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# Emotional correspondence between preschoolers and teachers: What are the effects on child-teacher relationships?

## Abstract

The effects of the emotion regulation skills of the children attending preschool education on their interactions with their teachers are emphasized in recent studies. Therefore, in this study, we examined the effects of emotion regulation skills on the quality of the relationship between the teacher and the child. In total 39 preschool teachers and 119 preschool children (55 girls and 64) boys from five public preschools were participated in the study. Teachers were asked to fill Student-Teacher Relationship Scale-Short Form regarding three children in their classrooms and Emotion Regulation Questionnaire for themselves. We conducted four observations bu using MPAC-R/S in order to assess child's abilities to express and regulate emotions. The results showed that children's emotional states were effective on teacher's relationship perception, and that teacher's emotion regulation skills were also effective on his/her relationship perception. In addition, the cognitive reappraisal strategy used by the teacher in emotion regulation has also been found to have an impact on the negative emotional state of children.

Key words: Precshoolers, emotion regulation, emotional competence, child-teacher relationships

Emotions form a framework that plays an important role in making experiences meaningful in the lives of individuals (Denham, 1998). They act as a kind of radar that gains meaning through the flow of experiences and that enables these experiences to be transferred into different situations and they function as a rapid reaction system. In other words, emotions shape our responses to events by evaluating our experiences (Cole, Martin and Dennis, 2004). In this context, it is stated that emotions are important components that complement relationships and they function as filters that determine how we perceive the events and how we interpret the messages sent (Pianta, 1999). This framework, which is defined as emotion regulation skills, is an important skill area that is based on the interactions established since the first year of life (Gross, 2002, Denham, 1998, Rothbart, Ziaie and O'Boyle, 1992).

Emotion regulation has its own functioning mechanism and this mechanism begins to take form with the emotions displayed by parents, primarily through interactions with them (Denham, 1998). It then continues to develop rapidly and beginning from the first or second year, the individual differences in this skill area progress on a quite stable line (Eisenberg, Spinrad and Eggum, 2010). These developments continue throughout the pre-school period, and over time multi-faceted emotion regulation strategies are attained. It is observed that emotion regulation skills progress more slowly in adulthood. Hence, in different studies it is asserted that the strategies for recognizing, understanding and organizing emotions are formed at the age of three to five (see Denham, 1998). Significant changes, including ability to produce emotion, ability to understand the causes and consequences of emotion, to express emotions in different ways, and to make cognitive appraisal of emotions, occur particularly in early childhood period (Denham, 1998, Lemerise and Arsenio, 2000, Denham, Bassett and Zinsser, 2012a, 2012b). For this reason, Florez explains that in this period, young children will learn to and will be able to manage their thoughts, emotions, behaviors and feelings if appropriate opportunities are offered to them (2011).

#### Definition, Function and Process of Emotion Regulation

Effective regulation of emotions is one of the basic functions of social emotional development (Cole, Michel & Teti, 1994, Denham, 2006). Emotion regulation is generally defined as any change in the system that is responsible for the formation and behavioral expression of emotions (see Ferrier, Bassett and Denham, 2014). According to Gross (1998), emotion regulation consists of processes involving ways that individuals can influence their own emotions and express these emotions by experiencing them. How emotions are expressed and how they are interpreted by the individual himself are seen as an important part of the emotion regulation mechanism. More importantly, emotion regulation skills are defined as a process that is shaped within the context of relationships rather than a self-directed process (Campos, Walle, Dahl and Main, 2011). Because, although the emotions belong to the individual, there is an object of emotion that is addressed to these emotions, which is often another individual. Therefore, interactions with others are an inevitable part of emotion regulation. Emotion regulation skills support the ability to be in harmony with others, to manage behaviors and to exhibit controlled behaviors (Calkins, Gill, Johnson, & Smith, 1999; Raver, Blackburn, Bancroft, & Torp, 1999).

Social context is the most significant environment that forms the basis in terms of emotion regulation. In this context, the emotions of the individual are organized not only in relation to the organism itself, but also as a result of conflicts with another individuals' own expressions and objectives. In social context, conflicts may occur among these objectives along with interpersonal communication. Because a wide range of expressions and their consequences, which are used in the establishment and maintenance of relations, create a field of struggle by interacting in various ways with one another and necessitate developing forms of expression which require change, differentiation and adaptation. (Campos, Walle, Dahl and Main, 2011). Thus, the individual learns to regulate emotion through these conflicts that arise from the overlapping of different objectives. In terms of emotion regulation skills, whether children are competent or not, in social settings they have to express their feelings in a way, either verbally or by reflecting on their behavior. While these expressions may be considered appropriate for a particular context (for example, while joking with his/her mother at home), they may not be functional enough in another context (for example, while joking around with peers in the classroom environment) (see Campos, Walle, Dahl and Main, 2011). As a matter of fact, in every culture and every environment, children are faced with various situations that cause conflict, frustration, disappointment and failure during the day. At this point, children need more adult guidance in order to be calmed down and make emotional arrangements that they can not do on their own. It is necessary for them to be supported in how to relax and calm down by organizing prosocial reactions in appropriate, acceptable ways (Grosshans & Burton, 2008). It grows difficult for children who can not express their emotions effectively to display behaviors expected of them, to follow daily routines in a certain order, to find appropriate ways of communicating with their peers, and to deal with disappointing situations in the school environment (Herndorn, Bailey, Shewark, Denham, Bassett, 2013). In such situations, it is regarded as usual for children who do not have competency in coping emotions to express their feelings by resorting to behavioral or verbal aggression and to exhibit some behavioral problems when they are disappointed, unable to deal with feelings of anger and unable to calm themselves (Greenberg & Kusche, 1994). This appears as a factor affecting the overall adaptation of the child and thus classroom climate. As for the classroom atmosphere, by creating an important context for the development of the social-emotional competence area, through emotion regulation skills it provides for establishing positive relationships with peers and teachers and/or coping effectively with probable difficulties (Gross, Sambrook, & Fogg, 1999; Ladd, Herald-Brown, & Andrews, 2009).

Young children need to be able to send and receive emotional messages in ways that are beneficial for themselves and others in order to establish successful relationships and interpersonal communication (Halberstadt, Denham, & Dunsmore 2001, Denham et al., 2012). In recent years, the development and enrichment of children's social and emotional competence has become one of the focal points of preventive intervention approaches (see Beyazkürk, 2015). In fact, it has been found that through some preventive intervention approaches, without giving sudden reactions to the problems they encountered on the face of challenging situations they experienced, children develop their abilities to identify their emotions, express their emotions, take into account others' emotions and needs, and control their behaviors in the classroom environment (Shure, 2001; Greenberg & Kusche, 1994). In this context, teachers should form a loving interaction with children to establish personal and positive relationships beyond academic goals. It is known that positive and supportive child-teacher relationship plays a role in organizing peer relations (Howes, 2000, Howes, Matheson, & Hamilton, 1994), emotional development, self-regulation (Denham & Burton, 1996), academic competencies such as attention, motivation, problem solving and self-confidence (Birch & Ladd, 1997; Pianta & Harbers, 1996). It is stated that children who develop healthy relationships based on trust with their teachers tend to exhibit prosocial behaviors and emotional understanding at higher levels. It is also known that high level of dependency and conflict in teacher-child relationships is connected to internalizing and externalizing behavior problems and school maladaptation in the pre-school period (Birch & Ladd, 1997, 1998; Howes, Matheson, & Hamilton, 1994).

At this point it will be important to examine attachment relationship, which has been specified to guide the social competence, emotion regulation and control of the child, in order to understand the quality and nature of the conflicting or corresponding relationships mentioned above (see Pianta, 1999).

### Early Relationships, The Relation Between Attachment and Emotion Regulation

Research with infants and pre-school children indicates that behavioral strategies used to regulate feelings are related to attachment quality (Braungart & Stifter, 1991) and psychopathology (Cole, Michel & Teti, 1994). From the earliest stages of life, a deep emotional bond which is defined as attachment is formed between the infant and primary caregiver (Bowlby, 1973, Ainsworth, 1969, 1989, Ainsworth and Bowlby, 1991). This bond is presumed to

be indicative in relation to all future relationships and is thought to form a context for the development of close, intimate, emotional relationships that help shape subsequent development. If predictable, sensitive and responsive, this relationship between the child and the parent reinforces the quality of the relationship positively (Pianta, 1999). For this reason, the interactions based on trust which infants and children establish with their primary caregivers are important, and as children mature, they internalize patterns of those interactions (see, Diamond and Aspinwall, 2003). As a matter of fact, researchers stated that the attachment style to the mother and the emotional socialization behaviors of the parents are significantly related to the social competence and emotion regulation skills of preschool children (Seçer and Karabulut 2016; Ural et al., 2015).

### The Role of Child-Teacher Relations in Emotion Regulation

Despite the critical role of the parent in the relationship, it is also explained that the attachment relationship is not just about the parent-child relationship. The context in which the child lives is not limited to a single relationship, but it interacts with different individuals (school, peers, teachers, etc.) across different systems. Behaviors, beliefs and emotions related to attachment are organized by critical adults, including teachers (Pianta, 1998). Both experiences within the family are important in terms of emotional socialization, and the interactions children establish with significant adults outside the family are effective in managing feelings. Therefore, the fact that progression in emotion regulation skills which begin in infancy continue in the preschool period ascribes a critical role to pre-school teachers for realizing thought and behavior regulation of children (Florez, 2011). Especially relations formed with teachers in early childhood in the school environment can be shaped as a model for emotion regulation and achievements related to emotion regulation may even lead to more qualified and positive maintenance of relations (Argon 2015; Denham, 1998; Florez, 2011; Sutton, Mudrey-Camino and Knight, 2009).

In terms of individual factors, although the child's temperament and personality characteristics make significant contributions, both personal and professional competencies of the teacher play a critical role in guiding the child. In this point of view, it is stated that teachers can be assigned as an agent in terms of emotional and social development by means of different techniques they will use in their interactions with children during daily schedule (Morris, Denham, Bassett, & Curby, 2013). For this reason, teacher's classroom practices, ways of

organizing the classroom, methods and techniques are important. The teacher is modeled through positive or negative emotions he/she displays in response to a certain behavior; thus, in the classroom environment the teacher is an important guide. The way teachers cope with such emotional situations also affects the quality of the relationship they build with children (Hamre & Pianta, 2005). As expressed by Campos et al. (2011), since the emotion regulation skills are shaped in the context of the relationship, the interaction pattern established between the child and the teacher contributes to these skills. Indeed, it is revealed through various studies that sensitivity and closeness of the teacher within the relationship play a significant role in the healthy formation of child-teacher relationships (Pianta, 1999, Pianta, La Paro, Payne, Cox, & Bradley, 2002) and in the development of children's emotional awareness (Morris, Denham, Bassett, & Curby, 2013).

Emotion regulation skills, which form as a part of the experience gained within the context of relations and social communication, constantly develop, change and ease adaptation with mutual interactions (Campos, Walle, Dahl and Main, 2011). From this point of view, it is thought that the emotion regulation skills of the child and the teacher within the relationship affect the quality of the relationship built between the two parties. For this reason, the effects of the emotion regulation skills of the children attending pre-school education on their interactions with their teachers are emphasized. At this point it is critical that teachers reflect their emotional competencies (Sutton, Mudrey-Camino and Knight, 2009). Florez (2011) underlines that the teacher must first have a strong self-regulation skill in order to teach self-regulation to young children. As a matter of fact, teachers have their own emotion regulation strategies and the way they communicate these to children through interpersonal communication can vary.

The characteristics the teacher has (reinforcement, support, and main control resources) have a very important role to be modelled (Jones and Jones, 2004, p. 82). However, teachers may develop different forms of relationship sometimes as models, sometimes by giving supportive or punitive responses to children for expressing their feelings, or by resorting to direct instruction intended for corresponding experience (Morris, Denham, Bassett, & Curby, 2013). Teachers may respond to negative social-emotional behaviors exhibited in the classroom via supportive or non-supportive reactions. For example; when dissappointed children cannot calm themselves, by

choosing to punish them teachers may adopt a mode of communication that can harm them. On the contrary, teachers can support children's emotion regulation skills by understanding their emotions and talking about them while children are leaving their parents for the first time to go to school, or by giving a hint like "your turn will come soon" to children who are waiting impatiently to play with a toy teachers can help them cope with the desire to grab the toy (Garner, Moses, & Waajid, 2013, Denham, Bassett, & Zinsser, 2012b). Therefore, rather than punitive and restrictive relationship patterns, relationship patterns established with the teacher involving closeness and understanding play a critical role in the development of relationships that have a regulation function.

Studies in this respect show that more research needs to be done about the effects of especially the teacher's emotion regulation skills both at the child and classroom level (Campos, Walle, Dahl and Main, 2011, Jennings and Greenberg, 2009). By underlining that there are few studies on the practices of teachers concerning emotion regulation, researchers assert that though teachers expressed that they kept their anger inside of themselves, tried to suppress their anger by squeezing their teeth, strived to control themselves and their tone of voice constantly by taking deep breaths, they also expressed regret for losing their control from time to time (Sutton, Mudrey Camino and Knigh, 2009). In his research, Brown (2004) stated that all teachers want to establish strong relationships based on trust, within a non-punitive approach, away from fear and punishment. Sutton (2004) even explained that teachers did not want to have a divisive effect, and that their ability to regulate negative emotions made them more effective from various angles. On the other hand, research reveals that if children perceive their teachers as adults who punish them and deprives them of what they love, their perceived closeness to their teachers is damaged (Sutton, 2004, Sutton, Mudrey-Camino & Knight, 2009). Opinions regarding that children are not passive recipients within the relationship they built with their teachers in the classroom and should be treated as individuals who have expectations from the teacher and who evaluate the teacher, are also being debated in the literature (Emmer & Stough, 2001).

The studies which examine the views on how children perceive the attitudes of teachers within the classroom seem to be limited as well (Readdrick, & Chapman, 2000, Sadık, 2008). The role of the emotional competencies of the teacher should be better understood in terms of its relation to different variables (child-teacher relationship, emotional state of the child, etc.). In

terms of the current study, we aimed to work with a sample of Turkish preschoolers and preschool teachers. Although there are some studies including the reflections of classrrom management strategies of preschool teachers and child-teacher relationships in Turkish samples, still we need to learn what kinds of strategies preschool teachers use in regaulting their own emotions, how those strategies were related to childrens' emotion relation skills. In a recent study, Ocak Karabay (2017) reported that cognitive reappraisal strategy used by Turkish preschool teachers for emotion regulation increased with positive relationship perception of teachers they have formed with children in their classrooms. The author also noted a positive relationship between the sensitivity levels of teachers and the strategies that teachers used for regulating their own emotions. The purpose of the current study is to examine the effects of emotion regulation skills on the quality of the relationship between the teacher and the child by revealing these skills of preschool children and their teachers. Accordingly, the basic hypothesis of the research is that both children's and teachers' emotion regulation skills will be effective on child-teacher relations. In this direction, an answer was sought in the research concerning whether the preschool children's and their teachers' emotion regulation skills have an effect on the quality of the relationship between the teacher and the child.

#### Method

#### Research Model

This research is a descriptive model that contains both quantitative and qualitative features. In the research, both quantitative and qualitative methods have been used for data triangulation which means validation of data collecting from two or more sources. For this reason all data has been collected via different data sources (researchers and teachers). Quantitative data set were obtained by means of scales and qualitative data were obtained by using observational technique.

### Participants

The participant group of the research consists of children and preschool teachers working in public preschools in three central districts of a metropolitan city in 2016-2017 education year. Those preschools were located in Izmir which is the third biggest city of Turkey on the west coast

and offered half day programs for children. In those preschools, a national curriculum has been implemented as being regulated by Ministery of Education. The national curriculum consists of active learning principles, creativity and concept development. The core structure of the curriculum is shaped based on acquisitions of preschoolers to achieve in developmental indicators. In the curriculum, under the social and emotional developmental acquisitions, there are three out of 17 has been identified as being directly focused on emotion regulation skills of children. Although it was not the main focus, emotion regulation skills of children have been considered as complimentary part of the curriculum as a whole.

This study was carried out on the basis of voluntariness, the participating teacher group was constituted by easy sampling which is among non-random sampling methods. In this sampling method, the sample is selected from easily accessible and practicable units due to the limitations of time, money and labor force. The children in this study were recruited via random sampling method and they identified as the 5th, 10th and 15th children on the class list by means of random sampling. Attention has been paid to the fact that children do not have any developmental delays or any disability either observed by the teacher or documented by the specialists. At the beginning, approximately 52 preschool teachers working in 6 public preschools and 151 children in their classes formed the sample group, but during data clarification and analyses the number of schools decreased to 5, the number of teachers to 39, and the number of children to 119, 55 girls and 64 boys. 33 of the teachers have working experience of 15 years or less, whereas 6 of them have 16 years or more working experience. It has been determined that class sizes were ranging between 11-25.

### Data Collection Tools

We used Student-Teacher Relationship Scale, Short Form (Pianta, 1992) for teachers to determine the nature of teacher-child relationship, Emotion Regulation Questionnaire (Gross & John, 2003) for teachers to reveal emotional regulation startegies of them and Minnesota Preschool Affect Checklist – Revised/Shortened (MPAC-R/S) (Denham, Bassett, Thayer, Mincic, Sirotkin, & Zinsser, 2012) for children to measure observational emotion regulation skills.

Student-Teacher Relationship Scale-Short Form (STRS-SF) (Pianta, 2001, Jerome, Hamre, ve Pianta, 2008)

Student-Teacher Relationship Scale-Short Form (STRS-SF) is a likert scale consisting of 15 self report items. Each item in the scale is coded between 1 (never applies) and 5 (always applies) (Pianta, 2001). The scale examines how the teacher perceives the student's behaviors and the student's thoughts about himself/herself, by taking into consideration the relationship formed with each student. It consists of two subscales which include closeness and conflict dimensions. Closeness subscale includes attending to needs of the child and being responsive, being involved in positive emotional interactions with the child as much as possible. The conflict subscale includes negative behaviors the teacher perceives concerning the child and negative emotional interactions. It is stated that, while evaluating the student-teacher relationship effectively, it also provides support for the identification of teachers who are experiencing problems in communication or interaction and who are going through occupational burnout (Pianta, 2001). The adaptation of the long form of the scale into Turkish was made by Şahin (2014). The adaptation of the short form used within the current study into Turkish has been completed by Ası and Karabay (2018). Conflict subscale internal consistency coefficient was reported as .84, closeness subscale internal consistency coefficient as .76, whereas test-retest reliability coefficient was reported as .87 for conflict subscale and .83 for closeness subscale in Turkish sample.

## Emotion Regulation Questionnaire (Gross & John, 2003)

Emotion Regulation Questionnaire (ERQ) is a questionnaire developed to evaluate individual differences in the use of emotion regulation strategies of cognitive reappraisal and suppression of expression. Six items of ERQ evaluate the cognitive reappraisal ("I change the way I think about the situation when I want to feel less negative emotions") strategy and four items evaluate the suppression of expression ("I keep my emotions to myself") strategy. Each item of the scale is coded between 1(I absolutely disagree)-7 (I absolutely agree). The adaptation of the scale into Turkish was done by Yurtsever (2004, 2008) and its psychometric properties were also examined by Toran (2015). Internal consistency coefficients in the Turkish sample were reported as .88 for cognitive reappraisal and .82 for suppression of expression.

Minnesota Preschool Affect Checklist – Revised/Shortened (MPAC-R/S) (Denham, Bassett, Thayer, Mincic, Sirotkin, & Zinsser, 2012)

This tool is originally consisting of 18 items and used for observing behaviors of children in the context of social-emotional development. With this observation tool, children can be evaluated in terms of interactions they formed with their peers and other adults in their natural environment (for example, at free playtime in pre-school classroom environment, in playground, at home), empathy skills, prosocial behaviors, involvement, emotion and behavior control, positive and negative emotional states and emotion regulation skills. By this way, it is possible to examine, at the microanalytic level, the child's abilities to express and regulate emotions as smaller units within the context of the child (Herndorn, Bailey, Shewark, Denham, Bassett, 2013). Minnesota Preschool Affect Checklist – Revised/Shortened consists of 10 items in total including 4 main categories; positive emotional state, negative emotional state, negative reaction to disappointment and positive reaction to disappointment. At the same time, each of these categories comprises 2 or 3 items of subjective behavior patterns. Each child has been observed individually for 5 minutes at four different times, and when the corresponding behavior patterns appear during the observations, coding is done to indicate that behavior exists. Due to the limited number of observation items, in the original reliability studies of the scale the inter-coder reliability was calculated by the intraclass reliability coefficient. Accordingly, the coefficients were calculated as .93 for positive emotional state, .88 for negative emotional state, .90 for negative reaction to disappointment and .75 for positive reaction. The average of the intraclass correlation coefficient was calculated as .86. In our study, for inter-coder reliability, encodings were done with MPAC-R/S via eight test videos, and then observations by each coders were compared and discussions were made among the observers to reach a consensus. At this point, after agreement was achieved, the coders worked on pilot 18 videos and coded their observations on the form independently. Since the inter-coder reliability could not reach the desired level in the first round, recodings were done through 27 more videos which were different than prrevious 18 videos. Second round inter-coder reliability coefficients were found to be .94 for positive emotional state, .90 for negative emotional state, .95 for negative reaction to disappointment and .87 for positive reaction.

# Procedure

At the initial phase we applied for and received ethical approval from university's research ethics committee. Our study was conducted simultaneously in six public preschools

based on voluntary participation. In order for the children's adaptation process to school to be completed to a large extent and the relations formed between the teachers and the children to be put on the right track, data were collected during the spring semester. The preparation and data collection process began in February 2017, and at the end of May 2017 the targeted data set has been reached.

During the preparation phase, firstly, the researchers who will observe emotional states of children, one of whom is a reseracher with M.A. degree in preschoo education and the other has a doctorate in clinical psychology and is experienced in preschool education, were trained to use MPAC-R/S in order to ensure reliability and measurement standards. Since the observations were to be made four times for each child and there would be long gaps between the first and the last observations of children, the inter-coder reliability was tested before started observations of children in the field. In the data collection tools section, as described in MPAC-R/S, the inter-coder reliability coefficients were calculated as .94 for positive emotional state, .90 for negative emotional state, .95 for negative reactions to disappointment and .87 for positive reactions. After the inter-coder reliability was achieved, the data collection process took place.

In the data collection process, 5th, 10th and 15th children were selected from the class list to fill the Student-Teacher Relationship Scale-Short Form, so that three children were selected from each class randomly. Teachers were asked to fill the relationship scale with the Emotion Regulation Questionnaire. Also, four observations (total of 20 minutes), each took for 5 minutes and conducted on separate days, via MPAC-R/S. At least 4 to 5 days have been left between each observation, since the emotional states of children may vary in different time periods and in different contexts such as play time, free time or free activity times. Attention has been paid to ensure that the children have no developmental disability or delay, in such a case the next child on the list has been picked up. Observations were conducted considering the three children identified as the 5th, 10th, and 15th child on the list when the teacher considered while filling the Student-Teacher Relationship Scale-Short Form. No visual and/or audio recording has been taken sinece it was not allowed but all observations were recorded by hand. In addition, children's families were informed about the study and taken their consent. No personal information related to children or teachers appeared in the forms or scales, each participant has been numbered and any information that identifies the people has been avoided.

#### Findings

At the beginning, a factor analysis was carried out, primarily considering four subdimensions of the MPAC-R/S so that it can be handled in two basic dimensions and by this way, the findings can be interpreted more easily. We decided to use principal component analysis based on varimax rotation with Kaiser normalization which revealed that two factor solution explaining %63 of total variance for the checklist as negative emotional state (deviation from positive emotional state and impulse control, negative reaction to disappointment) and positive emotional state (including positive emotional state and positive reaction to disappointment). Therefore, the analyses conducted via MPAC-R/S have been carried out based these two basic dimensions.

	Dependent Variables	SS	df	MS	F	р
Nagative Emotional state	Closeness	375.228	5	15.046	1.028	.407
	Conflict	303.012	5	60.602	4.286	.002
Positive Emotional state	Closeness	268.642	16	16.790	1.147	.329
	Conflict	615.948	16	38.497	2.723	.002
Negative Emotional	Closeness	266.066	20	13.303	0.909	.577
state* Positive Emotional	Conflict	642.008	20	32.100	2.270	.006
state						

Table 1. MANOVA results for MPAC-R/S regarding STRS

One question to be answered in this study was whether the emotional states of the children were effective on teacher's relationship perception. Multiple variance analysis was performed for this purpose (see Table 1). In the MPAC-R/S the main effect of the negative emotional state dimension on the STRS conflict sub-dimension (F(5,77)= 4.29, Wilks'  $\lambda$  = .770, p=.002) and the main effect of the positive emotional state dimension on the conflict sub-dimension (F(16, 77)= 2.72, Wilks'  $\lambda$  = .542, p=.002) were found to be significant. In addition, positive and negative emotional state interaction effect was significant in terms of conflict sub-dimension (F(20,77)= 2.270, Wilks'  $\lambda$  = .512, p= .006). Accordingly, the emotional state of the child (positive or negative) had a significant main effect on the teacher's conflict perception. Although conflict perception scores were relatively higher in the negative emotional state of the child than in the positive emotional state, emotional state was found to be effective on the conflict perception scores of the teacher. On the other hand, when it was investigated whether the relationship

perception of the teacher (conflictual or close) is effective on the positive or negative emotional state of the child, there was no such effect.

	Dependent Variables	SS	df	MS	F	р
Cognitive Reappraisal	Closeness	281.645	15	18.776	1.523	.116
	Conflict	630.723	15	42.048	2.622	.003
Suppression of Expression	Closeness	286.005	11	26.000	2.109	.028
	Conflict	570.217	11	51.838	3.233	.001
Cognitive Reappraisal*Suppression	Closeness	176.704	9	19.634	1.592	.131
of Expression	Conflict	167.431	9	18.603	1.160	.332

Table 2. MANOVA results for ERQ regarding STRS

Another important finding of this study indicated that the teacher's emotion regulation skills affected their perceptions involving both conflict and closeness in their relationships with children (see Table 2). As seen in Table 2, the main effect of the scores teachers got from the cognitive reappraisal subscale of ERQ on conflict perception was found to be significant (F(15,82)= 2.622, Wilks'  $\lambda$  = .509, p=.003). As for the suppression of expression subscale, the main effect of teachers' scores on the perception of both closeness (F(11,82)= 2.109, Wilks'  $\lambda$  = . 508, p=.028) and conflict (F(11,82)= 3.233Wilks'  $\lambda$  = .508, p=.001) was significant. The interaction effect in closeness and conflict perceptions with cognitive reappraisal and suppression of expression sub-dimensions was not found to be significant. To summarize briefly, while the main effect of cognitive reappraisal was significant only in terms of conflict perception, the main effect of expression of suppression on both closeness and conflict perception was found to be significant. In other words, while cognitive reappraisal was effective on conflict perception as a strategy, the suppression of expression strategy affected both closeness perception and conflict perception.

	Dependent Variables	SS	sd	MS	F	р
Cognitive Reappraisal	Positive Emotional	54.020	15	3.601	.405	.974
	state	59.796	15	3.986	1.808	.047
	Negative Emotional					
	state					
Suppression of	Positive Emotional	172.575	11	15.689	1.764	.074
Expression	state	28.589	11	2.599	1.179	.314
	Negative Emotional					
	state					
Cognitive Reappraisal*	Positive Emotional	112.678	9	12.520	1.407	.198
Suppression of	state	12.765	9	1.418	.643	.757
Expression	Negative Emotional					
	state					

Table 3. MANOVA results for ERQ regarding MPAC-R/S

It was also understood that the teachers' emotion regulation skills were influential on the child's particularly negative emotional state, and that effect was due to their cognitive reappraisal skills (see Table 3). Table 3 presents the MANOVA findings in which the effects of ERQ subdimensions on MPAC-R/S subdimensions are examined. According to those findings, the main effect of teachers' scores in cognitive reappraisal sub-dimension on children's scores regarding the observed negative emotional state was significant (F(15,82)= 1.808, Wilks'  $\lambda$  = . 706, p=.047). It was seen that teacher's emotion regulation skills were specifically effective on child's negative emotional state, and this effect is due to the cognitive reappraisal scores.

### Discussion

In the current study, basically, it was investigated whether the emotion regulation skills of children and teachers have an effect on the quality of the teacher-child relationship in the preschool period. In this context, the overall objective of the research was to find out whether emotion regulation skills provide a basis for developing secure and close relationships. It was also assessed whether the emotion regulation skills of both children and teachers were affected from each other. Findings show that children's emotional states were effective on teacher's relationship perception, and that teacher's emotion regulation skills were also effective on his/her relationship perception. In addition, the cognitive reappraisal strategy used by the teacher in emotion regulation has also been found to have an impact on the negative emotional state of children.

In this study, we used MPAC-R-Short Form, which is defined as an observation tool for children to assess how emotions are expressed and reflected in behaviors (Morris, Denham, Bassett, & Curby, 2013). Considering the basic findings of this study, it was found that the child's emotion regulation skills were effective on the teacher's conflict perception. This finding can be described as surprising because whatever the child's emotional state is (whether positive or negative), it has a significant impact on the teacher's conflict perception. Although the conflict perception is higher in the case of negative emotional state of the child, it has been concluded that the positive emotional state also affected the conflict scores. In other words, both emotional states (positive or negative) are effective on the conflict perception that teachers have in their

relationships with children. When culturally assessed, this can be explained by the conflicting feelings that the teacher possesses in terms of ensuring control as a part of his/her efforts to establish authority. To put it another way, when viewed culturally, conflict emerges as a quality that can easily manifest itself in relationship.

Even if closeness maintains its existence in the relationship as a framework, it is possible for the conflict perception to emerge as more apparent pattern. It is stated that many disciplinary models being carried out in schools are based on punishment and that also the factors such as time constraints of the teachers, abounding demands of the curriculum impair teachers' motivation to establish positive personal relationships. (Tillery, Varjas, Meyers and Collins, 2010). As Pianta (1999) points out, even though there is a mutual interaction in the relationship, the individuals clearly demonstrate their own way of behavior. As a matter of fact, in Tok's study (2011) the teacher's punitive behavior scores were found to be higher than the child's conflict scores, that is to say, the child's conflicting behavior pattern and the teacher's punitive attitude are not equivalent. The teacher's punitive attitude is not as parallel to the severity or content of the child's behavior pattern, and the teacher reacts more intensely. This finding that researcher puts forward is thought to be similar with the finding of our research, "whatever the child's emotional state is, it affects the teacher's conflict perception".

Competencies that teachers have in terms of social and emotional aspects significantly influence their communication with children, they ensure planning of activities and flows according to children's interests and abilities, which can trigger their potential, and they support problem solving skills of children (Jennings and Greenberg, 2009). Thus, the teacher becomes a real role model in the classroom. However, contrary to this, teachers with poor emotional management who have difficulties coping with frustration can lead to serious problems because of their negative attitudes towards children (such as setting strict rules, creating an emotionally challenging environment, punishing children). It is emphasized that these situations may damage student-teacher relations and lead to the formation of maladaptive behaviors by paving the way for the emergence of feelings of fear and anger in the environment (Tillery, Varjas, Meyers and Collins, 2010). For this reason, teachers' emotion regulation skills are extremely important in communication with children and in classroom functioning; because the teacher, together with the skills and competencies he/she has, creates a starting point in the relationship with the child

(Pianta, 1999). Allen (2010) explains that the negative relationship between teacher and learner adds a dimension rising mutual aggression and harms the professional relationship. In this respect, teachers should be rationals and good problem solvers who are able to control their emotions.

In the literature, it is reported that there are differences in emotion regulation strategies teachers use both in classroom management and in surviving professional life within the school environment (see Ocak Karabay, 2017). Although some findings show that cognitive reappraisal is a strategy used especially in classroom management and in relationships with children (Sutton, Mudrey-Camino and Knight, 2009), it is seen that teachers more often use suppression of expression as an emotion regulation strategy (Kayserili, 2009, Argon, 2015). In our study, while cognitive reappraisal strategy reported by teachers was found to be effective on their perception of conflicting relationship with children, it was seen that suppression of expression strategy influenced both closeness and conflict perception within the relationship. In Ocak Karabay's study (2017), it is reported that teachers tend to use cognitive reappraisal strategy more as positive relationship perception increases. It has been found that the findings obtained from different studies show correspondence with the findings obtained from our research, and that even both emotion regulation strategies have an influence on the relationship perception in this study. Although cognitive reappraisal contributes to the management of a more functional and stable process while the individual manages his own feelings, suppression of expression also functions in providing emotion control without an intense emotional and mental effort. In another study conducted using ERQ based on teachers' reports, it was stated that inappropriate behaviors of students were not effective on teachers' emotion regulation strategies. Researchers have emphasized that this is due to the fact that ERQ is generally associated with everyday life experiences and does not involve an occupation-specific assessment (Tsouloupas, Carson, Matthews, Grawitch, and Barber, 2010).

Another finding of this research is that teacher's emotion regulation skills are particularly influential on the child's negative emotional state. It is understood that this effect derives from cognitive reappraisal skills. In a recent study, the relationship between teachers' social-emotional competence, their professional commitment and children's negative emotions has been examined (Buettner, Jeon, Hur and Garcia, 2016). In that study, teachers' emotion regulation strategies and

their reactions to children's negative emotions were evaluated. Accordingly, coping skills which are defined as cognitive reappraisal and problem-focused strategies used by the teachers support children in giving positive reactions to their negative emotions. In this context, researchers emphasize the need for preschools to create an environment that will increase teachers' responsiveness and professional commitment by supporting their social-emotional capacities as well.

There are interesting findings reported in a study which examined teachers' beliefs and practices concerning emotion socialization. It was investigated whether those components were significant factors in predicting emotional competence of children (Morris, Denham, Bassett, & Curby, 2013). In addition, the classroom atmosphere and the behavior patterns of the teacher within the classroom were also evaluated. As a result of observations, the scores regarding the children's emotional understanding and recognition skills were surprisingly high in the classrooms where the scores concerning positive classroom atmosphere were low. There are studies which assert that children's exposure to negative emotions which can be defined as 'moderate' is highly correlated with their emotional understanding capacities (see Morris, Denham, Bassett, & Curby, 2013). This situation is explained as follows; there is an opportunity for children to encounter negative emotions, even low-dose, in classrooms where positive climate is poor and this, in turn, contributes to children's recognition of emotions and thus to their regulation skills. Moreover, in the same study, teacher's educational level and teacher's sensitivity were reported as two variables which predict children's emotional awareness scores. However, teachers' use of direct instruction regarding emotions didn't have an impact on emotional awareness of children and their observed behaviors related to emotion. For this reason, strategies such as being a model and emotional coaching can be considered to be more appropriate.

Individuals control their emotions and regulate their behavior patterns based on their own experiences (Pianta, 1999). At this point, as it can be can seen from the findings of our work, the more comprehensive evaluation of factors related to the child, as well as the teacher, will be important in terms of future work. Moreover, as it is emphasized by Morris, Denham, Basset and Curby (2013), what kind of emotion socialization strategies the child encounters at home is important at this point. The experience child gains in the home environment reflects on emotion regulation skills, classroom environment and interactions. The teacher must also have certain

skills in order to understand what equipment the child interacts with and to use appropriate strategies. Therefore, since the teacher is considered to be a significant adult in child's life specifically in preschool period, the fact that the teacher acts with negative emotions may lead both short term (being unhappy, unwilling, nonparticipant) and long term (distancing from school, alienation) problems on behalf of the child. This may cause children to display coercive, disruptive and inappropriate behavior, lead teacher to have more negative feelings by increasing his/her conflict perception within the relationship, and these feelings may become more evident over time (Jennings and Greenberg, 2009).

In order to prevent or mitigate all these problems, there is a need for the use, expansion and integration of evidence-based intervention programs universally within existing curriculums that would enable teachers to develop their competencies in various dimensions (Jennings and Greenberg, 2009). Therefore it is also recommended for Turkish preschool teachers to include activities promoting emotional competencies of young children into their daily schedules. In order to achieve this they need to participate in training programs more to realize critical importance of emotions deeply within interpersonal relationships and how those emotions can shape classroom climate. Besides this, it is also essential for teachers to recognize their own feelings so that they can be sure not to include feelings into classroom interactions since Turkish people prefer to rely on their feelings through interpersonall communication. Moreover, when this issue is considered in terms of preservice teachers, the power of emotion regulation, and classroom management skills and the relationships between teachers and students are not paid attention sufficiently especially within the scope of teacher training programs with a viewpoint including the power of emotions.

#### Limitations

In our study, there are several limitations to mention. One of the strengths of this study was to observe emotional competencies of children within their natural settings however we did not choose to observe teachers rather we used a self-report measure and asked teachers to complete a questionnaire in order to learn about their emotion regulation skills. In future studies it is recommended for reserachers to observe teachers' emotional reactions during classroom interactions as well as asking their own opinions. It would also be contributory to conduct focus groups with preschool teachers in order to learn deeply what kind of factors are affecting teachers' emotions about their professions and interactions with children. Another limitation of this study is not to include whole classroom interactions while observing children individually. It would be better to observe communication within classroom as a whole in order to understand classroom climate in general.

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