz, and Hooven (1996), which found that parental learning of emotional coaching and awareness of children's negative emotions provides an opportunity for intimacy with the child, marked by validation and labeling of emotions and setting limits by parents and resolving issues as necessary (42). Parents' emotional response to their children's emotions plays a crucial role in the quality of the parent-child relationship,

emotion regulation, and internalized problems (10). Another factor affecting parenting after divorce is changes in family structure, living with stepparents, and living with grandparents and other relatives, which plays a crucial role in the emotional instability of children after divorce. Often, parents who remarry and live with children with grandparents or other relatives are unaware of parenting methods. Therefore, the lack of control over children, excessive control, or lack of responsiveness to children's emotional needs, or conflict in parenting in these families, can cause emotional instability in children. The results of this research on parent training in these families showed that the educational-psychological manual for parenting after divorce, by increasing parents' awareness of common mistakes in parenting, can help reduce conflicts between parents and children in these families and create stability in parenting to reduce emotional instability; and the results of this part are similar to the research (43) which showed that training grandparents to increase parenting skills and reduce behavioral problems plays a primary role in emotion regulation. Also, the educational-psychological manual for parenting after divorce, by teaching efficient strategies for reducing emotion regulation, helps in enhancing the emotional well-being of children. The research results are consistent with other studies indicating that parental divorce can affect children's sense of emotional security and thereby interfere in their effective coping (12). Therefore, the educational-psychological manual for parenting after divorce can be used in public service centers such as courts and counseling centers to prevent emotion regulation problems in children before and after divorce. Among the limitations of this study is the limitation in the qualitative sample size, which is characteristic of qualitative research. The effect of the pre-test on the post-test scores should be considered. Also, follow-up studies have not been conducted. It is recommended for future research to consider the type of divorce, whether it is involuntary or consensual, which affects the level of parental conflict and can influence parents' agreement on parenting, the problems of children's emotion regulation before divorce, and the effect of the educational-psychological manual after divorce on other age groups.

Authors' Contributions

R.H. contributed significantly to the conception and design of the study, the development of the educational-psychological manual based on positive parenting, and was involved in drafting the manuscript and revising it critically for important intellectual content.

S.A. led the quantitative and qualitative analysis, contributed to the interpretation of data, and played a pivotal role in the research design and methodology, particularly in employing the mixed-method approach and analyzing data using the seven-step process by Colaizzi. S.A. also significantly contributed to drafting and revising the manuscript.

H.H. was instrumental in the collection and assembly of data, particularly through the administration of the questionnaire and conducting semi-structured interviews. H.H. also contributed to the analysis and interpretation of both qualitative and quantitative data and provided critical revisions of the manuscript.

All authors read and approved the final manuscript. S.A. is the corresponding author and has verified that all authors meet the authorship criteria and that no deserving authors have been omitted.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

The authors report no conflict of interest.

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Ethics Considerations

The study placed a high emphasis on ethical considerations. Informed consent obtained from all participants, ensuring they are fully aware of the nature of the study and their role in it. Confidentiality strictly maintained, with data anonymized to protect individual privacy. The study adhered to the ethical guidelines for research with human subjects as outlined in the Declaration of Helsinki.

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