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# A Study on Parents' Emotion Regulation Skills, Self-Awareness, and Cognitive Flexibility Levels

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## Abstract

Individuals' cognitive flexibility, their capacity to regulate their emotions, and their ability to be aware of the present moment will positively influence the way they behave toward themselves and their environment. It is considered that parents with these characteristics will exhibit behaviors that influence future generations largely in a positive way. The research aims to test a hypothetical model developed based on the literature to determine the factors affecting the cognitive flexibility of parents. The study group for the research consists of 351 parents with children in various age groups who are attending preschool, primary school, secondary school, or high school. The Cognitive Flexibility Inventory, Emotion Regulation Questionnaire, and Interpersonal Mindfulness in Parenting Scale were utilized as data collection tools in this study. The research was carried out with the relational screening model. Structural equation modeling was used for the analysis of the data. In the model, where cognitive flexibility was accepted as a predicted variable, emotion regulation skills and mindfulness demonstrated a positive relationship. Besides, mindfulness displays a positive relationship with cognitive flexibility.
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**Keywords:** Cognitive flexibility, Emotion regulation, Mindfulness, Parents.

## Introduction

Individuals who can adapt to rapidly changing social structure under the influence of science and technology have distinct characteristics. One of these features is cognitive flexibility (Martin & Rubin, 1998). Cognitive flexibility refers to the ability to cognitively develop and enforce new response arrangements in the face of changing environmental conditions (Martin & Rubin, 1995). It has been stated that individuals with high cognitive flexibility could prepare themselves for exhibiting new response patterns by evaluating possible situations beyond existing ones (Martin & Rubin, 1998). The concept of cognitive flexibility implies an individual trait that can be understood through life roles such as parenthood. Since it is possible for parents with children of any age to constantly encounter extraordinary situations and change their behaviors according to these experiences (Kobayashi, 2017), therefore, the concept of cognitive flexibility needs to emerge naturally during parenting. Parents' ability to anticipate potential threats to their children and determine their response accordingly may be related to the higher cognitive flexibility levels of parents. According to Martin and Rubin (1998), the variety of responses generated by individuals is also relevant to their cognitive flexibility levels. It has been observed that cognitively flexible individuals behave confidently in their relationships (Bandura, 1977; Martin & Rubin, 1995). In this regard, cognitive flexibility could be addressed as an important skill for parents to better regulate relationships with their children. In line with this information, Koesten, Schrodt, and Ford (2009) discovered in their study that cognitive flexibility fully mediates the effects of the power of self-expression and avoidance of conflict on the well-being of the family.

In the review of the national literature on cognitive flexibility, it was seen that the interest in this concept has gradually escalated in recent years and that cognitive flexibility has been studied with various groups and variables (Chen et al., 2022; Miles et al., 2022; Şahin Taşkın & Esen Aygün, 2022). However, the research, especially on the cognitive flexibility of parents, is limited. For example, Altunkol (2011) demonstrated a negative relationship between the perceived stress levels and the cognitive flexibility levels in university students. Küçüker (2016) investigated the possible roles of forgiveness, unforgiveness, and cognitive flexibility variables in the relationship between emotion regulation strategies and life satisfaction in university students. Atayeter (2020) determined that

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parents with high cognitive flexibility make positive impacts on their children's temperament characteristics. Çetin (2020) discovered that an increase in cognitive flexibility, combined with language learning motivation would lead to favorable results during foreign language learning in university students.

It is observed that the concept of cognitive flexibility has been examined in conjunction with various concepts in the international literature. Johnco, Wuthrich, and Rapee (2014) investigated the effects of cognitive flexibility on treatment outcomes and the acquisition of cognitive restructuring skills during the treatment of anxiety and depression in older adults. Al-Jabari (2012) examined the relationship between self-esteem, psychological and cognitive flexibility, and psychological symptomatology. The results suggested that cognitive flexibility has been found to be negatively correlated with psychological symptoms. Lin (2013) searched for the relationships between cognitive flexibility and openness to change and concluded that this relationship was positively related to academic achievement. Soltani et al. (2013) evaluated cognitive flexibility along with depression, resistance, and coping styles, and their results suggested a positive relationship between them.

Cognitively inflexible individuals are often rigid and dogmatic. Their rigid mindset is characterized by irrational thoughts, which can lead to psychological disorders such as depression (Dağ and Gülüm, 2013; Özdemir, 2019). According to Beck (1967), depressed people often experience a discrepancy when they compare the messages arising from the environment with their own depressive beliefs. This discrepancy causes the individual to show resistance to accepting and believing what actually happened rather than his own reflections. In other words, inflexible individuals fail to adapt their feelings and thoughts to different situations. Inflexibility and being narrow-minded create certain difficulties on part of the individual and thus, may impair mental health (Martin et al., 1991). This finding may be interpreted as an indicator of a close link between cognitive flexibility and emotion regulation skills.

Emotions direct a person's thoughts and actions in life. Individuals often integrate their thoughts and behaviors with their emotions and make sense of them. The emotions inform individuals about the intentions of others, whether a situation is good or bad, and the trajectory of social behavior (Gross, 1998; Hebb, 1949; Keltner & Gross, 1999; Young, 1943). If there is anything that is more critical than emotions, it is the ability to regulate them. Emotion regulation skills are the efforts of individuals to be able to successfully direct and regulate their emotions to maintain their harmonious and functional integrity despite changing environmental conditions (Gross, 1998; Thompson, 1994).

Especially when it comes to parents, it is known that the emotions they encounter usually vary along with the differentiation of the developmental stages of their children. Parenting itself is an emotional experience that includes emotions such as happiness, anger, sadness, anxiety, and commitment (Dix, 1991). It seems obvious that parents' emotion regulation skills are considered an important determinant of their self-regulation and adaptation skills (Barros et al, 2015). It is stated that parents' skillfully being aware of their own emotions has a positive impact on their sociability in the family, the strength of relationships, and even the emotion regulation skills of their children (Bariola et al., 2011). In the literature, it is observed that the research on emotion regulation is constantly increasing, and its links to various concepts are also examined. A positive relationship between children's emotion regulation behaviors and mothers' socialization behaviors was identified (Secer, 2017). It was stated that there is a positive association between the mothers' and their children's disclosure about their emotion suppression (Bariola et al., 2011). Emotional regulation skills in parents are obviously important and necessary in issues such as raising healthy children and maintaining family welfare. It does not seem possible to implement emotion regulation skills without integrating awareness and attention components. Mindfulness ranks first among the concepts that positively affect emotion regulation skills (Teper et al, 2013). Similarly, there are the research findings that could be interpreted as proof of the feasible influence of mindfulness on cognitive flexibility (Lebares, 2019). Based on these studies and theoretical knowledge, it is considered that this relationship between emotion regulation skills and cognitive flexibility, which are observed to be closely related, is mediated by mindfulness.

In the review of the literature, it is identified that there are empirical studies examining emotion regulation skills, mindfulness, and cognitive flexibility, and some of them are summarized here. It has been revealed that there is a positive relationship between children's emotion regulation skills and their mothers' mindfulness levels (Ren et al., 2021). Furthermore, it has been stated that acquired training or earned specialization in any job leads to the automatization of a person's skills, that is, they are used to elicit responses regardless of cognitive flexibility (Cañas et al., 2003). It is known that conscious awareness is inversely proportional to automation of the skills. All kinds of autopilot actions in daily life may impair the levels of consciously being aware. This could be related to parents' automatization of parenting roles, in which these roles frequently maintain themselves without conscious

awareness, and parents demonstrate less cognitive flexibility in new situations. According to Siegel (2007), the concept of mindfulness is "being able to get out of autopilot and focus consciousness on the present moment, and consciously grasp this moment." Mindfulness is a concept that was born from the experience of "being in the present moment" in eastern philosophies. The various researchers seem to emphasize the same points, albeit in different ways. The experience of being in the present moment is to feel alive in the lived experience, to discern the experience voluntarily, to direct attention to the current experience, and to accept the experience as it is (Germer, 2009; Hanh, 1991; Kabat-Zinn, 2003). Mindfulness is defined as an orientation that includes curiosity, openness, and acceptance, and the maintenance of attention in the present experience through self-regulation skills (Bishop et al., 2004).

Although mindfulness studies have been around for decades, they appear to have only recently become a subject of studies on parents (Sawyer Cohen & Semple, 2010). When parents are mindful, they are present in the present moment with their children. More specifically, it enables parents to approach their children carefully despite their own failures and limitations during their parenting adventure (Kabat-Zinn & Kabat-Zinn, 2014; McCaffrey, Reithman & Black, 2017; Moreira & Canavarro, 2019). In the review of the studies on the mindfulness of parents, it was evident that mindfulness is not a goal but a journey that must always be continued all the way through life, it has a significant impact on children's behavioral problems; that it predicts the well-being of families, particularly for children and that there have been some studies conducted on family education programs based on various mindfulness concepts (Dumas,2005; Kabat-Zinn and Kabat-Zinn, 2021; Ren et al., 2021).

In today's world, people are oriented to do many things at the same time, with more duties and responsibilities. Many areas, such as technological developments, epidemic processes, perceptions of normality, and education systems, will all influence individuals' behaviors. Therefore, parents have to manage their own personal change and to deal with the varying needs of their children at the same time. The ability to meet their children's physical needs in the modern world gradually transformed into a struggle to become parents who should be sufficient in every way in the post-modern world. One of the parental understandings that have spread rapidly among parents, especially in recent years, is the positive parenting approach. Positive parenting has been defined as an approach that includes "appropriate parenting behaviors that nurture, empower, involve no violence, set boundaries to ensure the whole child's development, and provide guidance by recognizing the child" (Committee of Ministers of the Council of Europe, 2006). Again, there is the "unconditional parenting" approach, which became popular in social life. This approach gives families advice on how to respond to their children's mistakes, how to deal with crisis situations, and how to address problematic behaviors in children(Kohn, 2015). These and similar parenting styles suggest that research should focus more on parents Thus, it is required to conduct a study on parents after consideration of the aforementioned explanations. After the examination of developmental neuroscience studies, it is known that people have various adaptive and coping skills in different life stages. Gopnik et al. (2017) identified in their study that cognitive flexibility undergoes certain changes during childhood, adolescence, and adulthood. High levels of cognitive flexibility, in particular, are thought to provide the necessary strength to parents for easily adapting to their parenting roles and personal relationships during such a complex life period as being a parent. Besides, the high level of mindfulness of the parents would enable them to be more aware of their emotions and to experience emotions in line with the situations they encounter. Similarly, this will facilitate parents' ability to respond appropriately to new and different situations, that is, to be more cognitively flexible. For this reason, mindfulness may have an enhancing effect on cognitive flexibility (Bilgin, 2009; Cox, 1980; Moore & Malinowski, 2009; Stevens, 2009). As a result, the purpose of this study was to put the structural equation modeling of emotion regulation skills and mindfulness levels to the test in order to better understand the cognitive flexibility levels of parents. Along with this model, it is intended to contribute to future studies aimed at understanding and developing parents' cognitive flexibility levels. This will enable field practitioners to use techniques and skills such as mindfulness in their interviews with parents. Maternal depression has been determined to be related to externalizing disorders characterized by childhood depression, anxiety, and impulse control. The importance of training based on mindful parenting for the prevention of these conditions is also mentioned(Sawyer Cohen & Semple, 2010). In the light of this information, it is considered that the results obtained from this study will make a contribution to school counselors, family counselors, and, briefly, all professionals working with parents in applying training programs based on mindfulness. Herein, it seems important to examine how the mindfulness levels of parents play a role in the relationship between cognitive flexibility levels and emotion regulation skills. As a result, the study's goal is to look into the role of mindful parenting in mediating the relationship between parents' emotional regulation skills and cognitive flexibility levels. In line with this general purpose, the answers to the following questions were searched for.

1) Are there any significant relationships between cognitive flexibility, emotion regulation, and mindful parenting variables?

2) Is the model that analyzes the mediating role of mindful parenting in the relationship between parents' cognitive flexibility and emotion regulation skills confirmed?

## Method

### The Research Model

This research is a descriptive study based on the relational screening model, which was conducted to determine the relationships between parents' emotional regulation, mindfulness, and cognitive flexibility levels.

### The Study Group

The study group of the research consists of 351 parents who have children in preschool, kindergarten, primary school, secondary school, and high school under the management of the Ministry of National Education in the 2020-2021 academic years. The demographic information of the parents and their children in the study group, such as gender, age, educational status, and occupation, is presented in Table 1.

Table 1. Demographic features of participants

| Variables | | Frequency | Percentage | Total |
|---|---|---|---|---|
| Gender | Female | 285 | 81.2 | 351 |
| | Male | 66 | 18.8 | %100 |
| Education level | Primary school | 18 | 25.1 | 351 |
| | Secondary | 11 | 3.1 | %100 |
| | High | 48 | 13.7 | |
| | University | 189 | 53.8 | |
| | Master | 85 | 44.2 | |
| Age | 22-29 | 46 | 13.2 | 349 |
| | 30-39 | 249 | 71.3 | %99.4 |
| | 40-50 | 54 | 15.5 | |
| Occupation | Teacher | 139 | 39.6 | 351 |
| | Housewife | 91 | 25.9 | %100 |
| | Health workers | 32 | 9.1 | |
| | Government official | 19 | 5.4 | |
| | Engineer | 10 | 2.8 | |
| | Private sector | 40 | 11.4 | |
| | Other | 20 | 5.7 | |
| The age of the children | Preschool | 215 | 61.3 | 351 |
| | Primary | 27 | 7.7 | %100 |
| | Secondary-High | 20 | 5.7 | |
| | Having children at different ages | 89 | 25.4 | |
| The number of children | One child | 185 | 52.7 | 351 |
| | Two children | 128 | 36.5 | %100 |
| | Three children | 32 | 9.1 | |
| | Four children | 3 | 0.9 | |
| | Five children | 3 | 0.9 | |

### The Measurement Tools

*The personal information form:* The personal information form prepared by the researchers includes questions about age, gender, education level, occupation, number of children, and the children's age.

*The cognitive flexibility inventory:* This inventory was developed by Dennis and Vander Wal (2010) to identify the cognitive flexibility levels of adults. The adaptation study of the inventory to Turkish culture was carried out by Dag and Gulum (2012). Three types of scores are obtained from this measurement tool, namely two subscale scores as *Alternatives* and *Control,* and a total score. According to the reliability study of the inventory, Cronbach's alphas for *Alternatives, Control* subscales, and total score were .89,.85, and .90, respectively. As a part of the validity study, the criterion validity analyses demonstrated that it measured the desired structure.

For this study, the internal consistency coefficient of the Cognitive Flexibility Inventory was found to be .87.The information regarding the validity study is as follows: $\chi^2$=2090,4, sd=662, $\chi^2$/sd=3.15, RMSEA=0.07, SRMR=0.04, GFI=0.90, AGFI=0.87, CFI=0.88, NFI=0.87, NNFI=0.90.

*The questionnaire on effect regulation* The Emotion Regulation Scale was developed by Gross and John (2003) to determine individuals' emotion regulation tendencies in basically two categories. It consists of two subscales: "*Cognitive Reappraisal*" and "*Expressive Suppression.*" The adaptation study of the scale into Turkish was conducted by Eldeliklioğlu and Eroğlu (2015). According to the reliability study, Cronbach's alphas for *Cognitive Reappraisal* and *Expressive Suppression* scores were.78 and.73, respectively. Cronbach alpha values for the test-retest cognitive reappraisal and expressive suppression scores are.74 and.72, respectively.

Cronbach's alpha internal consistency coefficients for the *Cognitive Reappraisal* and *Expressive Suppression* scores for this study were found to be.76 and.66, respectively. The findings regarding the validity study are as follows: $\chi^2$=338.4, sd=70, $\chi^2$/sd=4.83, RMSEA=0.10, SRMR=0.04, GFI=0.90, AGFI=0.87, CFI=0.88, NFI=0.88, NNFI=0.88

*The interpersonal mindfulness in parenting questionnaire*: The scale developed by McCaffrey et al. (2017) was utilized to determine the mindfulness levels of parents. The Interpersonal Mindfulness Scale in Parenting, which Arslan Gördesli, Arslan, ekici, Sünbül, and Malkoç (2018) adapted into Turkish, consists of 24 items and two subscales. As a part of the reliability studies, Cronbach's alpha values were detected for the two subscales, namely "*Parental Self-efficacy*" and "*Being in the Moment the Child*" as.83 and.73., respectively. For this study, the Cronbach alpha internal consistency coefficients for *Parental Self-efficacy* and *Being in the Moment with the Child* scores were found to be.84 and.80, respectively. The results of the validity study are as follows: $\chi^2$=1356.3 sd=504, $\chi^2$/sd=2.69, RMSEA=0.07, SRMR=0.04, GFI=0.92, AGFI=0.90, CFI=0.90, NFI=0.90, NNFI=0.91

**Data Collection**

In the data obtaining process, we contacted researchers who adapted the measurement tools that were planned to be primarily used in this study via email. Permission was requested for using the scales, and all information about general characteristics, psychometric properties, and scoring of the scales was provided by the researchers. After receiving approval from Ağrı İbrahim Çeçen University's Ethics Committee, the scales were administered to volunteer parents. The convenience sampling method, one of the non-probability sampling methods, was used. The schools in the city where the researchers are located were contacted. The research questions were sent to the volunteer parents via the internet. The researchers examined the Google Form documents they obtained.

**The Analysis of the Variables**

Before data analyses, it was examined whether some assumptions were met. These assumptions included sample size, extreme values, normality, linearity, multicollinearity, and sequentiality. For missing data, value assignment was performed with the mean of the series. Raw scores were converted to Z-scores for outlier analysis. Twenty people with a Z score of ±3.29 were excluded from the data set (Tabachnick & Fidell, 2014). The Mahalanobis distance value was checked to see if there was an extraordinary combination between the variables, there was no problem. detected. For the assumption of normality, the histogram graph and descriptive statistics values were checked. The kurtosis and skewness coefficients of all variables are within the range of ±1. It was determined that the variables showed a normal distribution. Variance increase factors (VIF), condition index (CI), and tolerance values were examined to determine whether there was a multicollinearity problem. It was determined that there was no multicollinearity problem between the variables. Afterwards, the relationship between cognitive flexibility and other variables was evaluated with the Pearson Product Moments Correlation Coefficient. Then, the measurement model arising from the hypothetical model, which was the subject of the investigation, was tested with Confirmatory Factor Analysis. In the last stage, the proposed hypothetical model was analyzed with the structural equation modeling technique. LISREL 8.7 and AMOS 23 statistical package programs were used in the research.

## Results

For answering the research question within the scope of this study, firstly, the relationships among the variables in the model to be tested were examined. The results are presented in Table 2.

Table 2. Correlations between the variables

| Variables | 1. | 2. | 3. | 4. | 5. |
|---|---|---|---|---|---|
| 1.Parental Self-efficacy | 1 | .695** | .446** | .055 | .272** |
| 2.Being in the Moment with the Child | | 1 | .447** | .037 | .298** |
| 3.Cogntive Flexibility | | | 1 | -.096 | .361** |
| 4.Expressive Suppression | | | | 1 | -.015 |
| 5.Cognitive Reappraisal | | | | | 1 |

**p<.01

As it is obvious from Table 2, there are significant relationships between the variables in the hypothetical model proposed for this study. Accordingly, cognitive flexibility was significantly related to parental self-efficacy (r=.45, p<.01), being in the moment with the child (r=.45, p<.01), and reappraisal (r=.36, p<.01). These results obtained from the relationship between the variables suggest an important finding in the validation of the hypothetical model.

In the research, the measurement model was tested to examine the suitability of the measurement tools used before the structural model test. It is seen that the measurement model gives sufficient and good fit values to test the structural model ($\chi^2$/Sd=1.58, RMSEA=0.057, SRMR=0.062, CFI=0.90, NFI=0.90, GFI= 0.89, AGFI=0.90). The fact that a measurement model has the same structure in different groups means that the model to be tested could measure the same features every time. This is called measurement invariance (Mark & Wan, 2005). In this study, gender invariance was examined to determine whether the models to be tested were invariant in terms of gender. At the end of the analysis, it was found that this measurement model, which included negative parenting, did not change with regard to gender [$\Delta$X2 = 6110.4 df= 2748, p>.001; $\Delta$RMSEA= 0.059, $\Delta$CFI=0.01].

It was observed that the measurement models tested provided acceptable fit values. In this context, structural equation modeling related to the hypothetical model was performed, and the representation of the model is presented in Figure 1.

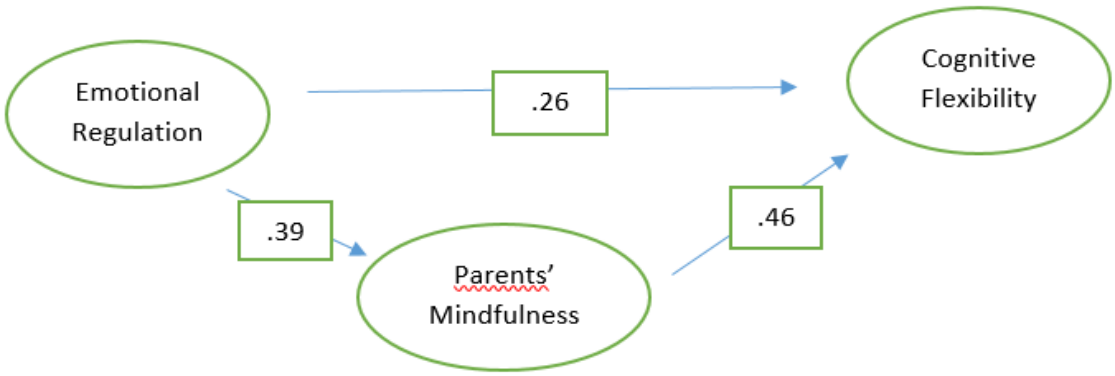


Figure 1: Representation of the hypothetical model

It is seen that the fit values of the hypothetical model were within acceptable limits ($\chi^2$/Sd=2.7, RMSEA=0.060, SRMR=0.061, GFI=0.91, NNFI=0.89, AGFI= 0.91, RFI=0.89). The statistical significance of the relationships between the latent variables in this model was interpreted according to t values and standardized beta coefficients. The results of these calculations are given in Table 3.

Table 3. Standardized values and t values for the hypothetical model tested

| Structural Relations | | | Standardized beta coefficients (β) | t values |
|---|---|---|---|---|
| Emotional Regulation | ⟹ | Parents' Mindfulness | 0.39 | 5.11 |
| Parents' Mindfulness | ⟹ | Cognitive Flexibility | 0.46 | 2.91 |
| Emotional Regulation | ⟹ | Cognitive Flexibility | 0.26 | 5.15 |

According to Table 3, it seems obvious that the variables in the tested hypothetical model predict each other significantly. According to this model, parents' levels of emotion regulation significantly predict their levels of mindfulness (β=.39, t=5,11 p<.01). mindfulness levels predict cognitive flexibility levels significantly (β=.46, t=2,91 p<.01). Emotion regulation levels predict cognitive flexibility levels significantly (β=.26, t=5,15 p<.01).

## Discussion, Conclusion, and Recommendations

This study was conducted to examine the mediating role of mindfulness levels in the relationship between parents' cognitive flexibility levels and emotion regulation skills. Structural equation modeling was utilized in the study since the research aimed to reveal the cause-and-effectrelationship and the mediation effect for the relationships between these variables. The results of the correlation analysis revealed that there is a significant relationship between cognitive flexibility and parental self-efficacy, which is the subscale of the Interpersonal Mindfulness in Parenting Questionnaire, and between being in the moment with the child and the cognitive reappraisal subscale of the Emotional Regulation Questionnaire. According to the structural equation analysis, a good level of fit was identified between the collected data and the predicted model. The results of the study revealed that emotional regulation skills could be predicted from the cognitive flexibility levels of the parents, and this relationship was almost entirely explained through mindfulness. In other words, mindfulness levels acted as a mediator between cognitive flexibility and emotion regulation skills.

The results of the study exhibited that emotion regulation affects cognitive flexibility both directly and indirectly through mindfulness. Given the positive relationship between emotion regulation skills and cognitive flexibility, the findings support the findings of previous studies (Leahy et al., 2011; Murphy, 2015). In a study examining the relationship between emotion regulation, life satisfaction, cognitive flexibility, and forgiveness-unforgiveness variables; maladaptive emotion regulation strategies were found to be associated with less cognitive flexibility. In other words, it was concluded that cognitively flexible individuals could use their emotion regulation skills more adaptively (Küçüker, 2016). The effects of yoga exercises on the individual's cognitive flexibility and emotion regulation skills were examined, and their positive effects were observed (Dick et al., 2014). According to the aforementioned study, an individual's inability to be in the moment leads to a loss of cognitive flexibility and avoidance of the present moment, which prevents the individual from gaining awareness and thus incapacitates him in regulating emotions. In the light of these studies, it could be suggested that parents who are able to regulate their emotions in accordance with the present situation could organize their thoughts according to this situation, take into account, and create better options for themselves. In this way, it is predicted that parents could maintain both the relationship between themselves as a couple and their relationships with their children in a more positive way. In addition, it is known that the role of parenting bears considerable stress by its nature (Rousseau et al., 2013). In stressful situations, cognitive flexibility is determinant in controlling people's emotions (Demirtaş, 2019). For this reason, it could be inferred that cognitively flexible parents could effectively cope with stressful situations they encounter while in their parenting roles and could easily regulate their emotions. This skill will make a positive contribution to the way parents raise their children and enable them to display more affirmative behaviors towards their children.

According to another result of this research, there is a direct relationship between mindfulness and emotion regulation skills. People who use mindfulness more actively could regulate their emotions in a more favorable direction. This finding is in line with the conclusion that the mindfulness-based intervention programs, which were implemented by Deplus, Billieux, Scharff, and Philippot (2016) in their study with adolescents, improved the emotion regulation skills of these individuals. Another study investigating the relationship between mindfulness and emotion regulation in the literature will be described here. Participants were asked to keep records of their emotional experiences six times a day for one week. In these records, the relationship between mindfulness levels, emotional differentiation, and emotional changes was evaluated. According to the results of the research, the recorded emotions were better recognized, identified, and regulated in a healthy way, and it concludes that mindfulness influences the emergence of all these processes (Hill & Updegraff, 2012). Individuals who could be aware of the present moment are considered to be able to feel the emotions that the moment triggers, hear their

thoughts, and exhibit appropriate behaviors in accordance with the moment. From this point of view, it could be suggested that parents who can actually stay in the moment experience their emotions in harmony with the moment. The individual who is aware of his feelings will express himself appropriately and will not have difficulty in acknowledging his wishes and complaints (Gross, 1998). Parents as important role models in a child's life, would set a good example for their children in this respect. Also, parents who are aware of the present moment will spend more quality time with their children. This, in turn, will positively influence the relationship of parents with their children.

Another result of the study is that there is a positive relationship between mindfulness levels and cognitive flexibility. Carmody, Baer, Lykins, and Olendzki (2009) obtained results similar to this research in a model trial they generated to predict the modifications in awareness by variables such as clarification of values, cognitive and behavioral flexibility, and changes in self-regulation. Kaymaz and Şakiroğlu (2020) conducted research and discovered a positive relationship between mindfulness and cognitive flexibility. According to this result, it could be inferred that individuals may give appropriate reactions as long as they are aware of the moment they are in. As parents could regulate their cognitions and emotions altogether, they could also be more functional, and they could become involved in positive situations in their lives to the extent that they could arrange their way of thinking and feeling in the face of upcoming events (Demirci and Güneri, 2020). These types of self-regulation exist only when one accepts what is happening in the moment without a judgmental attitude and accommodates himself to the situations. Kabat-Zinn and Kabat Zinn (2021) suggest that mindful parents (1) are more aware of a child's unique nature, feelings, and needs; (2) are more present and have the ability to listen carefully to their child; (3) accept and remember all pleasant or unpleasant moments as they happen; (4) identify their own reactive impulses and respond more appropriately, creatively, and with greater clarity and kindness. After these are evaluated, it is stated that parents with high levels of mindfulness exhibit more appropriate and creative behaviors that are compatible with the situation. The definition mentioned here is in parallel with the characteristics of cognitively flexible individuals. Flexible individuals could generate various options suitable for a situation and choose the most suitable one among them (Martin & Rubin, 1998). It can be suggested that the definitions given here are similar to each other, and this similarity is supported by the findings of this study. In addition, it would not be a mistake to imply that parents with a high level of these characteristics tend to exhibit more positive parenting behaviors, such as creating various alternatives and choosing the most appropriate one for the situation, and being aware of their children's needs.

Finally, the mediating role of mindfulness in the relationship between emotion regulation skills and cognitive flexibility was identified in this study consisting of model-based testing. It was concluded that these variables displayed a positive relationship with cognitive flexibility. When interpreting the results of the research, it should be taken into account that the study was conducted with only parents. In future studies, it may be possible to work with parents whose children are in similar age groups and attend preschool, primary school, high school, or university. In addition, the variation of the model over time could be followed up with a longitudinal study. In future studies, the possible effects of variables such as meta-emotion, meta-cognition, and the predisposition levels of parents to any mental disorders such as anxiety and depression, which may play a role as mediating variables in the relationship between parents' cognitive flexibility and emotion regulation skills, could be explored. The results of this study are considered beneficial for psychological counselors working in the field. Practitioners could work with parents towards increasing their cognitive flexibility based on Cognitive Behavioral and Rational-Emotive Behavioral Therapy. This approach will enhance their emotion regulation skills. In addition, parent mindfulness as a mediator variable provides a link in the relationship between parents' emotion regulation skills and cognitive flexibility. As a result, we can conclude that mindfulness-based trainings will improve parents' emotional regulation and cognitive flexibility. In this way, parents could be strengthened in terms of these skills through psycho-educational programs and family trainings targeted to increase their levels of conscious awareness.

## Author (s) Contribution Rate

The authors' contribution rate in this study is equal.

## Conflicts of Interest

There was no conflict of interest between the authors in this study.

## Ethical Approval

Ethical permission (5.03.2021 tarih ve 78 sayılı karar) was obtained from Ağrı İbrahim Çeçen University institution for this research.

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