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Prediction of Emotional Understanding and Emotion Regulation Skills of 4-5 Age Group Children with Parent-Child Relations

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Abstract
The objective of the present study is to examine whether personal attributes, family characteristics of the child and parent-child relations predict children's emotional understanding and emotion regulation skills. The study was conducted with relational screening model, one of the screening models. Study sample included 423 children between the ages of 4 – 5.5 that attend preschool educational institutions. A personal information form, Parent – Child Relationship Scale, Emotion Regulation Checklist and Wally Feeling Understanding Test were utilized as data collection tools. Data were tested with Pearson correlation coefficient and hierarchical regression analysis. Study findings demonstrated that there was a significant correlation between parent – child relations sub-dimensions and emotion regulation and emotional understanding skills. Furthermore, it was determined that child's personal traits, family characteristics and parent – child relation sub-dimensions significantly predicted emotional understanding and emotion regulation skills sub-dimensions.
Keywords: Parent-child relations, Emotional understanding, Emotion regulation, Preschool period

1. Introduction

The significance of the conditions of social environment in child development and the role of the opportunities provided by the family and immediate environment especially during initial years of life on child's emotional, social and intellectual development are undeniable facts (Kartal, 2007; Topbaş, 2004). Emotional understanding and emotion regulation skills are important behavioral elements for the individuals to initiate and maintain positive interaction with others (Gormley et.al, 2011; Vural and Gürşimşek, 2009).

Early childhood is a critical period for the development of children's emotional understanding and emotion regulation skills, their value systems, self-confidence and social abilities. Emotional understanding was defined by LaBounty, Wellman, Olson, Lagattuta, and Liu (2008) as "the understanding of emotional expressions, internal feelings, and the antecedents and consequences of emotions in the self and in others'" (p. 758). In this period, children demonstrate significant development in recognizing and understanding basic (i.e. happiness, sadness, anger, fear) and complex (i.e. pride, shame, anxiety) emotions (Kramer, 2014). Emotional understanding includes understanding emotional expressions (i.e. facial and bodily) and a) understanding the reasons for others' emotions, b) understanding emotional evidence of others, c) understanding multiple emotions, d) methods of deliberately using emotional expressions to communicate with others (expressing or hiding emotions), e) knowledge on the methods of coping with emotions (Southam-Gerowa and Kendall, 2002).

Emotion regulation skills, on the other hand, individual's control, monitoring, assessment and alteration of emotional reactions to fulfill individual objectives (Thompson, 1994). Generally, emotion regulation skills basically include emotion regulation and emotion lability / negativity dimensions. Emotion regulation was conceptualized as the skill of an individual to regulate emotional impulses in order to render own relationships coherent with the environment (Shields and Cicchetti, 1997; Thompson, 1994). Emotion regulation is the skill to cope with negative emotions and sustaining positive emotions concurrently (Denham, 1998; Hyson, 2004). Emotion regulation includes internal and external processes that does not only consist of reducing the emotion itself, the way it is perceived, its intensity and frequency, but to create and sustain the emotional response. Internal emotion regulation processes contain self-regulation of the individual's emotions, while the external processes entail someone else regulating the individual's emotions (Thompson,1994). Emotion regulation is an important factor for individuals to reach their goals and adapt to social life (Cole, Martin and Dennis, 2004). Emotion lability / negativity is to respond generated emotional stimuli rapidly and at the same time to having difficulty evading negative emotional responses (Cole, Martin and Dennis, 2004). Children with emotional understanding and emotion regulation skills could manage their emotions under all circumstances, reduce the possibility of exhibiting externalized and destructive behavioral disorders, succeed in social and interpersonal relations, exhibit social behavior, accepted by their peers, and their academic achievements increase (Dunsmore, Booker and Ollendick, 2013, Howse et.al., 2003). Furthermore, children who regulate their emotions could cope with disappointments more easily, delay the pleasure, express their emotions in a socially acceptable manner,

and could control their aggressive impulses (Frankel et.al, 2012). On the other hand, lack of emotional understanding in children and emotion lability / negativity in emotion regulation are directly related with internal and external behavioral problems, failure in interpersonal relations, rejection by peers, destructive behavioral disorders and aggressiveness (Denham, 1998; Eisenberg et. al, 1995; Eisenberg and Fabes'e 1995; Kim and Deater-Deckard, 2011; Shields and Cicchetti, 1998; Shields, Cicchetti and Ryan, 1994; Frankel et.al, 2012).).

Parents have a significant impact on children's achievement of emotional understanding and emotion regulation skills during early childhood. Especially caretaker parents play a key role on this issue (Thompson, 1994). Emotional understanding and emotion regulation behavior and capacities of children are formed within parent – child relationship. The styles of using emotions during communication within the family, attachment quality, family's educational standing are effective on the development of children's emotional understanding (Southam-Gerowa and Kendall, 2002).

Children learn by observing the communication models that their parents exhibit in the environment, emotion regulation through direct dialogue, providing a model and reactions that parents display as a response to children's emotions (Kiel and Kalomiris, 2015). Parents could enable or prevent their children's achievement of emotional understanding and emotion regulation skills by 1) being a model in using emotion regulation or certain emotion regulation strategies; 2) accepting the emotions of the child, responding to emotional statements, helping children to regulate their emotions, to calm down, or on the contrary, unquestioning / punishing children's emotional expressions; 3) providing guidance for the children to learn various emotion regulation strategies (searching for adequate information with the child, analyzing the situation, creating alternatives and assessing the alternatives, etc.); 4) motivating the child with various social and material awards or punishments (Dunsmore, Booker and Ollendick, 2013; Frankel, et.al, 2012). If the parents conduct moderate, honest and reliable relations with their peers, family members and individuals in society, it is possible for them to conduct positive relations with their children. However, if parents have aggressive, offensive and conflicting relationships with their peers, family members and individuals in society, it is possible for them to conduct negative relations with their children. Parent – child relationship in early childhood has significant effects on emotional well-being, strategies to cope with problems and future communication skills of the children. As a result of this interaction, children learn the skills necessary to cope with others and succeed in different environments (Rogoff, 2003).

Preschool is a critical period for the children to acquire emotional understanding and emotion regulation skills. It is considered that parents play an important role in children's achievement of emotional understanding and emotion regulation skills. Thus, the present study aimed to investigate whether child's personal traits, familial characteristics and parent – child relations predict emotional understanding and emotion regulation skills of preschool children.

1.1 Aim of the Study

The objective of the present study is to examine whether child's personal traits, family variables and parent – child relations predict emotional understanding and emotion regulation skills of children.

2. Method

Research model, universe, sample, data collection tools and data analysis are discussed in this section **.**

2.1 Research Model

The present study was conducted with relational screening model, one of the screening research models. Screening model is a research approach that aims to describe a past or present situation as it is (Karasar, 2010).

2.2 Universe and Sample

Research universe includes 4 and 5 years old children that attend state preschool educational institutions at Eskişehir city center in Turkey. Study sample consisted of 423 children who attended preschool education institutions. The sample was selected with one of the purposive sampling methods, criterion sampling method. Sampling criteria were determined as being in 4-5 age group, attending a preschool educational institution, and not having a developmental problem.

Tablo 1. Demographics variables of research sample

Variables	Status	f	%
Gender of Child	Girl	209	49.4
	Boy	214	50.6
Age of Child	4 age	164	38.8
	5 age	259	61.2
Mother Education	Elementary education	122	28.8
	Secondary education	124	29.3
	University	177	41.8
Father Education	Elementary education	87	20.6
	Secondary education	164	38.8
	University	172	40.6
Family İncome.	0-1000 TL	37	9.5
	1001-2000 TL	158	36.2
	2001-3000 TL	55	13.3
	3001-4000 TL	72	16.7
	More than 4000 TL	101	24.3
Age of Mother	Under 25 age	40	9.46
	26-30 age	142	33.56
	31-35 age	198	46.81
	36-40 age	43	10.17
Age of Father	Under 25 age	31	7.33
	26-30 age	151	35.70
	31-35 age	192	45.39
	36-40 age	49	11.58

The research was carried out through the data gathered from 209 (49.4 %) female and 214 (20.6 %) male preschool education children. In the study groups, 38.8 % of the participants had 4 age and 61.2 % had 5 age. 28.8 % of the participants had elementery school graduate mothers, 29.3 % of the participants had secondary school graduate mothers, and 41.8 % of the participants had university or master/ doctoral graduate mothers. 20.6 % of the participants had elementary school graduate fathers, 38.8 % of the participants had secondry school graduate fathers, and 40.6 % of the participants had university or master/ doctoral graduate fathers. 45.7 % of the participants were from the lower socio-ecomonic level, 30.0 % of the participants were from the middle socio-economic level and 24.3 % of the participants were from the upper socio-ecvonomic level.

2.3 Data Collection Tools

Personal Information Form

This is the form that was used to identify the personal attributes of the children in the sample group.

Parent – Child Relationship Scale

Parent – Child Relationship Scale was developed by Pianta (1992) based on attachment theory and Attachment Q-Set scale. The scale was adapted by Akgün and Yeşilyaprak (2010) to Turkey for children in the 4-6 age group. The Turkish scale includes a two-factor structure with 24 items. Conflict dimension factor loads vary between .38 and .72 and affinity dimension factor loads vary betweem .42 and .72. Scale internal consistency coefficients (Cronbach alpha) are .85 for conflict dimension subscale, .73 for affinity dimension subscale, and .73 for the whole scale. Confirmatory factor analysis for the scale was tested by Yüksek – Usta (2014) and the scale was determined as a good fit (GFI = .86, NFI = .85, CFI = .93, RMSEA = .061).

Emotion Regulation Checklist – Teacher Form

The scale was developed by Shields and Cicchetti (1997) to determine emotion regulation and control skills of preschool and school-age children. The scale contains two subscales: Emotion lability / Negativity dimension includes 15 items, whereas Emotion Regulation dimension includes 8 items, while there is a separate item which does not have a factor load in neither subscale. Emotion regulation dimension Cronbach alpha coefficient is .83 and Emotion Lability / Negativity dimension Cronbach alpha coefficient is .92.

The scale was adapted to Turkey for 4-5 age group children by Danışman, Dereli-İman, Akın-Demircan and Yaya (2015). Initially, two-factor structure of the scale was tested with confirmatory factor analysis, however it was observed that the data did not confirm the two-factor structure. As a result of conducted explanatory factor analysis, a two-factor structure that explained 81.12% of the total variance was obtained and it was observed that the item that was excluded from both factors in the original scale was included in the first factor. To confirm the obtained structure, confirmatory factor analysis was conducted and it was determined that the model was a good fit (GFI = .83, AGFI = .80, CFI = .97, RMSEA = .07, χ^2/sd = 2.83). Cronbach alpha coefficient for the whole scale was .88, and .98 and .98 for the sub-dimensions (Danişman , Dereli- İman, Akın –

Demircan and Yaya, 2015).

Wally Feeling Test:

It was developed to identify preschool children's terms of emotion by Webster-Stratton, Reid and Stoolmiller (2008). In this test, eight pictures that depict positive and negative moods are shown to children and the children are asked to identify what the children in the pictures feel. The test was used to measure emotional understanding of 1,700 children and it was determined that the test was differential. This test is used in several countries to assay emotional understanding of children. The test was adapted to Turkey for 4-5 age group children by the author. Initially, two-factor structure of the test (understanding positive and negative moods) was tested with confirmatory factor analysis and it was observed that the data confirmed the two-factor structure. Confirmatory factor analysis established that the model was a good fit (GFI = .93, AGFI = .90, CFI = .98, RMSEA = .05, χ^2/sd = 1.813). Factor loads obtained demonstrated that the scale could also be used in a single-factor structure. Cronbach alpha coefficient calculated for the scale was .87, and .94 and .87 for the sub-dimensions.

2.4 Data Collection

Parent – Child Relationship Scale was filled out by the parents of the participating children and Emotion Regulation Checklist was filled out by the preschool teacher while observing the children.

Emotional understanding test was applied to children individually by the author. Before the scales used in the research were applied, the approval of Eskişehir Province National Education Directorate was obtained. Furthermore, consent of parents and preschool teachers were obtained prior to presenting the research scales. Parents and preschool teachers responded to the scales on a voluntary basis.

2.5 Data Analysis

Since multiple regression analysis has certain assumptions such as multiple covariance, normality, extremity, linearity, homogeneity and independence of residual values, these hypotheses were tested before the analysis. Covariance exists when there is a high level of correlation between the independent variables. VIF and tolerance values of the sate were checked and no tolerance values below .10 and no VIF values over 10 were observed. Thus, it was determined that independent variables were not correlated.

Normal distribution of data was examined with Kolmogorov – Smirnov Test prior to data analysis. Kolmogorov – Smirnov test did not yield significant results and thus, identified the normal distribution of all data. It was observed that Kolmogorov – Smirnov values veried between .082 and .498 for dependent and independent variables. Furthermore, analysis of skewness and kurtosis coefficients demonstrated that skewness coefficients changed between .056 and .383, and kurtosis coefficients changed between .270 and .796. Lower than 1 skewness and kurtosis values reflected normal distribution. Single variable normality was tested with Z-values, multivariate normality and extreme values were examined using Mahalanobis Distance test. No extreme values and any factors that affected multivariate normality were observed.

Data analysis was conducted with SPSS 21.0 software. Correlation between parent – child relationship sub-dimension scores and children's emotional understanding and emotion regulation skills sub-dimension scores was tested with Pearson correlation coefficient; whether parent – child relationship sub-dimension scores predicted children's emotional understanding and emotion regulation skills sub-dimension scores was tested with hierarchical multiple regression analysis (Büyüköztürk, 2009).

3. Results

In this section, information on the correlation coefficient between parent – child relationship, emotional understanding and emotion regulation skills of 4-5 years old children, and whether personal traits, family characteristics and parent – child relationship predicted their emotional understanding and emotion regulation skills are discussed.

Table 2. Correlations between the variables

Variables	1	2	3	4	5	6	7
Closeness (1)	1						
Conflict (2)	-.37**	1					
Emotion Lability/Negativity (3)	-.36**	.33**	1				
Emotion Regulation (4)	.39**	-.39**	-.46**	1			
Understanding Negative Feelings(5)	.46**	-.43**	-.31**	.52**	1		
Understanding Pozitive Feelings(6)	.45**	-.36**	-.30**	.51**	.86**	1	
Total Understanding Feelings(7)	.47**	-.41**	-.31**	.54**	.96**	.96**	1

**P<.01; *P<.05

Table 2 indicate that there was negative correlation between closeness and emotion lability / negativity (r = -.36, p< .01), pozitive correlation between closeness and emotion regulation (r = .39, *p*< .01), pozitive correlation between closeness and understanding negative feelings (r = .46, *p*< .01), pozititive correlation

between closeness and understanding pozitive feelings (r = .45, *p*< .01), pozitive correlation between closeness and total understanding feelings (r = .47, *p*< .01).

There was pozitive correlation between conflict and emotion lability / negativity (r = .33, p< .01), negative correlation between conflict and emotion regulation (r =- .39, *p*< .01), negative correlation between conflict and understanding negative feelings (r = -.43, *p*< .01), negative correlation between conflict and understanding pozitive feelings (r = -.36, *p*< .01), negative correlation between conflict and total understanding feelings (r = -.41, *p*< .01).

There was negative correlation between emotion lability/negativity and understanding negative feelings (r = -.31, p< .01), negative correlation between emotion lability/negativity and understanding pozitive feelings (r =-.30, *p*< .01), negative correlation between emotion lability/negativity and total understanding feelings (r = -.31, *p*< .01).

There was pozitive correlation between emotion regulation and understanding negative feelings (r =.52, p< .01), pozitive correlation between emotion regulation and understanding pozitive feelings (r =.51, *p*< .01), pozitive correlation between emotion regulation and total understanding feelings (r =.54, *p*< .01).

Hierarchical multiple regression analysis was conducted to determine the level that parent – child relationships predicted emotional understanding and emotion regulation skills. Hierarchical multiple regression analysis was conducted in four steps. In the first step, only personal traits of the child, gender, age and number of siblings, in the second, family characteristics, mother's education level, father's education level, family income level, in the third step, parent – child relationship, and in the final step all variables were included in the analysis.

Table 3. Results of hierarchical regression analysis related to the dependent variable "understanding pozitive feelings "

		Unstandardized		Standardized				
Model	Independent Variables	B	Std. Error	Beta	t	F	R^2	ΔR^2
1st Child's Characteristics	(Constant)	2.737	.484		5.660**	.397	.003	.002
	Gender	-.079	.098	-.040	-.803			
	Age	.030	.102	.015	.296			
	Number of sublings	.032	.058	.027	.545			
2st Step Family's Characteristics	(Constant)	1.974	.152		12.98**	13.21**	.087	.080
	Mother educ.	.142	.074	.117	1.918			
	Father educ.	.046	.089	.035	.513			
	F. İncome	.133	.050	.181	2.644**			
3st Step Parent-Child relationship	(Constant)	2.483	.346		7.186	70.023**	.250	.246
	Closeness	.043	.005	.366	8.077			
	Conflict	-.029	.006	-.232	-5.113			
4st All Independent Variables	(Constant)	.908	.602		1.507	21.39**	.293	.279
	Gender	-.047	.084	-.024	-.560			
	Age	.213	.097	.104	2.198*			
	Mother Edu.	.153	.069	.127	2.240*			
	Father Edu.	.055	.079	.042	.699			
	Number of sublings	-.018	.050	-.015	-.348			
	F. İncome	.071	.046	.096	1.540			
	Closeness	.039	.005	.331	7.169**			
	Conflict	-.025	.006	-.202	-4.40**			

**P<.01; *P<.05

Results indicate that child's personal traits included in the first step was not predicted understanding pozitive feelings sub-dimension of understanding feeling factor significantly [$R^{2=}$ .003; F =.397, *p*>.05].

After the three demographic variables in the first model were controlled, it was observed that family characteristics included in the second step predicted understanding pozitive feelings significantly [R^2= .087; F = 13.21, *p*< .01]. It was also observed that family characteristics explained 8.7% of the total variance in understanding pozitive feelings dimension scores. According to independent variables t-test results, only the family income predicted understanding pozitive feelings (β=.181; p<.01).

After the variables in the first and second models were controlled, it was observed that parent – child relationship included in the third step predicted understanding pozitive feelings significantly [R^2=.25; F= 70.023, *p*< .01]. It was also observed that parent – child relationship explained 25 % of the total variance in

understanding pozitive feelings scores. According to independent variables t-test results, closeness dimension (β=.366; p<.01) was the strongest predictor of understanding pozitive feelings followed by the conflict dimension (β= -.232 p<.01).

In the final model, scores for all independent variables included in the regression equation predicted the understanding pozitive feelings score significantly (R^2=.293; F=21.39; p<.01). It was observed that independent variables explained 29.3% of the total variance in understanding pozitive feelings dimension scores. According to independent variables t-test results, the independent variable closeness dimension (β= .331; p<.01) was the strongest predictor of understanding pozitive feelings, followed by the conflict dimension (β=- .202; p<.01), mother's education level (β=.127; p<.05, the child's age (β=.104; p<.05).

Table 4. Results of hierarchical regression analysis related to the dependent variable "understanding negative feelings "

		Unstandardized		Standardized				
Model	Independent Variables	B	Std. Error	Beta	t	F	R^2	Δ R^2
1st Child's Characteristics	(Constant)	3.251	.468		6.944**	2.679*	.019	.012
	Gender	-.224	.095	-.115	-2.347*			
	Age	-.054	.099	-.027	-.550			
	Number of sublings	.070	.056	.061	1.240			
2st Step Family's Characteristics	(Constant)	1.817	.146		12.40**	17.32**	.111	.104
	Mother educ.	.105	.071	.090	1.483			
	Father educ.	.111	.086	.086	1.287			
	F. İncome	.145	.049	.202	2.991**			
3st Step Parent-child Relationship	(Constant)	2.834	.327		8.653**	87.180**	.293	.290
	Closeness	.040	.005	.353	8.019**			
	Conflict	-.036	.005	-.302	-6.85**			
4st All Independent variables	(Constant)	1.759	.563		3.123**	27.951**	.351	.339
	Gender	-.188	.079	-.096	-2.379*			
	Age	.117	.091	.058	1.289			
	Mother Edu.	.084	.064	.071	1.307			
	Father Edu.	.112	.074	.087	1.516			
	Number of sublings	.014	.047	.013	.307			
	F. İncome	.076	.043	.106	1.768			
	Closeness	.038	.005	.331	7.481**			
	Conflict	-.031	.005	-.256	-5.89**			

**P<.01; *P<.05

Results indicate that child's personal traits included in the first step predicted understanding negative feelings sub-dimension of understanding feeling factor significantly [$R^{2=}$.019; F= 2.679, p<.05]. According to independent variables t-test results, only the child's gender predicted understanding negative feelings (β=-.115; p<.05).

After the three demographic variables in the first model were controlled, it was observed that family characteristics included in the second step predicted understanding negative feelings significantly [R^2=.111; F = 17.32, p< .01]. It was also observed that family characteristics explained 11.1% of the total variance in understanding negative feelings dimension scores. According to independent variables t-test results, only the family income predicted understanding negative feelings (β= .202; p<.01).

After the variables in the first and second models were controlled, it was observed that parent – child relationship included in the third step predicted understanding negative feelings significantly [R^2= .293; F= 87.180, p< .01]. It was also observed that parent – child relationship explained 29.3 % of the total variance in understanding negative feelings scores. According to independent variables t-test results, closeness dimension (β=.353; p<.01) was the strongest predictor of understanding negative feelings followed by the conflict dimension (β= - .302; p<.01).

In the final model, scores for all independent variables included in the regression equation predicted the understanding negative feelings score significantly (R^2=.351; F=27.951; p<.01). It was observed that independent variables explained 27.9 % of the total variance in understanding negative feelings dimension scores. According to independent variables t-test results, the independent variable closeness dimension (β=.331; p<.01) was the strongest predictor of understanding negative feelings, followed by the conflict dimension (β= -.256;

p<.01), the child's gender (β= -.096; p<.05).

Table 5. Results of hierarchical regression analysis related to the dependent variable "total understanding feelings "

		Unstandardized		Standardized				
Model	Independent Variables	B	Std. Error	Beta	t	F	R^2	Δ R^2
1st Child's Characteristis	(Constant)	5.988	.919		6.519**	1.291	.009	.002
	Gender	-.303	.187	-.079	-1.619			
	Age	-.024	.193	-.006	-.124			
	Number of sublings	.102	.110	.046	.919			
2st Step Family's Characteristis	(Constant)	3.743	.302		12.40**	13.40**	.088	.081
	Mother educ.	.383	.132	.167	2.899**			
	Father educ.	.406	.146	.161	2.787**			
	F. İncome	.072	.104	.032	.686			
3st Step Parent-child Relationship	(Constant)	5.316	.641		8.300**	86.045**	.291	.287
	Closeness	.083	.010	.373	8.457**			
	Conflict	-.065	.010	-.276	-6.26**			
4st All Independent Variables	(Constant)	2.667	1.107		2.408*	26.865**	.342	.330
	Gender	-.235	.155	-.062	-1.515			
	Age	.330	.178	.084	1.851			
	Mother Edu.	.237	.126	.103	1.884			
	Father Edu.	.168	.146	.067	1.151			
	Number of sublings	-.003	.093	-.001	-.033			
	F. İncome	.147	.084	.104	1.737			
	Closeness	.077	.010	.344	7.706**			
	Conflict	-.056	.010	-.237	-5.35**			

**P<.01; *P<.05

Results indicate that child's personal traits included in the first step was not predicted total understanding feelings significantly [$R^{2=}$ .009; F =1.291, p>.05].

After the three demographic variables in the first model were controlled, it was observed that family characteristics included in the second step predicted total understanding feelings significantly [R^2= .088; F = 13.40, p< .01]. It was also observed that family characteristics explained 8.8% of the total variance in total understanding feelings scores. According to independent variables t-test results, mother education level (β= .167; p<.01) was the strongest predictor of total understanding feelings followed by the father education level (β= .161 p<.01).

After the variables in the first and second models were controlled, it was observed that parent – child relationship included in the third step predicted total understanding feelings significantly [R^2=.291; F= 86.045, p< .01]. It was also observed that parent – child relationship explained 29.1 % of the total variance in total understanding feelings scores. According to independent variables t-test results, closeness dimension (β=.373; p<.01) was the strongest predictor of total understanding feelings followed by the conflict dimension (β= -.276, p<.01).

In the final model, scores for all independent variables included in the regression equation predicted the total understanding feelings score significantly (R^2=.342; F=26.865; p<.01). It was observed that independent variables explained 34.2% of the total variance in total understanding feelings dimension scores. According to independent variables t-test results, the independent variable closeness dimension (β=.344; p<.01) was the strongest predictor of total understanding feelings, followed by the conflict dimension (β= - .237; p<01).

Table 6. Results of hierarchical regression analysis related to the dependent variable " emotion lability/negativity"

		Unstandardized		Standardized				
Model	Independent Variables	B	Std. Error	Beta	t	F	R^2	Δ R^2
1st Child's Characteristics	(Constant)	31.509	5.582		5.645**	2.88*	.013	.006
	Gender	2.377	1.137	.102	2.091*			
	Age	.001	1.175	.000	.001			
	Number of sublings	-.588	.671	-.043	-.876			
2st Step Family's Characteristics	(Constant)	46.470	1.730		26.854**	19.346**	.122	.116
	Mother educ.	-1.722	.839	-.123	-2.052*			
	Father educ.	-1.930	1.015	-.126	-2.501*			
	F. İncome	-1.312	.574	-.153	-2.288*			
3st Step Parent-child Relationship	(Constant)	34.184	4.204		8.132	45.216**	.177	.173
	Closeness	-.379	.065	-.279	-5.876**			
	Conflict	.329	.068	.229	4.824**			
4st All Independent Variables	(Constant)	57.558	7.130		8.073**	18.576**	.265	.250
	gender	1.839	.998	.079	1.843			
	Age	-2.817	1.146	-.118	-2.257*			
	Mother Edu.	-1.915	.811	-.137	-2.362*			
	Father Edu.	-1.953	.939	-.127	-2.080*			
	Number of sublings	.116	.597	.009	.194			
	F. İncome	-.787	.544	-.092	-1.448			
	Closeness	-.347	.064	-.255	-5.41**			
	Conflict	.240	.067	.168	3.589**			

**P<.01; *P<.05

Results indicate that child's personal traits included in the first step predicted emotion lability/negativity sub-dimension of emotion regulation factor significantly [$R^{2=}$ .013; F= 2. 88, p< .05]. It was observed that child's personal traits explained 1.3% of the total variance in emotion lability/negativity dimension scores. According to independent variables t-test results, only the child's gender predicted emotion lability/negativity (β= .102; p<.05).

After the three demographic variables in the first model were controlled, it was observed that family characteristics included in the second step predicted emotion lability/negativity significantly [R^2= .122; F = 19.346, p< .01]. It was also observed that family characteristics explained 12.2% of the total variance in emotion lability/negativity dimension scores. According to independent variables t-test results, family income was the strongest predictor of emotion lability/negativity (β= -.153; p<.05), followed by father's education level (β= -.126; p<.05), and mother's education level (β= -.123; p<.05).

After the variables in the first and second models were controlled, it was observed that parent – child relationship included in the third step predicted emotion lability/negativity significantly (R^2=.177; F=45.216; p<.01). It was also observed that parent – child relationship explained 17.7% of the total variance in emotion lability/negativity dimension scores. According to independent variables t-test results, closeness dimension (β= -.279; p<.01) was the strongest predictor of emotion lability/negativity, followed by the conflict dimension (β= .229; p<.01).

In the final model, scores for all independent variables included in the regression equation predicted the emotion lability/negativity score significantly (R^2=.265; F=18.576; p<.01). It was observed that independent variables explained 26.5% of the total variance in emotion lability/negativity dimension scores. According to independent variables t-test results, the independent variable closeness dimension (β= - .255; p<.01) was the strongest predictor of emotion lability/negativity, followed by the conflict dimension (β=.168; p<.01) , mother's education level (β= -.137; p<.01), father's education level (β=-.127; p<.01), and the child's age (β= -.118; p<.05) .

Table 7. Results of hierarchical regression analysis related to the dependent variable "emotion regulation "

		Unstandardized		Standardized				
Model	Independent Variables	B	Std. Error	Beta	t	F	R^2	ΔR^2
1st Child's Characteristics	(Constant)	37.645	4.605		8.17**	6.310*	.045	.043
	Gender	-3.685	.938	-.189	-3.93**			
	Age	-.354	.970	-.018	-.365			
	Number of sublings	1.131	.554	.92	1.85			
2st Step Family's Characteristics	(Constant)	19.492	1.404		13.88**	31.034**	.182	.176
	Mother educ.	1.629	.681	.139	2.39*			
	Father educ.	1.769	.824	.137	2.14*			
	F. İncome	1.540	.465	.214	3.30**			
3st Step Parent-child Relationship	(Constant)	34.776	3.424		10.15**	61.760**	.227	.224
	Closeness	.326	.053	.286	6.20**			
	Conflict	-.352	.056	-.292	-6.32**			
4st All Independent Variables	(Constant)	14.311	5.525		2.590*	30.997**	.375	.363
	Gender	-3.097	.773	-.159	-4.00**			
	Age	2.538	.888	.127	2.857**			
	Mother Edu.	1.681	.628	.143	2.676**			
	Father Edu.	1.689	.728	.131	2.321*			
	Number of sublings	.379	.462	.033	.820			
	F. İncome	1.061	.421	.148	2.519*			
	Closeness	.288	.050	.253	5.818**			
	Conflict	-.261	.052	-.216	-5.02**			

**P<.01; *P<.05

Results indicate that child's personal traits included in the first step predicted emotion regulation sub-dimension of emotion regulation factor significantly [$R^{2=}$ .045; F = 6.310, p< .05]. It was observed that child's personal traits explained 4.5% of the total variance in emotion regulation dimension scores.

According to independent variables t-test results, only the child's gender predicted emotion regulation (β=-.189; p<.01).

After the three demographic variables in the first model were controlled, it was observed that family characteristics included in the second step predicted emotion regulation significantly [R^2= .182; F = 31.034, p< .01]. It was also observed that family characteristics explained 18.2% of the total variance in emotion regulation dimension scores. According to independent variables t-test results, family income was the strongest predictor of emotion regulation (β= .214; p<.05) followed by mother's education level (β= .139; p<.05), and father's education level (β= .137; p<.05).

After the variables in the first and second models were controlled, it was observed that parent – child relationship included in the third step predicted emotion regulation significantly [R^2= .227; F= 61.760, p< .01]. It was also observed that parent – child relationship explained 22.7% of the total variance in emotion regulation dimension scores. According to independent variables t-test results, conflict dimension (β= - .292; p<.01) was the strongest predictor of emotion regulation followed by the closeness dimension (β= .286; p<.01).

In the final model, scores for all independent variables included in the regression equation predicted the emotion regulation score significantly (R^2=.375; F=30.997; p<.01). It was observed that independent variables explained 37.5% of the total variance in emotion regulation dimension scores. According to independent variables t-test results, the independent variable closeness dimension (β= .253; p<.01) was the strongest predictor of emotion regulation, followed by the conflict dimension (β= - .216; p<.01) , gender (β=-.159; p<.01), family income (β=.148; p<.05), mother's education level (β=.143; p<.05), father's education level (β= .131; p<.05), the child's age (β= .127; p<.05).

4.Discussion

In the present study, prediction of preschool children's emotional understanding and emotion regulation skills by personal traits, family characteristics and parent – child relationship was scrutinized. In the study, it was found that child's gender, mother's education level, father's education level, family income, parent – child relationship sub-dimension closeness and conflict significantly predicted emotional understanding and emotion regulation skills sub-dimension emotion lability/negativity and emotion regulation sub-dimensions. Based on standardized

regression coefficient and independent variable t-test results, it was determined that female children had higher emotion regulation skills than male children and had lower emotion lability/negativity. Chaplin and Aldao (2013) found that emotion regulation scores of preschool children differentiated favoring girls. Cole, Zahn-Waxler and Smith (1994) reported that emotion regulation skills of girls were higher. In a study conducted by Saarni (1984), it was determined that girls had higher emotion regulation skills. Ural, Güven, Sezer, Efe-Azkeskin and Yılmaz (2015) found that girls' emotion regulation sub-dimension scores were higher than boys' emotion regulation scores. Also, İslam and Sille (2016) found that emotion regulation skills sub-dimension mean scores of preschool children differentiated based on gender. Goldstein (2015) identified that emotion regulation of preschool children did not differentiate based on age and gender. Bajgar, Ciarrochi, Lane and Deane (2005) and Casey (1993) found that girls' emotion regulation scores were higher than that of boys.

Based on standardized regression coefficient and independent variable t-test results, it was observed that as mother's education level and father's education level increased, emotion lability/negativity scores decreased and children's emotion regulation and emotional understanding scores increased. As parent education level decreases, the higher level of pressure applied by the parents on children and their strict disciplinary attitudes could result in experiencing more conflicts and lower levels of affinity with their children. As parent education level increases, easier access of mothers to technology and current publications and their high information sharing level could result in reviewing their relationship with their children and promote positive relations and demonstrating positive attitude towards their children and the reduction of conflicts with children. As mother education level increases, mothers behave more moderate, warm and affectionate towards their children could have increased the children's emotion regulation and emotional understanding skills and reduced emotion lability/negativity scores. Aral, Gürsoy, Yıldız-Bıçakçı and Aysu (2014) found that children's emotion regulation scores did not differentiate based on mother's-father's education level in their study. Based on mothers' statements, Arı and Yaban (2016) found a positive and significant correlation between mother's education level and emotion regulation of children. Natasha, Shannon and Tamis-LeMonda (2007) found that children's emotion regulation scores differed based on father's education level. Especially higher than middle education father education level positively affects children's emotion regulation skills.

Based on standardized regression coefficient and independent variable t-test results, it was determined as family income increased, emotion lability/negativity scores decreased and children's emotional understanding and emotion regulation scores increased. Factors such as the economic problems low socio-economic level families experience, their lack of knowledge on child education and of ability to purchase and read publications on children could be the reasons for the decrease in children's emotional understanding and emotion regulation scores and the increase in emotion lability/negativity scores. Natasha, Shannon and Tamis-LeMonda (2007) found that children's emotion regulation scores differentiated with family income level. Especially, high income level has a positive impact on children's emotion regulation skills.

In the study, it was observed that parent relations sub-dimensions significantly predicted children's emotional understanding and emotion regulation skills sub-dimensions. Based on this finding, it could be stated that parent –child relationship is a significant factor for children's emotional understanding and emotion regulation skills. Children learn about understanding their emotions and regulating their emotions in their relations with their parents. In emotional understanding and emotion regulation, children tend to use the strategies that their parent use. If the parent is moderate, affectionate, accepting and sincere in its relationship with the child, solves the problems with communication and utilize active strategies in coping with negative emotions they experience, children will be successful in understanding and regulating emotions. However, if conflict reigns in parent – child relationship, problems are resolved with conflict and they experience problems with emotion lability/negativity they experience, it is possible for children not to achieve emotional understanding and emotion regulation skills (Fabes, Leonard, Kupanoff, & Martin, 2001; Mirabile et al., 2009; Eisenberg et al., 1998; Thompson, 1998). The possibilities of the children of the parents who exhibit anger and conflict in their social relations to learn to express their negative emotions using adequate methods and observe emotion regulation, hence to learn these skills are quite low. For children to achieve emotional understanding and emotion regulation skills, they need to observe and motivate these skills. If the parent supports the child emotionally when the child experiences a negative feeling and teach the child how to cope with that feeling, the child would acquire emotional awareness and emotion regulation skill (Cole, Dennis, Smith-Simon and Cohen, 2009). Mathis and Bierman (2015) found a positive significant correlation between moderate and sensitive relationship between the child and the family members and children's emotional regulation and a negative significant correlation between moderate and sensitive relationship between the child and the family members and emotional symptoms. Furthermore, they established a negative significant relationship between motivational – critical family – child relationship and emotion regulation of the children and a positive significant relationship between motivational – critical family – child relationship and emotional symptoms.

5. Conclusion

Based on the abovementioned findings, the following recommendations could be made:
Training programs on in-family communication and interaction, positive parent relationships and conflict resolution skills for families especially with low mother-father education levels and parents with low income levels should be developed and implemented and their impact on children's emotional understanding and emotion regulation. Further studies on the factors that affect parent – child relationship could be conducted. Curricula related to parent – child relationship could be developed to investigate their effects on children's emotional understanding and emotion regulation skills. Similar studies could be conducted with different sample groups and age groups to compare the findings.

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