

Investigation of Moral and Social Rule Conceptions, Prosocial Behaviors and Emotion Regulation Skills of 60-72 Month-Old Children Attending a Preschool Education Institution

Ali ÖZCAN^a Fatma Abide GÜNGÖR AY TAR^b


^a:  0000-0003-2589-0591

 Pamukkale University, Turkiye

 aliozcan@pau.edu.tr

^b:  0000-0002-0327-3317

 Gazi University, Turkiye

 abidegungor@gmail.com

Abstract

The present study was conducted with the aim of examining the relationships between the prosocial behaviors and emotion regulation skills of children aged 60-72 months attending pre-school educational institutions and their conceptions of moral and social rules. The sample group consists of 423 children (200 female and 223 male) aged 60-72 months and their families, selected among students attending kindergartens and pre-schools in Merkezefendi, Pamukkale, Tavas and Kale districts of the Denizli province using the Simple Random Cluster Sampling method in Turkiye. The "Preschool Children's Conceptions of Moral and Social Rules" scale was used to evaluate the conceptions of the children regarding moral and social rules while the "Prosocial Behavior Scale" and the "Emotion Regulation Checklist" were used to evaluate their prosocial behaviors and emotion regulation skills, respectively. The data were analyzed using the t-test and Pearson Product-Moment Correlation Coefficient (r) techniques. The study's findings revealed that a significant relationship between the variables of prosocial behaviors, emotion regulation and the conception of moral and social rules. The findings obtained from the analysis in this study were discussed within the scope of related studies in the literature and various suggestions were made for future studies within the framework of the conclusions reached.

Keywords

Pre-School period, moral and social rules, prosocial behavior, emotion regulation.

Ethics Committee Approval: Ethics committee permission for this study was obtained from Pamukkale University Social and Human Sciences Research Ethics Committee with the decision dated 06.12.2021 and numbered 23-3.

Suggested Citation: Özcan, A., & Güngör Ay tar, F. A. (2023). Investigation of moral and social rule conceptions, prosocial behaviors and emotion regulation skills of 60-72 month-old children attending a preschool education institution. *Sakarya University Journal of Education*, 13(2), 140-162. doi: <https://doi.org/10.19126/suje.1069780>

INTRODUCTION

The pre-school period is a phase where children start to acquire behaviors and habits that are in line with the values and cultural structure of the society in which they live (Smetana, Schlagman & Adams, 1993). During this period, children's developing minds and social experiences provide significant improvements in developing their personality, sense of morality and emotional maturity (Santrock, 2011). Therefore, children start to develop impressions regarding moral and social rules as a result of the social relations they experience with adults (such as teachers and parents) and peers. Children infer moral laws from experiences that caused them harm or unfair situations they observed as a result of their social relationships (Smetana, Schlagman & Adams, 1993).

Certain types of emotional behavior, which are also components of morality, are not present in infants at birth. Attitudes and emotions are formed and acquired over time (Yavuzer, 2001). Pre-school children are at the stage in which they are develop for the first time in terms of emotional understanding and become more adept at communicating emotions and responding appropriately to the emotional signals of others. Following this, they get better at emotional self-regulation, particularly coping with intense negative emotions. Finally, as pre-school children become more accustomed to experiencing self-conscious emotions and empathy, their developing sense of morality is reinforced (Berk, 2013a). From early childhood, these improvements observed in children significantly develop their emotional world and personality, and their small worlds begin to expand. Emotional signals exhibited by children, such as smiling, crying, and paying close attention to someone in their environment, strongly influence the behaviors of those around them. Similarly, emotional reactions of others also begin to shape the social behavior of children (Berk, 2013b).

As bio-cultural, social and emotional beings who are only at the very beginning of their development, babies exhibit a strong interest towards the social world and an intensive motivation for understanding and gravitating towards it (Santrock, 2012). In terms of pre-school education, the desired growth of social-emotional development that influences human life from childhood to adulthood is dependent on the development of several other skills. Social competence and emotion regulation skills are some of the most significant among these skills (Anthony et al., 2005; Chen & French, 2008). Emotion regulation is the activation of the strategies used to control the intensity and duration of one's emotional reactions, with the aim of utilizing them to achieve one's goals (Eisenberg & Spinrad, 2004). It is more likely for children who are sociable and well-versed in emotion regulation skills to help others in stressful moments, share feelings with them and comfort them. However, children who are not skilled at emotion regulation typically exhibit less anxiety and prosocial behavior (Bengston, Eisenberg & Valiente, as cited in Berk, 2013a, p. 371).

Another significant function of emotions and emotion regulation in individuals' social life is that they are effective in terms of prosocial behavior. Behaviors such as sharing, helping, cooperation and sacrifice are categorized as prosocial behaviors (Eisenberg, Lennon & Roth, 1983). Prosocial behaviors enable individuals to form social relationships with the society in which they live, and the healthy continuation of these relationships (Kim & Stevens, 1987). Positive social (prosocial) behaviors, which are among the most significant factors of social development and the cohesion of social progress, are social behaviors that are performed voluntarily for the benefit of an individual (Miller, Bernzweig, Eisenberg & Fabes, 1991). Eisenberg and Mussen (1989), similarly defined prosocial behavior as "voluntary actions that are intended to help or benefit another individual or group of individuals, performed with one's free will without any pressure or duress". The conceptualization of theories

regarding positive social behavior has been greatly influenced by the works of Kohlberg and colleagues. Kohlberg (1969) argued that moral reasoning is influential on social behavior, and that moral judgments are among the most significant factors for exhibiting positive social behavior. In line with this idea proposed by Kohlberg, studies show that moral judgments are positively linked to prosocial behavior (Blasi, 1980; Eisenberg, 1982; Miller, Eisenberg, Fabes & Shell, 1996). On the other hand, certain researchers argue that emotional factors are of great importance for individuals to exhibit positive social behavior (Blair, Denham, Kochanoff & Whipple, 2004; Eisenberg, 2000; Eisenberg, Fabes, Karbon et al., 1996; Scalco, Ceschi, Sartori & Rubaltelli, 2015).

According to Hoffman (2000), moral principles can motivate individuals to exhibit positive social behavior only via emotional experiences. According to the researcher, moral judgments can be linked to positive social behavior through emotional factors. Based on the cognitive-developmental theory of Kohlberg, it can be proposed that there is a direct link between moral judgments and prosocial behavior (Li, Hao & Shi, 2018). To elaborate on this argument, individuals with adequate moral judgment skills can better understand the needs or problems of others, and can therefore empathize with them (Eisenberg, Zhou & Koller, 2001). It is thought that empathetic emotions of sorrow and anxiety are important motivators in alleviating the distress of others and, therefore, engaging in helpful behavior (Carlo, Mestre, Samper, Tur & Armenta, 2011; Eisenberg, 2000). For this reason, moral judgments can encourage positive social behavior through empathy (Li, Hao & Shi, 2018).

Early childhood experiences are of great importance for human development. Early life experiences play a significant role in the development of human physiology and brain systems. Therefore, it is thought to have an impact on subsequent moral development (Narvaez & Gleason, 2013). The early development of children includes many components, from physical and cognitive development to socio-moral development. (Narvaez, 2016). Social and emotional development is significantly influenced by early life experiences. Although cognitive theories dominate moral development research (Bloom, 2013; Thompson, 2012), in actuality, social and emotional development make more significant contributions to this process (Kochanska et al., 2008). Social, emotional and moral development have an extremely important effect on a child's life and the preschool period is a critical period in which the basic structures of these developmental areas are formed. During this crucial period, children learn the behavioral patterns that are socially valued or unvalued. Children who begin learning how to exhibit their behavior and emotions in the right place and at the right time progress towards the goal of displaying social behavior in the desired manner, initially with the guidance of adults in their environment (particularly those in their family) and then by using their own resources (Yağmurlu, Candan & Kodlak, 2010). In this period, the behavioral patterns acquired by the child also provide insight regarding the direction of the behaviors they will exhibit in the future. For this reason, as all other acquisitions gained by children during this period, those in the social, emotional and moral realms can also provide foresight regarding the future socio-cultural structure of society. In addition to providing guidance to other researchers, the present study is regarded as significant for revealing the positive social behaviors, emotion regulation skills and conceptions of moral and social rules necessary for the present and future course of social life to proceed in a healthy environment. Therefore, the present study aims to examine the relationships between the prosocial behavior and emotion regulation skills of pre-school children and their conceptions of moral and social rules. In addition, in the participating children's prosocial behaviors, emotion regulation skills and perceptions of moral and social rules were examined according to gender-based differences.

METHOD

In the present study, the correlational survey model was used. Studies which collect data with the purpose of determining certain features of a group are classified as survey studies (Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz & Demirel, 2013).

Sample Group

The population of the study consists of 12.449 children aged 60-72 months attending pre-school educational institutions in Denizli, and their families. The sample group consists of 423 children (200 female and 223 male) aged 60-72 months and their families, selected among students attending kindergartens and pre-schools in Merkezefendi, Pamukkale, Tavas and Kale districts of the Denizli province using the Simple Random Cluster Sampling method.

Data Collection Tools

Demographic Information Form

The demographic information of the children participating in the study and their families was collected using the “Demographic Information Form” prepared by the researcher.

Moral and Social Rule Conception Scale

This scale, which is used to determine the conceptions of the participating children regarding moral and social rules, was developed by Smetana (1981). The scale consists of 10 situational pictures depicting the violation of moral and social rules. The scale “Preschool Children’s Conceptions of Moral and Social Rules” consists of two sub-scales: “Conceptions of Moral Rules” and “Conception of Social Rules”. In its adaptation into Turkish culture, this scale was presented to expert opinion by being examined in terms of content validity and face validity, and its pretest-posttest correlation coefficient was calculated as $r=0.78$ (Çeliköz et al. 2008; Seçer, Sarı & Olcay, 2006). The scale includes ten pictures, five related to moral rules and five to social rules.

Pictures related to moral rules;

- A child is hitting another child.
- A child is not sharing his teddy bear with his friend.
- A child is shoving another child.
- A child is throwing water at another child.
- A child is forcibly taking an apple from another child’s hand.

Pictures related to social rules;

- A child is not participating in the game with his friends.
- A child is not sitting where he should be during story time at school.
- A child is throwing the apple he ate on the ground.
- A child is not putting his toy where it should be.
- A child is not hanging his coat on the rack and throwing it on the floor.

The children were shown five pictures depicting the violation of moral rules and another five depicting the violation of social rules. Five distinct questions were asked to determine the children’s conceptions

of “Seriousness”, “Absence of Authority”, “Absence of Rules”, “Generalization” and “Punishment” within the context of each picture. Four different facial expressions were used to determine the children’s level of seriousness regarding the incidents depicted in the pictures. The first expression is a smiling face that approves the incident depicted in the picture, the second expression is a slightly angry face that somewhat disapproves of the incident and the third expression is a very angry face that totally disapproves of the incident.

After the pictures were shown to the children interviewed, first, it was asked whether the incident depicted in the picture is right or wrong. The answer “right” was evaluated as 0 points while the answer “wrong” was assigned 1 point. Afterwards, the questions “If this incident is wrong, how wrong is it in your opinion?”, “What would your reaction be to this incident?” and “Can you pick the facial expression that best reflects your reaction?” were directed at the children. The happy/approving facial expression was evaluated as 1 point, while the slightly angry/disapproving expression was regarded as 2 points, the very angry/highly disapproving expression was regarded as 3 points, and the furious/totally disapproving expression was assigned 4 points. The question "If the teacher had not seen what the child in the picture was doing, if there was no predetermined rule about the incident depicted, or if the child had done this somewhere else, would this behavior be appropriate?" was directed at the children. The answer "yes" was recorded as 0 points while "no" was recorded as 1 point. In order to measure the attitude of the children regarding punishment in the case of the violation of moral and social rules, the question "Do you think the teacher should punish the child in the picture for this behavior? If so, in what amount (a little/a lot)?" was asked. The answer "No, there should be no punishment" was assigned 0 points while "Yes, there should be a little punishment" was assigned 1 point and "Yes, there should be a lot of punishment" was assigned 2 points. A high number of points was interpreted as high knowledge of moral and social rules. In this study, the reliability analysis of the scale was made, the Cronbach's Alpha internal consistency coefficient was calculated as .80 for the moral rule conceptions subscale and .83 for the social rule conception subscale.

Prosocial Behavior Scale

For the measurement of prosocial behavior, a 19-item scale comprised of 13 items developed by Iannotti (1985) and 6 items developed by Wilby (2004) was used. The scale was adapted into Turkish by Yağmurlu and Sanson (2009). The internal consistency coefficients of the scale were calculated as .85 for helping under the condition of "Voluntariness", .86 for sharing, .91 for comforting and .80 for cooperation; .83 for helping under the condition of "at the request of the teacher", .81 for sharing, .92 for comforting and .75 for cooperation. The Prosocial Behavior Scale was filled out by the teachers for each child in their class. The Prosocial Behavior Scale, through which teachers evaluated the children in their class, contains four sub-scales involving four types of prosocial behavior (helping, sharing, cooperation and comforting). Out of the 19 items, 4 pertain to the behavior of helping (tidies up), 6 pertain to sharing (gives what they are currently playing with to another child), 5 pertain to comforting (says something to comfort a distressed child or adult), and 4 to cooperation (cooperates with you or another child). A 7-point scoring system was used in the scale (1=never, 7=always). High scores in the scale indicate a high level of prosocial behavior. In this study, the reliability analysis of the scale was conducted and the Cronbach's alpha internal consistency coefficient was calculated to be .97.

Emotion Regulation Checklist

The Emotion Regulation Checklist was developed by Shields and Cicchetti (1997) and adapted into Turkish by Batum and Yağmurlu (2007). The scale, which is used for the purpose of evaluating the

emotion regulation skills of children, consists of 24 items and is scored on a four-point measure (1=almost never, 4= always). It is a measurement tool graded by mothers or teachers. Within the scope of the present study, the scale was filled out by the teachers for each child in their class. The scale consists of two sub-dimensions: "Emotion Regulation" and "Lability-Negativity". The "Lability-Negativity" sub-scale involves items on emotional activation, reactivity, anger dysregulation and mood lability (Ex. "Impulsivity"). The "Emotion Regulation" sub-scale includes items on exhibiting socially appropriate emotions (Ex. "Able to delay gratification"). High scores in the scale indicate high levels of emotion regulation. Shields and Cicchetti (1997) calculated the Cronbach's alpha internal consistency coefficient as .96 for the sub-scale "Lability/Negativity" and .83 for the "Emotion Regulation" sub-scale. The Cronbach's alpha internal consistency coefficients for the Turkish adaptation of the scale performed by Batum and Yağmurlu (2007) were calculated as .73 for the "Emotion Regulation" sub-scale and .75 for the "Lability/Negativity" sub-scale. In this study, the reliability analysis of the scale was made, the Cronbach's alpha internal consistency coefficient was calculated as .88 for the "Lability/Negativity" sub-dimension and .81 for the "Emotion Regulation" sub-dimension.

Data Analysis

In the analysis of the study's data, the t-test was used to determine whether there was a significant difference in the prosocial behaviors and emotion regulation skills of the children and their conceptions of moral and social rules based on gender. The Pearson product-moment correlation coefficient (r) technique was used to reveal the relationship between the prosocial behaviors and emotion regulation skills of the children and their conceptions of moral and social rules. The analyses were tested in a computer environment using the SPSS 16.0 package program at significance levels of ".01" and ".05".

Ethical Principles

Ethics committee permission for this study was obtained from Pamukkale University Social and Human Sciences Research Ethics Committee with the decision dated 06.12.2021 and numbered 23-3.

FINDINGS

T-test results on the conception of moral and social rules scores of the children by gender are presented in Table 1.

Table 1*T-test Results on the Conception of Moral and Social Rules Scores of the Children by Gender*

The Conception of Moral and Social Rules Scale		Gender	N	\bar{X}	Sd	t	p	
Sub-Dimensions								
CONCEPTION OF MORAL AND SOCIAL RULES	SERIOUSNESS	Female	200	13.27	2.08	.278	.781	
		Male	223	13.21	2.30			
	ABSENCE OF AUTHORITY	Female	200	4.92	.474	1.34	.181	
		Male	223	4.84	.676			
	ABSENCE OF RULES	Female	200	4.83	.673	1.54	.124	
		Male	223	4.70	.964			
	GENERALIZATION	Female	200	4.88	.651	1.35	.177	
		Male	223	4.78	.848			
	PUNISHMENT	Female	200	8.64	1.90	-380	.704	
		Male	223	8.71	2.03			
	CONCEPTION OF MORAL AND SOCIAL RULES	SERIOUSNESS	Female	200	12.66	2.60	-583	.574
			Male	223	12.80	2.57		
		ABSENCE OF AUTHORITY	Female	200	4.90	.598	1.25	.210
			Male	223	4.82	.698		
ABSENCE OF RULES		Female	200	4.88	.658	1.90	.057	
		Male	223	4.73	.958			
GENERALIZATION		Female	200	4.88	.703	1.44	.150	
		Male	223	4.77	.893			
PUNISHMENT		Female	200	7.96	2.35	-249	.803	
		Male	223	8.02	2.37			

Table 1 reveals that the moral rules mean scores of the female students were calculated as (\bar{x} =13.27) for the “Seriousness” sub-dimension, (\bar{x} =4.92) for “Absence of Authority”, (\bar{x} =4.83) for “Absence of Rules”, (\bar{x} =4.88) for “Generalization” and (\bar{x} =8.64) for “Punishment”, while the moral rules mean scores of the male students were calculated as (\bar{x} =13.21) for the “Seriousness” sub-dimension, (\bar{x} =4.84) for “Absence of Authority”, (\bar{x} =4.70) for “Absence of Rules”, (\bar{x} =4.78) for “Generalization” and (\bar{x} =8.71) for “Punishment”.

The social rules mean scores of the female students were calculated as (\bar{x} =12.66) for the “Seriousness” sub-dimension, (\bar{x} =4.90) for “Absence of Authority”, (\bar{x} =4.88) for “Absence of Rules”, (\bar{x} =4.88) for “Generalization” and (\bar{x} =7.96) for “Punishment”, while the moral rules mean scores of the male students were calculated as (\bar{x} =12.80) for the “Seriousness” sub-dimension, (\bar{x} =4.82) for “Absence of Authority”, (\bar{x} =4.73) for “Absence of Rules”, (\bar{x} =4.77) for “Generalization” and (\bar{x} =8.02) for “Punishment”. According to the results of the t-test performed to determine whether there is any significant difference in the mean scores, no significant difference was observed based on gender between the mean scores of the “Seriousness” [t(421)=.278, p>.05] “Absence of Authority” [t(421)=1.34, p>.05] “Absence of Rules” [t(421)=1.54, p>.05], “Generalization” [t(421)=1.35, p>.05] and “Punishment” [t(421)=-.380, p>.05] sub-dimensions of the conception of moral rules, as well as the “Seriousness” [t(421)=-.583, p>.05] “Absence of Authority” [t(421)=1.25, p>.05] “Absence of Rules” [t(421)=1.90, p>.05], “Generalization” [t(421)=1.44, p>.05] and “Punishment” [t(421)=-.249, p>.05] sub-dimensions of the conception of social rules.

Table 2

T-test Results on the Prosocial Behavior Scores of the Children by Gender

Prosocial Behavior Scale	Gender	n	\bar{X}	Sd	t	p
Sub-Dimensions						
Helping	Female	200	26.10	7.09	2.86	.004
	Male	223	24.04	7.57		
Cooperation	Female	200	10.76	2.96	1.68	.093
	Male	223	10.26	3.08		
Comforting	Female	200	30.08	8.84	2.77	.006
	Male	223	27.71	8.65		
Sharing	Female	200	30.62	8.37	2.00	.046
	Male	223	28.97	8.51		

Table 2 demonstrates that the prosocial behavior mean scores of the female students were calculated as (\bar{x} =26.10) for the “Helping” sub-dimension, (\bar{x} =10.76) for “Cooperation”, (\bar{x} =30.08) for “Comforting” and (\bar{x} =30.62) for “Sharing” while those of the male students were calculated as (\bar{x} =24.04) for “Helping”, (\bar{x} =10.26) for “Cooperation”, (\bar{x} =27.71) for “Comforting” and (\bar{x} =28.97) for “Sharing”. According to the results of the t-test performed to determine whether there is any significant difference in the mean scores based on gender, it was determined that there was a significant difference in favor of the female children in the sub-dimensions “Helping” [t(421)=2.86, p<.05],

“Comforting” [t(421)=2.77, p<.05] and “Sharing” [t(421)=2.00, p<.05] while no significant difference was found in the “Cooperation” [t(421)= 1.68, p>.05] sub-dimension.

Table 3

T-test Results on the Emotion Regulation Scores of the Children by Gender

Emotion Regulation Checklist Sub-Dimensions	Gender	n	\bar{X}	Sd	t	p
Emotion Regulation	Female	200	24.34	4.53	.463	.000
	Male	223	24.15	4.01		
Lability/Negativity	Female	200	26.23	7.09	-3.79	.643
	Male	223	29.11	8.35		

Table 3 shows that the emotion regulation mean scores of the female children were calculated as (\bar{X} =24.34) for the “Emotion Regulation” sub-dimension and (\bar{X} =26.23) for “Lability/Negativity” while those of the male students were calculated as (\bar{X} =24.15) for “Emotion Regulation” and (\bar{X} =29.11) for “Lability/Negativity”. According to the results of the t-test performed to determine whether there is any significant difference based on gender in the mean scores, it was determined that there was a significant difference in favor of the female children in the “Emotion Regulation” [t(421)= .463, p<.05] sub-dimension. No significant difference was observed in the “Lability/Negativity” sub-dimension [t(421)=-3.79, p>.05].

Table 4

Correlation Values Between Prosocial Behavior, Emotion Regulation and the Conception of Moral Rules and Descriptive Statistics

Variables	1	2	3	4	5	6	7	8	9	10	11
1. Helping	1										
2. Cooperation	.87**	1									
3. Comforting	.80**	.81**	1								
4. Sharing	.83**	.81**	.83**	1							

5. CMR Seriousness	-.01	-.02	-.06	-.03	1						
6. CMR A.A.	.19**	.20**	.16**	.19**	.08	1					
7. CMR A.R.	.17**	.18**	.14**	.16**	.04	.61**	1				
8. CMR Generalization	.22**	.23**	.19**	.19**	.06	.62**	.48**	1			
9. CMR Punishment	.06	.07	.03	.02	.46**	.03	.07	.05	1		
10.E.R.	.57**	.61**	.72**	.57**	-.08	.19**	.15**	.19**	.02	1	
11.L/N	.52**	-	-	-	.02	-.12*	-.06	-.14**	.02	-.42**	1
		.44**	.47**	.56**							
Arithmetic Mean	25.01	10.49	28.83	29.75	13.24	4.87	4.76	4.83	8.67	24.2	27.75
Standard Deviation	7.41	3.03	8.81	8.47	2.20	.58	.84	.76	1.97	4.26	7.91
Coefficient of Skewness	-.50	-.68	-.27	-.43	-1.47	-1.53	-1.68	-1.90	-1.23	-.40	.84
Coefficient of Kurtosis	-.58	-.34	-.61	-.40	1.92	1.78	1.84	1.67	1.40	-.20	.19

*p<.05, **p<.01 CMR: Conception of Moral Rules, A.A: Absence of Authority, A.R.: Absence of Rules, ER: Emotion Regulation, L/N: Liability/Negativity

Based on the analysis results displayed in Table 4, it was determined that there was a positive and significant relationship between the "Helping" sub-dimension of the prosocial behaviors of the children and the "Absence of Authority" ($r=.197$, $p<.01$), "Absence of Rules" ($r=.177$, $p<.01$), and "Generalization" ($r=.222$, $p<.01$) sub-dimensions of the conception of moral rules sub-scale; between the "Cooperation" sub-dimension and the "Absence of Authority" ($r=.203$, $p<.01$), "Absence of Rules" ($r=.186$, $p<.01$) and "Generalization" ($r=.198$, $p<.01$) sub-dimensions of the conception of moral rules sub-scale; between the "Comforting" sub-dimension and the "Absence of Authority" ($r=.163$, $p<.01$), "Absence of Rules" ($r=.140$, $p<.01$) and "Generalization" ($r=.198$, $p<.01$) sub-dimensions of the

conception of moral rules sub-scale; between the "Sharing" sub-dimension and the "Absence of Authority" ($r=.198, p<.01$), "Absence of Rules" ($r=.166, p<.01$) and "Generalization" ($r=.193, p<.01$) sub-dimensions of the conception of moral rules sub-scale.

It was determined that there was a positive and significant relationship between the "Emotion Regulation" sub-dimension of the Emotion Regulation Checklist and the "Absence of Authority" ($r=.196, p<.01$), "Absence of Rules" ($r=.154, p<.01$) and "Generalization" ($r=.198, p<.01$) sub-dimensions of the conception of moral rules sub-scale; and a negative and significant relationship between the "Lability/Negativity" sub-dimension of the Emotion Regulation Checklist and the "Absence of Authority" ($r=.122, p<.05$) and "Generalization" ($r=.145, p<.01$) sub-dimensions of the conception of moral rules sub-scale.

It was determined that there was a positive and significant relationship between the "emotion regulation" sub-dimension of the Emotion Regulation Checklist and the "Helping" ($r=.574, p<.01$), "Cooperation" ($r=.610, p<.01$), "Sharing" ($r=.576, p<.01$) and "Comforting" ($r=.727, p<.01$) sub-dimensions of the Prosocial Behavior Scale. Additionally, it was revealed that there was a negative and significant relationship between the "Lability/Negativity" sub-dimension of the Emotion Regulation Checklist and the "Helping" ($r=.521, p<.01$), "Cooperation" ($r=.449, p<.01$), "Comforting" ($r=.473, p<.01$) and "Sharing" ($r=.576, p<.01$) sub-dimensions of the Prosocial Behavior Scale.

Table 5

Correlation Values Between Prosocial Behavior, Emotion Regulation and the Conception of Social Rules and Descriptive Statistics

Variables	1	2	3	4	5	6	7	8	9	10	11
1.Helping	1										
2.Cooperation	.87**	1									
3.Comforting	.80**	.81**	1								
4.Sharing	.83**	.81**	.83**	1							
5. CMR Seriousness	-.04	-.05	-.06	-.06	1						
6. CMR A.A.	.21**	.21**	.18**	.23**	.10*	1					
7. CMR A.R.	.21**	.19**	.15**	.20**	.12**	.67**	1				

8. CMR Generalization	.25**	.24**	.20**	.21**	.07	.67**	.56**	1			
9. CMR Punishment	.02	.03	.04	.003	.56**	.03	.01	.003	1		
10. E.R.	.57**	.61**	.72**	.57**	-.03	.20**	.17**	.20**	.03	1	
11. L/N	- .52**	- .44**	- .47**	- .56**	.05	-.17**	-.11*	- .16**	-.01	-.42**	1
Arithmetic Mean	25.01	10.49	28.83	29.75	12.74	4.86	4.80	4.82	7.99	24.24	27.75
Standard Deviation	7.41	3.03	8.81	8.47	2.59	.65	.83	.81	2.36	4.26	7.91
Coefficient of Skewness	-.50	-.68	-.27	-.43	-1.09	-1.70	-1.82	-1.56	-1.32	-.40	.84
Coefficient of Kurtosis	-.58	-.34	-.61	-.40	.30	1.74	1.92	1.62	1.46	-.20	.19

*p<.05, **p<.01 CMR: Conception of Moral Rules, A.A: Absence of Authority, A.R.: Absence of Rules, ER: Emotion Regulation, L/N: Lability/Negativity

It was determined that there was a positive and significant relationship between the "Helping" sub-dimension of the Prosocial Behavior Scale and the "Absence of Authority" ($r=.216$, $p<.01$), "Absence of Rules" ($r=.213$, $p<.01$) and "Generalization" ($r=.250$, $p<.01$) sub-dimensions of the conception of social rules sub-scale; between the "Cooperation" sub-dimension and the "Absence of Authority" ($r=.218$, $p<.01$), "Absence of Rules" ($r=.199$, $p<.01$) and "Generalization" ($r=.247$, $p<.01$) sub-dimensions of the conception of social rules sub-scale; between the "Comforting" sub-dimension and the "Absence of Authority" ($r=.183$, $p<.01$), "Absence of Rules" ($r=.150$, $p<.01$) and "Generalization" ($r=.200$, $p<.01$) sub-dimensions of the concept of social rules sub-scale; between the "Sharing" sub-dimension and the "Absence of Authority" ($r=.239$, $p<.01$), "Absence of Rules" ($r=.202$, $p<.01$) and "Generalization" ($r=.219$, $p<.01$) sub-dimensions of the conception of social rules sub-scale.

It was found that there was a positive and significant relationship between the "Emotion Regulation" sub-dimension of the Emotion Regulation Checklist and the "Absence of Authority" ($r=.206$, $p<.01$), "Absence of Rules" ($r=.174$, $p<.01$) and "Generalization" ($r=.203$, $p<.01$) sub-dimensions of the conception of social rules sub-scale; and a negative and significant relationship between the "Lability/Negativity" sub-dimension of the Emotion Regulation Checklist and the "Absence of

Authority" ($r=.179, p<.01$), "Absence of Rules" ($r=.110, p<.05$) and "Generalization" ($r=.161, p<.01$) sub-dimensions of the conception of social rules sub-scale.

RESULTS, DISCUSSIONS, AND SUGGESTIONS

In the present study, in which the relationships between the prosocial behavior and emotion regulation skills of pre-school children aged 60-72 months and their conceptions of moral and social rules as well as whether their prosocial behavior, emotion regulation and conception of moral and social rules scores differ based on gender, the findings obtained and their relations to those of other studies in the literature are presented below.

According to the first finding of the study, no significant difference was found between the mean scores of the conceptions of moral and social rules based on the gender of the children (Table 1). When the previous studies in the literature examining whether the conception of moral and social rules and moral development exhibit a significant difference based on gender were examined (Dilber, 2015; Gibs, Arnold & Burkhart, 1984; Ramazan, Ural & Sözer Çapan, 2006; Thoma, 1986), it was determined that the findings of these studies were consistent with those of the present study. On the other hand, researchers in the literature have also reached findings indicating that gender is effective on moral development, moral judgments and moral rules. For example, in the study conducted by Nucci and Nucci (1982) with the aim of investigating the reactions of children regarding the moral and social crimes that occur in open playgrounds, it was concluded that the answers given by the children on moral and social crimes differed based on gender. Walker (1984) reevaluated previous studies comparing the development of moral logic based on gender and determined that there was little difference caused by gender among children and adolescents. When the literature is examined, it is observed that although there are studies on moral development, moral judgment and moral rules reporting that gender is significant or insignificant, the large majority of the findings obtained in previous studies indicate that gender does not have a significant effect on these, which is consistent with the present study.

Based on gender, a significant difference in favor of the female students was discovered in the "Helping", "Comforting" and "Sharing" sub-dimensions of the prosocial behavior of children (Table 2). When previous studies investigating whether prosocial behavior differs significantly based on gender are examined (Eisenberg, Carlo, Murphy & Court, 1995; Eisenberg & Miller, 1987; Fabes, Carlo, Kupanoff & 152iable, 1999; Karaman & Dinçer, 2020; Yağmurlu et al., 2005), it can be observed that the findings obtained in these studies are in line with those of the present study. In certain studies, no consistent difference could be found between children of different genders (Bar-Tal, Raviv & Goldberg, 1982; Çetin & Samur, 2018; Dunn & Munn, 1986; Radke-Yarrow et al., 1983; Yarrow, Waxier et al., 1976). Although certain studies concluded that differences in prosocial behaviors based on gender were inconsistent, it is also reported that female children tend to exhibit prosocial behaviors more frequently compared to their male counterparts (Eisenberg & Mussen, 1989).

It is believed that this difference is due to the gender roles adopted by children as a result of observing their surroundings from a young age. In many cultures, exhibiting helpful behavior for the well-being of others is generally deemed to be an attribute more suitable for females. For this reason, prosocial behaviors of females are reinforced with affirmative remarks and they are further encouraged to be helpful. In many cultures around the world, females are expected to be more charitable, sharing and

attentive compared to males. This expectation from female children leads them to exhibit prosocial behaviors more frequently (Eisenberg & Mussen, 1989; Fagot, 1978; Power & Parke, 1986).

In terms of the emotion regulation skills of the participating children, a significant difference was found in favor of the females (Table 3). When previous studies investigating whether emotion regulation skills differ significantly based on gender are examined (Brown & Dunn, 1996; Fivush, 2007; McRae, Ochsner, Mauss, Gabrieli & Gross, 2008; Raikes, Robinson, Bradley & Ayoub, 2007; Rose & Rudolph, 2006), it can be observed that the findings obtained in these studies are in line with those of the present study. Studies on gender differences in emotion regulation processes show that anger is more socially acceptable for male children to exhibit compared with female children (Cole, Zahn Waxler & Smith, 1994; Lopez & Little, 1996). In the study conducted by Cole, Zahn Waxler and Smith (1994) in the United States on children aged 4-5 years, it was suggested that emotion regulation could also be associated with gender-specific behavioral problems. The present study reveals that when feeling angry, female children have a tendency to suppress their anger, which prevents them from displaying appropriate emotions, even in tense situations, while male children in the same situation are not as effective at blocking out their anger and experience problems as a result.

When pre-school-aged children are examined in terms of emotional expressions, a clear distinction based on gender can be observed. Female children experience less anger compared to male children while experiencing sadness more intensely. It can be argued that this is a result of reactions from social environments and social roles. The "boys don't cry" attitude is instilled in males from an early age in society. This mindset allows females to express emotions such as sadness and fear more easily than their male counterparts (Chaplin, Cole, & Zahn-Waxler, 2005).

Based on the values in Tables 4 and 5, it was concluded that there was a positive and significant relationship between the children's scores for the "Helping", "Cooperation", "comforting" and "Sharing" sub-dimensions of the Prosocial Behavior Scale and their scores for the "Absence of Authority", "Absence of Rules" and "Generalization" sub-dimensions of the "Conception of Moral Rules" and "Conception of Social Rules" sub-scales of the conception of social rules scale. In the literature, there are many studies with similar results with the results of this study (Miller, Eisenberg, Fabes & Shell, 1996; Siegal & Storey, 1985; Smetana, 1981; Smetana, 1999). For instance, in the study conducted by Miller, Eisenberg, Fabes and Shell (1996), the relationship between the moral reasoning, reciprocal emotional response and prosocial behavior of children aged four and five were investigated, and it was determined that there was a positive relationship between higher moral judgment and prosocial behavior. In other studies in the literature investigating whether there is a significant relationship between the various aspects of moral development and the social development of children, Johnson and McGillicuddy-Delisi (1983) investigated the relationship between pre-school children's conceptions of tradition and rules and intrafamilial socialization factors, and obtained findings indicating that children's conceptions of rules and tradition are related to the variable of social class. Eisenberg, Lennon and Roth (1983) revealed that there was a relationship between prosocial reasoning levels and prohibition-oriented reasoning. Additionally, certain researchers obtained findings indicating that children's conceptions regarding social rules may develop as they experience the rules and practices of the social system in which they live (Smetana, 1985; Smetana, Schlagman & Adams, 1993).

As they grow up, children encounter others and form positive relationships with them. This situation is an inevitable and continuous rule of social development. Therefore, the development of the positive

and negative aspects of forming relationships with others (e.g. altruism and aggression) is of great significance. Another important aspect of social development is moral development, which assesses what is “wrong” and what is “right” (Morgan, 2013). With the development of social cooperation between children and other related processes, the child gains access to new moral relationships based on mutual respect, leading to a certain form of autonomy (Piaget & Inhelder, 2016). The results of the studies in the literature and statements by researchers reveal that there is a mutual relationship between the social and moral development of children, one that is based on mutual influence. It can be said that the findings obtained in the present study are consistent with those in the literature, and that there is a significant relationship between children's prosocial behavior and conceptions of moral and social rules.

Tables 4 and 5 show that a positive and significant relationship was discovered between the pre-school children's scores for the "Emotion Regulation" sub-dimension of the Emotion Regulation Checklist and the "Absence of Authority", "Absence of Rules" and "Generalization" sub-dimensions of the "Conception of Social Rules" and "Conception of Moral Rules" sub-scales of the Conceptions of Moral and Social Rules Scale. It was also concluded that there was a negative relationship between the children's scores for the "Lability/Negativity" sub-dimension of the Emotion Regulation Checklist, the "Absence of Authority" and "Generalization" sub-dimensions of the conception of moral rules sub-scale and the "Absence of Authority", "Absence of Rules" and "Generalization" sub-dimensions of the conception of social rules sub-scale.

The emergence of feelings of special moral obligation is one of the primary outcomes of emotional relationships between the child and their parents (or others who assume the guardian role) (Piaget & Inhelder, 2016). Various emotions, including guilt, shame, and empathy, play a significant role in moral development. In recent studies, fundamental emotions such as happiness, sorrow, and anger, which appear to have no connection with morality, have been examined as the predictors of, or being associated with moral behavior (Eisenberg, 2000). Anger, disgust, and grief, among other negative emotions, are strongly associated with perceptions of injustice and immorality (Mikula, Scherer & Athenstaedt, 1998; Scher 1997). It is also argued that negative emotions related to justice, such as guilt or anger, often prompt individuals to contemplate issues on justice (Scher & Heise 1993).

In the study conducted by Lotze, Ravindran and Myers (2010) to examine at-risk children with incarcerated mothers, a positive relationship was discovered between healthy moral emotions and emotion regulation skills. Walker and Pitts (1998) concluded that higher-level emotions such as guilt and sympathy motivated moral behavior and argued that these emotions play a significant role in the development of moral character. Additionally, Eisenberg (2000) estimated that studies on the effects of emotionality and emotion regulation on moral development and moral behavior will be more sophisticated in the future in conceptual and methodological terms. These statements reinforce the idea that there is a mutual relationship between the emotional and moral development of children. It can be said that the findings obtained in the present study are consistent with those in the literature and that there is a significant relationship between children's emotion regulation behavior and conceptions of moral and social rules.

As demonstrated in Table 4, a significant relationship was found between the children's scores for the "Emotion Regulation" and "Lability/Negativity" sub-dimensions of the Emotion Regulation Checklist and those from the "Helping", "Cooperation", "Comforting" and "Sharing" sub-dimensions of the Prosocial Behavior Scale. Consistently, the researchers found that positive emotional state is related

to prosocial behavior, and that various mechanisms can explain this relationship. Similarly, in the study conducted by Eisenberg, Smith, and Spinrad (2011), it was revealed that the tendency of children who exert themselves to give prosocial responses is linked to positive emotions, social competence, and conscience development. In parallel with the findings of the aforementioned studies, several studies in the literature have revealed a significant relationship between social development and positive social behavior as well as between emotionality and emotion regulation (Blair, Denham, Kochanoff & Whipple, 2004; Carlson, Charlin & Miller, 1988; Dağlı & Dağlıoğlu, 2021; Shields, Cicchetti & Ryan, 1994).

The prosocial and emotion regulation behaviors of children are important subdomains of social competence. Prosocial behavior is defined as voluntary actions that benefit others. Emotion regulation refers to the processes used as a means to manage emotional arousal and support adaptive social and non-social responses (Thompson, 1994). Children's recognition of the dynamics of emotional experiences such as the expression of emotions and emotion regulation can affect the quality of their social interactions and relationships (Garber & Dodge, 1991). These statements reinforce the idea that there is a mutual relationship between the emotional regulation skills and social development of children. It can be said that the findings obtained in the present study are consistent with those in the literature and that there is a significant relationship between children's emotion regulation skills and prosocial behavior. As a result of the present study, it was concluded that there is a relationship between pre-school children's prosocial behavior, emotion regulation skills and conceptions of moral and social rules, one that is based on mutual influence. Based on the results of this study, the following recommendations can be made:

- Through in-service training, pre-school teachers can be trained on the importance of children's expressed skills, a subject which closely concerns society.
- Training programs for parents on the importance of children's prosocial behavior, emotion regulation skills and conceptions of moral and social rules on their development can be prepared by taking the needs of children into consideration.
- Findings related to gender and the relationships between the variables in the study should be tested by using different sample groups and study methods to ensure their reliability.
- Findings in the study reflect an indirect observation as they were obtained using certain scales. More in-depth information can be obtained by using a qualitative method about children's perception of moral and social rules, prosocial behaviors, and emotion regulation skills.

Pre-school educational institutions are very important institutions that ensure the social, emotional and moral development of children. It should be ensured that children enroll in these institutions at an early age and continue to do so until the primary education period.

REFERENCES

- Aldao, A., Nolen-Hoeksema, S., & Schweizer, S. (2010). Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical Psychology Review, 30*(2), 217-237. <https://doi.org/10.1016/j.cpr.2009.11.004>
- Anthony, L. G., Anthony, B. J., Glanville, D. N., Naiman, D. Q., Waanders, C., & Shaffer, S. (2005). The relationships between parenting stress, parenting behaviour and preschoolers' social competence

- and behaviour problems in the classroom. *Infant and Child Development*, 14(2), 133-154. <https://doi.org/10.1002/icd.385>
- Batum, P., & Yagmurlu, B. (2007). What counts in externalizing behaviors? The contributions of emotion and behavior regulation. *Current Psychology: Developmental Learning Personality Social*, 25(4), 272-294. <https://doi.org/10.1007/BF02915236>
- Bar-Tal, D., Raviv, A., & Goldberg, M. (1982). Helping behavior among preschool children: An observational study. *Child Development*, 53(2), 396-402. <https://doi.org/10.2307/1128982>
- Berk, L. E. (2013a). *Bebekler ve çocuklar [Babies and children]* (N. Işıkoğlu Erdoğan, Tr.). Ankara, Nobel.
- Berk, L. E. (2013b). *Çocuk gelişimi [Child development]* (B. Onur, Tr.). Ankara, İmge.
- Blasi, A. (1980). Bridging moral cognition and moral action: A critical review of the literature. *Psychological bulletin*, 88(1), 1-45. <https://psycnet.apa.org/doi/10.1037/0033-2909.88.1.1>
- Blair, K. A., Denham, S. A., Kochanoff, A., & Whipple, B. (2004). Playing it cool: Temperament, emotion regulation, and social behavior in preschoolers. *Journal of School Psychology*, 42(6), 419-443. <https://doi.org/10.1016/j.jsp.2004.10.002>
- Bloom, P. (2013). *Just babies: The origins of good and evil*. Crown.
- Brown, J. R. & Dunn, J. (1996). Continuities in emotion understanding from three to six years. *Child Development*, 67(3), 789-802. <https://doi.org/10.1111/j.1467-8624.1996.tb01764.x>
- Büyüköztürk, Ş., Kılıç-Çakmak, E., Akgün, Ö. E., Karadeniz, Ş. & Demirel, F. (2013). *Bilimsel araştırma yöntemleri [Scientific research methods]*. Ankara: Pegem.
- Campos, J. J., Mumme, D., Kermoian, R., & Campos, R. G. (1994). A functionalist perspective on the nature of emotion. *Japanese Journal of Research on Emotions*, 2(1), 1-20. <https://doi.org/10.4092/jsre.2.1>
- Carlo, G., Mestre, M. V., Samper, P., Tur, A., & Armenta, B. E. (2011). The longitudinal relations among dimensions of parenting styles, sympathy, prosocial moral reasoning, and prosocial behaviors. *International Journal of Behavioral Development*, 35(2), 116-124. <https://doi.org/10.1177/0165025410375921>
- Carlson, M., Charlin, V., & Miller, N. (1988). Positive mood and helping behavior: a test of six hypotheses. *Journal of Personality and Social Psychology*, 55(2), 211-229. <https://doi.org/10.1037/0022-3514.55.2.211>
- Chaplin, T. M., Cole, P. M., & Zahn-Waxler, C. (2005). Parental socialization of emotion expression: gender differences and relations to child adjustment. *Emotion*, 5(1), 80-88. <https://psycnet.apa.org/doi/10.1037/1528-3542.5.1.80>
- Chen, X. & French, D. C. (2008). Children's social competence in cultural context. *Annual Review of Psychology*, 59(2008), 591-616. <https://doi.org/10.1146/annurev.psych.59.103006.093606>
- Cole, P. M., Zahn-Waxler, C., & Smith, K. D. (1994). Expressive control during a disappointment: Variations related to preschoolers' behavior problems. *Developmental Psychology*, 30(6), 835-846. <https://doi.org/10.1037/0012-1649.30.6.835>
- Çeliköz, N., Çetin, Ş., Demir ŞEN, H. Ş., & Seçer, Z. (2008). Çocuk yuvası ve ailesiyle yaşayan çocukların ahlaki ve sosyal kural anlayışlarının karşılaştırmalı olarak incelenmesi [An study on moral and social

rule perceptions of children living with family and orphanage]. *Journal of Gazi University Industrial Arts Education Faculty*, 23, 1-13. Retrieved from <https://dergipark.org.tr/tr/pub/esef/issue/28798/308141>

- Çetin, B. B., & Samur, A. Ö. (2018). 60-72 aylık çocukların prososyal davranışları ile anne-babalarının prososyal davranışları arasındaki ilişkinin incelenmesi [The Examination of the Relationship Between Prosocial Behaviors of The Children Between 60 and 72 Months Old and of Their Parents]. *Journal of Erzincan University Faculty of Education*, 20(1), 1-17. <http://dx.doi.org/10.17556/erziefd.286651>
- Dağlı, H., & Dağlıoğlu, H. (2021). Okul öncesi dönem çocuklarının duygu düzenleme becerileri ile problem çözme becerileri arasındaki ilişkinin incelenmesi [Examining the relationship between preschool children's emotion regulation skills and problem-solving skills]. *Cumhuriyet International Journal of Education*, 10(3), 1020-1046. <http://dx.doi.org/10.30703/cije.799698>
- Dilber, M. (2015). Okul öncesi çocukların ahlaki yargı düzeyleriyle kişilerarası problem çözme becerileri arasındaki ilişkinin incelenmesi [Examination of the relationship between the levels of moral judgment and interpersona problem solving skills of preschool children]. (Unpublished master's thesis). Gazi University Institute of Educational Sciences. Ankara.
- Dunn, J., & Munn, P. (1986). Siblings and the development of prosocial behaviour. *International Journal of Behavioral Development*, 9(3), 265-284. <https://doi.org/10.1177/016502548600900301>
- Eisenberg, N. (1982). The development of reasoning regarding prosocial behavior. Eisenberg, N. (Ed.). *The development of prosocial behavior* (p. 219 – 249). Newyork, London.
- Eisenberg, N. (2000). Emotion, regulation, and moral development. *Annual Review of Psychology*, 51(1), 665-697. <https://doi.org/10.1146/annurev.psych.51.1.665>
- Eisenberg, N., Carlo, G., Murphy, B., & Van Court, P. (1995). Prosocial development in late adolescence: a longitudinal study. *Child Development*, 66(4), 1179-1197. <https://doi.org/10.1111/j.1467-8624.1995.tb00930.x>
- Eisenberg, N., Lennon, R., & Roth, K. (1983). Prosocial development: A longitudinal study. *Developmental Psychology*, 19(6), 846-855. <https://psycnet.apa.org/doi/10.1037/0012-1649.19.6.846>
- Eisenberg, N., & Miller, P. A. (1987). The relation of empathy to prosocial and related behaviors. *Psychological Bulletin*, 101(1), 91-119. <https://psycnet.apa.org/doi/10.1037/0033-2909.101.1.91>
- Eisenberg, N., & Mussen, P. H. (1989). *The roots of prosocial behavior in children*. Cambridge University Press.
- Eisenberg, N., Smith, C. L., & Spinrad, T. L. (2011). Handbook of self-regulation: Research, theory, and applications K. D. Vohs & R. F. Baumeister (Ed.), *Effortful Control: Relations with emotion regulation, adjustment and socialization in childhood* (p. 263 - 284). Newyork, London, The Guilford.
- Eisenberg, N., Zhou, Q., & Koller, S. (2001). Brazilian adolescents' prosocial moral judgment and behavior: Relations to sympathy, perspective taking, gender-role orientation, and demographic characteristics. *Child Development*, 72(2), 518-534. <https://doi.org/10.1111/1467-8624.00294>

- Fabes, R. A., Carlo, G., Kupanoff, K., & Laible, D. (1999). Early adolescence and prosocial/moral behavior I: The role of individual processes. *The Journal of Early Adolescence*, 19(1), 5-16. <https://doi.org/10.1177/0272431699019001001>
- Fabes, R. A., Leonard, S. A., Kupanoff, K., & Martin, C. L. (2001). Parental coping with children's negative emotions: Relations with children's emotional and social responding. *Child Development*, 72(3), 907-920. <https://doi.org/10.1111/1467-8624.00323>
- Fagot, B. I. (1978). The influence of sex of child on parental reactions to toddler children. *Child Development*, 49(2), 459-465. <https://doi.org/10.2307/1128711>
- Fivush, R. (2007). Maternal reminiscing style and children's developing understanding of self and emotion. *Clinical Social Work Journal*, 35(1), 37-46. <https://doi.org/10.1007/s10615-006-0065-1>
- Garber, J., & Dodge, K. A. (Eds.). (1991). *The development of emotion regulation and dysregulation*. Cambridge University Press.
- Gibbs, J. C., Arnold, K. D., & Burkhart, J. E. (1984). Sex differences in the expression of moral judgment. *Child Development*, 55(3), 1040-1043. <https://doi.org/10.2307/1130155>
- Gross, J. J. (1998). The emerging field of emotion regulation: an integrative review. *Review of General Psychology*, 2(3), 271-299. <https://doi.org/10.1037/1089-2680.2.3.271>
- Grolnick, W. S., Kurowski, C. O., McMenemy, J. M., Rivkin, I., & Bridges, L. J. (1998). Mothers' strategies for regulating their toddlers' distress. *Infant Behavior and Development*, 21(3), 437-450. [https://doi.org/10.1016/S0163-6383\(98\)90018-2](https://doi.org/10.1016/S0163-6383(98)90018-2)
- Hoffman, N. P. (2000). An examination of the "sustainable competitive advantage" concept: past, present, and future. *Academy of Marketing Science Review*, 4(2000), 1-16. Retrieved from <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=d5711e6a938145b14f5946fe624a977480f3561>
- Iannotti, R. J. (1985). Naturalistic and structured assessments of prosocial behavior in preschool children: The influence of empathy and perspective taking. *Developmental Psychology*, 21(1), 46-55. <https://psycnet.apa.org/doi/10.1037/0012-1649.21.1.46>
- Kail, R. V. (2004). *Children and their development*. New Jersey: Pearson.
- Karaman, N. N., & Dinçer, Ç. (2020). An analysis of several variables that affect preschool children's prosocial behavior. *Journal of Early Childhood Studies*, 4(3), 639-664. <https://doi.org/10.24130/eccd-jecs.1967202043236>
- Kim, Y. O., & Stevens, J. H. (1987). The socialization of prosocial behavior in children. *Childhood Education*, 63(3), 200-206. Retrieved from <https://www.proquest.com/openview/a60475d7d736647faf24273685662139/1?pq-origsite=gscholar&cbl=1816512>
- Kochanska, G., Barry, R. A., Aksan, N., & Boldt, L. J. (2008). A developmental model of maternal and child contributions to disruptive conduct: The first six years. *Journal of Child Psychology and Psychiatry*, 49(11), 1220-1227. <https://doi.org/10.1111/j.1469-7610.2008.01932.x>

- Li, J., Hao, J., & Shi, B. (2018). From moral judgments to prosocial behavior: multiple pathways in adolescents and different pathways in boys and girls. *Personality and Individual Differences*, 134, 149-154. <https://doi.org/10.1016/j.paid.2018.06.017>
- Lopez, D. F. & Little, T. D. (1996). Children's action-control beliefs and emotional regulation in the social domain. *Developmental Psychology*, 32(2), 299-312. <https://psycnet.apa.org/doi/10.1037/0012-1649.32.2.299>
- Lotze, G. M., Ravindran, N., & Myers, B. J. (2010). Moral emotions, emotion self-regulation, callous-unemotional traits, and problem behavior in children of incarcerated mothers. *Journal of Child and Family Studies*, 19(6), 702-713. <https://doi.org/10.1007/s10826-010-9358-7>
- Mayes, C. L. & Cohen, J. D. (2002). *Yale üniversitesi çocuk araştırma merkezi çocuğunuzu anlama rehberi (Yale university children's research center guide to understanding your child)* (Y. Yazgan, Tr.). İstanbul: White Whale.
- McElwain, N. L., Halberstadt, A. G., & Volling, B. L. (2007). Mother-and father-reported reactions to children's negative emotions: Relations to young children's emotional understanding and friendship quality. *Child Development*, 78(5), 1407-1425. <https://doi.org/10.1111/j.1467-8624.2007.01074.x>
- McRae, K., Ochsner, K. N., Mauss, I. B., Gabrieli, J. J., & Gross, J. J. (2008). Gender differences in emotion regulation: An fMRI study of cognitive reappraisal. *Group Processes & Intergroup Relations*, 11(2), 143-162. <https://doi.org/10.1177/1368430207088035>
- Mikula, G., Scherer, K. R., & Athenstaedt, U. (1998). The role of injustice in the elicitation of differential emotional reactions. *Personality and Social Psychology Bulletin*, 24(7), 769-783. <https://doi.org/10.1177/0146167298247009>
- Miller, P. A., Bernzweig, J., Eisenberg, N., & Fabes, R. A. (1991). The development and socialization of prosocial behavior. A. R. Hinde & J. Groebel (Ed.), *Cooperation and prosocial behaviour* (p. 54-77). New York: Cambridge University.
- Miller, P. A., Eisenberg, N., Fabes, R. A., & Shell, R. (1996). Relations of moral reasoning and vicarious emotion to young children's prosocial behavior toward peers and adults. *Developmental Psychology*, 32(2), 210-219. <https://doi.org/10.1037/0012-1649.32.2.210>
- Morgan, C. T. (2013). *Psikolojiye giriş. (Introduction to psychology)* (H. Karakaş & R. Eski, Tr.). Konya, Eğitim.
- Narvaez, D. (2016). *Embodied morality: Protectionism, engagement and imagination*. Springer.
- Narvaez, D. & Gleason, T. (2013). Developmental optimization. In D. Narvaez, J., Panksepp, A. Schore, & T. Gleason (Eds.), *Evolution, early experience and human development: From research to practice and policy* (pp. 307-325). Oxford University Press
- Nucci, L. P., & Nucci, M. S. (1982). Children's responses to moral and social conventional transgressions in free-play settings. *Child Development*, 53(5), 1337-1342. <https://doi.org/10.2307/1129024>
- Piaget, J. & Inhelder, B. (2016). *Çocuk psikolojisi (Child psychology)* (O. Türkay, Tr.). İstanbul: Pinhan.

- Power, T. G., & Parke, R. D. (1986). Patterns of early socialization: Mother-and father-infant interaction in the home. *International Journal of Behavioral Development*, 9(3), 331-341. <https://doi.org/10.1177/016502548600900305>
- Radke-Yarrow, M., Zahn-Waxler, C. & Chapman, M. (1983). Prosocial dispositions and behavior. P. Mussen (Ed.), *Manual of child psychology. Socialization, personality, and social development* (p. 469-545). New York: Wiley.
- Raikes, H. A., Robinson, J. L., Bradley, R. H., Raikes, H. H., & Ayoub, C. C. (2007). Developmental trends in self-regulation among low-income toddlers. *Social Development*, 16(1), 128-149. <https://doi.org/10.1111/j.1467-9507.2007.00375.x>
- Ramazan, O., Ural, O. & Sözer Çapan, A. (2006). *Okul öncesi çocuklarının ahlaki yargı düzeylerinin belirlenmesi. [Determination of moral judgment levels of preschool children]*. The Future of Preschool Education in the European Union Process Symposium., Volume 1, İstanbul: Ya-Pa.
- Rose, A. J. & Rudolph, K. D. (2006). A review of sex differences in peer relationship processes: potential trade-offs for the emotional and behavioral development of girls and boys. *Psychological Bulletin*, 132(1), 98-131. <https://doi.org/10.1037/0033-2909.132.1.98>
- Santrock, J.W. (2012). *Yaşam boyu gelişim (Lifelong development)* (G. Yüksel, Tr.). Ankara, Nobel.
- Seçer, Z. & Sarı, H., & Olcay, O. (2006). Anne tutumlarına göre okulöncesi dönemdeki çocukların ahlaki ve sosyal kural bilgilerinin incelenmesi. [Examining the moral and social rule knowledge of preschool children according to their mother's attitudes]. *Journal of Selcuk University Institute of Social Sciences*, 16, 539–557. Retrieved from <https://dergipark.org.tr/en/pub/susbed/issue/61792/924133>
- Scalco A., Ceschi A., Sartori R., & Rubaltelli E. (2015) Exploring Selfish versus Altruistic Behaviors in the Ultimatum Game with an Agent-Based Model. Bajo J. et al. (eds) *Trends in Practical Applications of Agents, Multi-Agent Systems and Sustainability*. Advances in Intelligent Systems and Computing (199-206). Springer, Cham. https://doi.org/10.1007/978-3-319-19629-9_22
- Scher, S. J. (1997). Measuring the consequences of injustice. *Personality and Social Psychology Bulletin*, 23(5), 482-497. <https://doi.org/10.1177/0146167297235004>
- Scher, S. J. & Heise, D. R. (1993). Affect and the perception of injustice. *Advances in Group Processes*, 10(1993), 223-252. Retrieved from https://thekeep.eiu.edu/psych_fac/29/
- Shields, A., & Cicchetti, D. (1997). Emotion regulation among school-age children: The development and validation of a new criterion Q-sort scale. *Developmental Psychology*, 33(6), 906-916. <https://doi.org/10.1037/0012-1649.33.6.906>
- Shields, A. M., Cicchetti, D., & Ryan, R. M. (1994). The development of emotional and behavioral self-regulation and social competence among maltreated school-age children. *Development and Psychopathology*, 6(1), 57-75. <https://doi.org/10.1017/S0954579400005885>
- Siegal, M. & Storey, R. M. (1985). Day care and children's conceptions of moral and social rules. *Child Development*, 56(4),1001-1008. <https://doi.org/10.2307/1130111>
- Smetana, J. G. (1985). Children's impressions of moral and conventional transgressors. *Developmental Psychology*, 21(4), 715-724. <https://psycnet.apa.org/doi/10.1037/0012-1649.21.4.715>

- Smetana, J. G. (1999). The role of parents in moral development: A social domain analysis. *Journal of Moral Education*, 28(3), 311-321. <https://doi.org/10.1080/030572499103106>
- Smetana, J. G., Schlagman, N., & Adams, P. W. (1993). Preschool children's judgments about hypothetical and actual transgressions. *Child Development*, 64(1), 202-214. <https://doi.org/10.1111/j.1467-8624.1993.tb02904.x>
- Thoma, S. J. (1986). Estimating gender differences in the comprehension and preference of moral issues. *Developmental Review*, 6(2), 165-180. [https://doi.org/10.1016/0273-2297\(86\)90010-9](https://doi.org/10.1016/0273-2297(86)90010-9)
- Thompson, R. A. (1994). Emotion regulation: A theme in search of definition. *Monographs of The Society For Research In Child Development*, 59(2-3), 25-52. <https://doi.org/10.2307/1166137>
- Thompson, R. A. (2012). Whither the preconventional child? Toward a life-span moral development theory. *Child Development Perspectives*, 6(4), 423-429. <https://doi.org/10.1111/j.1750-8606.2012.00245.x>
- Walker, L. J. (1984). Sex differences in the development of moral reasoning: A critical review. *Child Development*, 55(3), 677-691. <https://doi.org/10.2307/1130121>
- Walker, L. J. & Pitts, R. C. (1998). Naturalistic conceptions of moral maturity. *Developmental Psychology*, 34(3), 403-419. <https://doi.org/10.1037/0012-1649.34.3.403>
- Wilhelm, T., Böhme, H. J., & Gross, H. M. (2005). Classification of face images for gender, age, facial expression, and identity. Duch W., Kacprzyk J., Oja E., Zadrożny S. (Eds). In International conference on artificial neural networks (pp. 569-574). Springer, Berlin, Heidelberg. https://doi.org/10.1007/11550822_89
- Yağmurlu, B., & Candan Kodalak, A. (2010). Romantik ilişkiler, evlilik ve ana-baba-çocuk ilişkileri [Romantic relationships, marriage and parent-child relationships] T. Solmuş (Ed.), *Ebeveynlik ve okul öncesi dönemde çocuğun sosyal gelişimi [Social development of the child in parenting and preschool period]* (p. 299-308). Ankara: Nobel.
- Yağmurlu, B., Sanson, A., & Köymen, S. B. (2005). Ebeveynlerin ve çocuk mizacının olumlu sosyal davranış gelişimine etkileri: Zihin kuramının belirleyici rolü. [The effects of parents and child temperament on the development of prosocial behavior: The decisive role of the theory of mind]. *Turkish Journal of Psychology*, 20(55), 1-20. Retrieved from <https://www.proquest.com/openview/4959495f96ab0836c8a73fa5bd7d59d5/1?pq-origsite=gscholar&cbl=28562>
- Yağmurlu, B., & Sanson, A. (2009). Acculturation and parenting among Turkish mothers in Australia. *Journal of Cross-Cultural Psychology*, 40(3), 361-380. <https://doi.org/10.1177/0022022109332671>
- Yarrow, M. R., Waxler, C. Z., Barrett, D., Darby, J., King, R., Pickett, M., & Smith, J. (1976). Dimensions and correlates of prosocial behavior in young children. *Child Development*, 47(1), 118-125. <https://doi.org/10.2307/1128290>
- Yavuzer, H. (2001). *Çocuk psikolojisi. [Child psychology]*. İstanbul, Remzi.

Author Contributions

First and second author planned, modeled the study and co-wrote the paper. First author was involved in the collection of the data and contributed to the literature review and discussion section. Second author performed the data analysis of the study and contributed to the interpretation of the results.

Conflict of Interest

No potential conflict of interest was declared by the author.

Supporting Individuals or Organizations

No grants were received from any public, private or non-profit organizations for this research.

Ethical Approval and Participant Consent

Ethics committee permission for this study was obtained from Pamukkale University Social and Human Sciences Research Ethics Committee with the decision dated 06.12.2021 and numbered 23-3.

Copyright Statement

Authors own the copyright of their work published in the journal and their work is published under the CC BY-NC 4.0 license.

Plagiarism Statement

Similarity rates of this article was scanned by the iThenticate software. No plagiarism detected.

Availability of Data and Materials

Not applicable.

Acknowledgements

This study was compiled from the master's thesis of the author Ali Özcan and presented as a summary paper at the 5th International Preschool Education Congress.