



The Relationship between Prosocial Behaviours of Children, Perspective Taking Skills and Emotional Regulation


Aysel Esen Çoban, Assoc. Prof. Dr., Hacettepe University, yslcbn@yahoo.com

 0000-0002-0631-0064

Nevra Atış-Akyol, Assist. Prof. Dr., Sivas Cumhuriyet University, nevrarven@gmail.com

 0000-0003-4697-847X

Sabiha Eren, Phd., Uşak University, sabihakaymakeren@gmail.com

 0000-0002-2599-3913

Keywords

Perspective taking
Emotional regulation
Prosocial behaviours
Children
Preschool age

Article Info:

Received : 11-03-2022
Accepted : 30-06-2022
Published : 04-08-2022

DOI: 10.52963/PERR_Biruni_V11.N2.09

Abstract

The purpose of this study is to examine the relationship of perspective-taking and emotional regulation with prosocial behaviours of children in the preschool age group, emphasizing the predictor aspect of perspective taking and emotional regulation skills, which are critically important for the development of children in early childhood. The "Perspective Taking Test for Children", the "Emotion Regulation Scale" and the "Prosocial Behavior Scale" were used in this study, which involved a total of 213 children aged between 48 and 72 months attending pre-school education. In the study, it was found that there were statistically significant correlations between prosocial behaviour and perspective taking and emotional regulation. In addition, it was found that emotional regulation had a greater effect on the total score of prosocial behaviours and the "helping" sub-scale score of prosocial behaviors than the perspective taking score.

To cite this article: Çoban, A. E., Atış-Akyol, N. & Eren, S. (2022). The relationship between prosocial behaviours of children, perspective taking skills and emotional regulation. *Psycho-Educational Research Reviews*, 11(2), 147-157. doi: 10.52963/PERR_Biruni_V11.N2.09

INTRODUCTION

The skills and experiences of early childhood are extremely influential in a person's life. The preschool period, which covers the early years of life, is a period of unique experiences and learning regarding the social and emotional development of children. The quantity and quality of social and emotional experiences of children, especially those who benefit from kindergarten, increase with their expanding environment. By having many experiences in kindergartens, it is possible for children who encounter social learning examples to observe and learn prosocial behaviors. So children are likely to encounter and/or perform various prosocial behaviors. According to its most basic definition, prosocial behaviours are voluntary behaviours done to be beneficial to another person or group without expecting any reward or praise in return (Eisenberg & Mussen, 1989; Eisenberg, 2003a; Knafo & Plomin, 2006). According to another definition, prosocial behaviours are expressed as behaviours that will benefit others, such as taking care of another person and helping or encouraging someone (Choi, 2005).

Prosocial behaviours are expressed as positive social behaviours in some sources and are discussed as sharing, helping, cooperating and relaxing (Iannotti, 1985; Yagmurlu et al., 2005). Therefore, it requires a self-sacrificing process of spending personal resources for the benefit of others. According to Kuhlmeier et al. (2014), prosocial behaviours of children, such as helping and sharing, are often selective; in the later stages of their development, children interpret different prosocial behaviours as good, they become less selective in their behaviours, and prosociality becomes a consistent personality trait for them. Pro-social behaviours predict well-adjusted social relationships for children not only for the present but also for the future. The central importance of pro-social behaviours for the social development of children has led researchers to examine this variable in terms of different factors such as emotional regulation, socialization, temperament, and empathy (Astonington and Jenkins, 1995; Carlo et al., 2010; Denham, 1986; Underwood and Moore, 1982). The positive correlation between prosocial behaviours and emotional regulation suggests that emotional regulation skills may be a predictor of prosocial behaviours.

All internal and external reactions used by individuals to manage their emotional state, change and evaluate their reactions are expressed as emotional regulation (Thompson, 1994). Emotional regulation is defined as the ability to evaluate emotional reactions to the events and situations encountered and to develop appropriate strategies when necessary (Gross & Thompson, 2007). Children with high emotional regulation skills experience the better social and emotional development and perform better in social-emotional relationships. For example, in a study conducted with preschool children, it was stated that there was a positive correlation between the emotional regulation skills of children and their social competencies of children (Denham et al., 2003). It was found that the ability to understand, recognize and express emotions greatly contributes to the individual's ability to establish positive social relationships both in childhood and in the future (Izard et al., 2001). In another study, it was found that individuals with good emotional regulation skills were more comfortable with and empathetic towards the emotions of people with distress (Peck, 2003). It is thought that prosocial behaviours may also be related to perspective taking skills, apart from emotional regulation. Because perspective taking is important for the development of empathy (Cigala et al., 2014), the regulation of emotions (Arel, 2016) and for socialization of the child (Genal, 2018).

According to Selman (1971), perspective taking skills were expressed as the ability of individuals to put aside their perspective and to understand what other people think, how they perceive, and what they feel. It is known that children's perspective taking skills begin to develop from an early age. Studies have shown that by the age of one and a half, children recognize basic emotions such as anger, happiness, rage, and sadness. From the age of three, children can understand both the situations related to emotions and the characteristics of emotions (Ensor, et al., 2011).

Depending on the cognitive development level of children, their egocentric thinking structures change, it becomes more and more possible for them to predict or understand what someone else is thinking or feeling in a particular situation; as a result, perspective taking skills begin to develop around the age of five or six (Scarpelli-Dwyer, 2011). Therefore, the preschool period is a critical period for the development of perspective taking skills as well (Spence, 2003; Wellman et al., 2001). The components of perspective taking skills are defined as cognitive perspective taking, perceptual perspective taking and emotional perspective taking. Emotional perspective taking skills refer to the ability to understand the emotional states of another person, which form the basis of empathy (Cigala et al., 2014). It is argued that perspective taking is important in social interactions because it makes it easier to perceive other people's thoughts. When people can sense the thoughts of others, social interactions become more predictable, and thus the parties can plan their actions with the information they infer from the other person (Dixon & Moore, 1990). The ability of the parties to change their behaviour and develop appropriate strategies is defined as emotional regulation (Gross & Thompson, 2007). Therefore, examining the predictor role of perspective taking and emotional regulation skills for the early childhood period on prosocial behaviours is important in terms of its contribution to the literature. This study aims to examine the relationship between pre-school children's prosocial behaviours and perspective taking as well as emotional regulation. For this purpose, the following hypotheses were tested;

H1: Preschool children's perspective taking skills and emotion regulation independent variables explain prosocial behaviors at a significant level.

H2: Preschool children's perspective taking skills and emotion regulation independent variables explain helping at a significant level.

H3: Preschool children's perspective taking skills and emotion regulation independent variables explain cooperating at a significant level.

H4: Preschool children's perspective taking skills and emotion regulation independent variables explain relaxing at a significant level.

H5: Preschool children's perspective taking skills and emotion regulation independent variables explain sharing at a significant level.

METHOD

SAMPLE

The sample of this study consists of a total of 213 children aged between 48 and 72 months attending pre-school education. The research was explained to the school administrators and teachers, and 4-5 children from the class of each of the teachers who agreed to participate in the research were determined by a random selection method. A voluntary participation form containing explanations about the research was sent to the families of the children, and the children of the parents who voluntarily agreed to participate in the study were included in the sample. Of the children, 124 (58.2%) are girls and 89 (41.8%) are boys. The children who participated in the study were in the 4-6 age group (48-72 months) at the time. It was stated that the majority of the mothers of the children were housewives (72.3%), and the majority of the fathers were self-employed (31%) at the time. Of the children 62.4% had only one sibling, 16.9% had 2 or more siblings, and 20.7% had no siblings at the time. In terms of education level, it was stated that the majority of the mothers were high school graduates (37.1%) and the majority of the fathers (47.9%) were undergraduate graduates.

DATA COLLECTION TOOLS

Perspective Taking Test for Children: This scale, which was developed by Aslan and Köksal-Akyol (2016), has 3 sub-scales "perspective taking", "cognitive perspective taking" and "affective perspective

taking” consists of 24 items. The validity and reliability of Perspective Taking Test for Children were tested with 236 children aged 3-5 years with normal development. Test-retest reliability was measured as .91. Scale questions were answered by the researcher with the child, accompanied by a picture booklet prepared for the children. The answers given by the children to the questions asked about the pictures in the booklet were coded as 1 if they are correct, and as 2 if they are incorrect. In the study, the interrater consistency was measured as .84 for 30% of the total sample for this measurement tool.

Emotion Regulation Scale: This scale, which was developed by Shields and Cicchetti (1997) and adapted by Batum and Yagmurlu (2007), has 2 sub-scales, namely negative-high regulation problem and emotional regulation, and consists of 24 items. It is a 4-point Likert-type scale (1: Never/rarely, 4: Almost always) and can be filled in by a teacher or parent. The scale for this research was filled by preschool teachers. In the study of Batum and Yagmurlu (2007), Cronbach's coefficient alpha of the scale was calculated as .73, regarding the internal consistency. High scores indicate that the child is highly skilled in terms of emotional regulation.

Prosocial Behavior Scale: The scale developed by Iannotti (1985) for preschool children was adapted by Yagmurlu, Sanson, and Köymen (2005). The scale consists of 6 items for sharing, 4 items for helping, 4 items for cooperating and 5 items for relaxing sub-scales. The 7-point Likert-type scale (1: never, 7: always) is a measurement tool consisting of 19 items. The scale can be filled by both parents and teachers, and it can be filled by teachers in two ways. It can be used to determine the prosocial behaviours that children spontaneously perform or to determine the prosocial behaviours they perform when the teacher wants. In this study, teachers were asked to fill in the scale by considering the spontaneous behaviours of the children. Cronbach's coefficient alpha was .85 for the helping sub-scale, .86 for sharing sub-scale, .91 for relaxing sub-scale, and .80 for cooperating sub-scale, regarding internal consistency. High scores indicate that the child performs the prosocial behaviour of that sub-scale at a high rate.

DATA COLLECTION PROCESS

Participation in the research is on a voluntary basis. A voluntary participation form was sent to families through school administrators and teachers. Children of families who agreed to participate in the study were included in the study. The measurement tool used to measure the perspective taking skills of the children was applied to each child separately for an average of 20-30 minutes and collected by the researchers. In this process, before starting the scale application with the children, verbal consent was obtained from the children, and the children who did not want to participate in the study were excluded from the sample. The prosocial behaviour scale and the emotional regulation scale were filled by the teachers at different times.

ANALYSIS OF DATA

Data analysis was performed using the SPSS 22 program. First, missing data was checked and the median of nearby points, one of the missing data assignments method was used for scale items. The skewness and kurtosis values were examined for the assumption of normality, which is an important assumption for parametric tests. Data distribution between -2 and +2 was normal for skewness and kurtosis values (Field, 2009; George & Mallery, 2010). Although the data distribution was normal, outliers were also checked. The z standard values of all scale items were calculated and those outside the range of -3.29 and +3.29 among these standard values were checked. The z values obtained from the scale items of all participants are within this range. Then, for the regression analysis, it was checked whether there was a multivariate outlier and in this context, Mahalanobis distance was examined. Values with a probability of Mahalanobis distance less than $p=.0001$ are expressed as multivariate extreme values (Mertler & Vanatta, 2005; Tabachnick & Fidell, 2013). No multivariate extreme values were found in the data set. Thus, the analyses were completed with the data of 213 children.

FINDINGS

The effects of perspective taking and emotional regulation sub-scales on children's pro-social behaviours were examined by regression analysis. All scale scores were continuous and normally distributed. Various assumptions were used for multiple regression analysis. These assumptions were as follows: There must be a correlation between all variables, the dependent variable must be continuous and normally distributed, the independent variables (continuous ones) must be normally distributed, and there cannot be a multicollinearity problem between the dependent and independent variables (Pallant, 2007). The correlation between the variables is shown in Table 1.

Table 1. *Correlation between Variables*

	Perspective	Emotional	Helping	Cooperating	Relaxing	Sharing	Prosocial
Perspective	1						
Emotional	.169*	1					
Helping	0.096	.187**	1				
Cooperating	0.036	0.094	.537**	1			
Relaxing	0.068	.179**	.611**	.455**	1		
Sharing	0.073	.163*	.541**	.591**	.523**	1	
Prosocial	0.089	.203**	.833**	.707**	.841**	.831**	1

*p<.05; **p<.01

According to Table 1, there is a statistically significant correlation between perspective taking skills and emotional regulation (p<.05). There is a statistically significant correlation between emotional regulation and the prosocial behaviour scale total score as well as sub-scales of helping, relaxing, and sharing (p<.05). In addition, it was checked whether there was a multicollinearity problem between the independent variables, and it was determined that there was no multicollinearity problem since the tolerance value was greater than 0.10 and the VIF value was less than 10.

It can be seen that regression models regarding the effects of emotional regulation scale sub-scales and perspective taking scale scores on prosocial behaviours ($F_{(3,209)}=5.166$, $p=.000$, $p<.05$) and sub-scales of helping ($F_{(3,209)}=5.516$, $p=.001$, $p<.05$), cooperating ($F_{(3,209)}= 4.208$, $p=.006$, $p<.05$), relaxing ($F_{(3,209)}=3.057$, $p=.029$, $p<.05$), sharing ($F_{(3,209)}=3.25$, $p=.023$, $p<.05$) are statistically significant. R-squared (R²) is a statistical measure that represents the proportion of the variance for a dependent variable that's explained by an independent variable or variables in a regression model. According to this, these variables explain 6.9% of the variability in student prosocial behaviours, 7.3% of the variability in the helping sub-scale, 5.7% of the variability in the cooperating sub-scale, 4.2% of the variability in the relaxing sub-scale, and 4.5% of the variability in the sharing sub-scale (see Table 2).

Table 2. Regression

Scales and Sub-scales	Variables	B	Standard Error	β	T	p
Prosocial Behaviour	Continuous	4.744	0.563		8.432	0
	Perspective	0.025	0.012	0.140	2.051	0.041
	Emotional	0.357	0.135	0.188	2.641	0.009
	R=0.263	R ² =0.069	Adjusted R ² =0.056			
	F(3,209)=5.166	p=.000				
Helping	Continuous	4.801	0.681		7.046	0
	Perspective	0.032	0.015	-0.148	-2.18	0.03
	Emotional	0.371	0.164	0.161	2.262	0.025
	R=0.271	R ² =0.073	Adjusted R ² =0.060			
	F(3,209)=5.516	p=.001				
Cooperating	Continuous	6.366	0.747		8.523	0
	Perspective	0.018	0.016	0.078	1.133	0.258
	Emotional	0.080	0.180	0.032	0.446	0.656
	R=0.239	R ² =0.057	Adjusted R ² =0.043			
	F(3,209)=4.208	p=.006				
Relaxing	Continuous	4.224	0.700		6.032	0
	Perspective	0.022	0.015	0.101	1.468	0.144
	Emotional	0.455	0.168	0.195	2.704	0.007
	R=0.205	R ² =0.042	Adjusted R ² =0.028			
	F(3,209)=3.057	p=.029				
Sharing	Continuous	4.676	0.674		6.942	0
	Perspective	0.024	0.015	0.113	1.644	0.102
	Emotional	0.341	0.162	0.152	2.103	0.037
	R=0.211	R ² =0.045	Adjusted R ² =0.031			
	F(3,209)=3.25	p=.023				

*p<.05

According to Table 2, the effects of perspective taking (t=2.051, B=0.025) and emotional regulation (t=2.641, B=0.357) variables on children's prosocial behaviours were found to be statistically significant (p<.05). The effect of perspective taking on pro-social behaviour was positive, and the non-standardized regression coefficient (B) was calculated as 0.025. In other words, a 1-unit increase in children's perspective taking scores provides a 0.025-unit increase in their prosocial behaviour scores. The effect of emotional regulation skills on pro-social behaviour was positive, and the non-standardized regression coefficient (B) was calculated as 0.357. A 1-unit increase in children's emotional regulation scores provides a 0.357-unit increase in their prosocial behaviour scores. As can be seen, emotional regulation skills have a greater effect on prosocial behaviours compared to perspective-taking skills (β ; 0.188>0.14).

The effect of the perspective taking score (t=2.18, B=0.032) and emotional regulation score (t=2.262, B=0.371) on the helping behaviour of children was statistically significant (p<.05). The effect of perspective taking on helping behaviour was positive, and the non-standardized regression coefficient (B) was calculated as 0.032. In other words, a 1-unit increase in children's perspective taking scores provides a 0.032-unit increase in their helping behaviour scores. The non-standardized regression coefficient (B) for the emotional sub-scale is 0.371 and its effect on the helping sub-scale is positive. A 1-unit increase in children's emotional regulation scores causes a 0.371-unit increase in their helping behaviour scores. In order of importance, emotional regulation most affects helping behavior and the perspective taking variable least affects helping behavior.

Only the effect of emotional regulation on children's relaxing behaviour is statistically significant (t=2.704, B=0.455, p<.05). The non-standardized regression coefficient (B) for emotional regulation

skills is 0.455 and its effect on cooperating is positive. In other words, a 1-unit increase in children's emotional regulation scores causes a 0.455-unit increase in cooperating scores.

Only the effect of emotional regulation on children's sharing behaviour is statistically significant ($t=2.103$, $B=0.341$, $p<.05$). The effect of emotional regulation skills on sharing was positive, and the non-standardized regression coefficient (B) was calculated as 0.341. In other words, a 1-unit increase in children's emotional regulation scores provides a 0.341-unit increase in their sharing scores.

DISCUSSION, CONCLUSION AND IMPLICATIONS

According to the research findings, the effect of the perspective taking score on the total score of prosocial behaviours and the "helping" sub-scale score of prosocial behaviours is statistically significant. We could not find any other study in the literature examining the correlation between perspective taking and prosocial behaviours or their effect on each other. However, it has been stated in other studies that perspective taking is the leading skill for empathy (Cigala et al., 2014). Researchers have often drawn attention to the special role of emotional empathy in motivating prosocial behaviours (Batson, 1987; Eisenberg, 2003; Eisenberg et al., 1989; Eisenberg et al., 1994; Eisenberg et al., 2006; Eisenberg et al., 2010; Toi & Batson, 1982). Young adults, middle-aged and elderly people were studied in the sample of a study that aims to examine the relationship between emotional empathy and prosocial behaviour with the age variable. As a result of the research, it was found that the rate of prosocial behaviour increased with increasing age, and it was determined that there was a correlation between emotional empathy and prosocial behaviour in all three age groups (Sze et al., 2012). Balçıkanlı and Yıldırım (2018) examined the relationship between the empathetic skill levels of indoor hockey players and their prosocial behaviour towards their teammates and the players of the opposing team. As a result of the research, it was determined that there is a correlation between empathetic skills and prosocial behaviours in sports. A study that tested the relationship between children's empathy development and their prosocial behaviour towards their peers using growth curve modelling for multiple points of time (24, 30, 42, 48, and 54 months) also revealed a correlation between empathy and prosocial behaviours. Therefore, all the results examined in the literature show that the development of empathy can contribute to prosocial behaviours. It can be seen that children who can better understand the emotions of others perform prosocial behaviours more (Taylor et al., 2013). To understand the feelings of others, it is necessary to have perspective taking skills. When we searched for the literature on the perspective taking skills and prosocial behaviours of preschool children, we also encountered some results that we think may be related to our research findings. For example, in a study conducted to examine the relationship between children's prosocial behaviours and moral judgment levels, it was determined that there is a positive and significant correlation between moral judgment and prosocial behaviour (Saygılı & Akkaynak, 2021). Erel (2016), on the other hand, found that children's perspective taking skills positively predicted their awareness of the intention underlying moral violations. When the results of these studies are evaluated together, it can be seen that perspective taking skills predict moral judgment, and there is a positive correlation between moral judgment and helping as well as prosocial behaviours. In another study on perspective taking skills, a moderately positive and significant correlation was found between the perspective taking skills of children aged 4-6 and their interpersonal problem-solving skills (Özlem & Temel, 2014). Considering that prosocial behavior such as helping and cooperating play a role in the solution of interpersonal problems, we think that this research finding is in line with the results of our research. In conclusion, it can be understood that all these findings in the literature support the results of our study, and it can be understood that perspective taking skills play a predictor role for prosocial behaviours. Therefore, it can be said that children are more prosocial to the extent that they can understand people and situations, understand why and how things happen and how they affect feelings.

As a result of the research, it was determined that the effect of the emotional regulation score on the total score of prosocial behaviours and the effect of prosocial behaviours on "helping", "relaxing" and "sharing" sub-scale scores were statistically significant. According to the study by Eisenberg et al. (2006), prosocial behaviors are affected by many factors, including children's emotional reactions, emotional regulation, needs, and desires. There are many studies in the literature proving the correlation between emotional regulation and prosocial behaviours (Eisenberg et al., 2007; Hastings, Rubin, & DeRose, 2005; Liew et al., 2010; Scrimgeour, Davis, & Buss, 2016). In the literature, we also found a study showing that the emotional regulation strategies of the children's parents are correlated with the prosocial behaviours of the children (Xiao et al., 2018). In a study examining emotional regulation and interpersonal problem-solving skills of preschool children, a positive and significant correlation was found between children's emotional regulation levels and interpersonal problem-solving skills (Apaydın Demirci et al., 2020). Considering that prosocial behaviour such as helping and cooperating play a role in the solution of interpersonal problems, we think that this research finding is in line with the results of our research. All the research findings examined above are in line with the results of this study, and it can be understood that emotional regulation skills predict prosocial behaviours. It can be said that as children's ability to regulate their feelings towards people and situations improves, their tendency to prosocial behaviours increases. In other words, children perform prosocial behaviours by trying to regulate their emotions for social norms, their values, their knowledge, and their internal urge to fit themselves in the right situation.

According to this research, emotional regulation predicts the sub-scale of "helping", "relaxing", and "sharing" together with the total score of prosocial behaviours; on the other hand, perspective taking predicts only the sub-scale of helping together with the total score. In addition, it was found that emotional regulation had a greater effect on the total score of prosocial behaviours and the "helping" sub-scale score of prosocial behaviours than the perspective taking score. It was also determined that emotional regulation and perspective taking did not significantly predict the cooperating sub-scale of prosocial behaviours. Paulus (2018) states that different types of prosocial behaviours (helping, sharing, relaxing, and cooperating) observed among children are not correlated with each other. Therefore, it can be said that perspective taking and emotional regulation skills affect prosocial behaviours without considering any such differentiation among prosocial behaviour types, and emotional regulation has a higher share in this effect. The components of perspective taking skills are defined as cognitive perspective taking, perceptual perspective taking and emotional perspective taking (Cigala, Mori, and Fangareggi, 2014). It has been thought that children's understanding of the emotions of others as well as their own emotions may be correlated with their emotional regulation skills (Eisenberg et al., 2005). In the light of all this information, it can be said that perspective taking for a person or situation predicts the prosocial behaviours of children. However, emotional regulation, as a skill that combines awareness of one's own emotions and self-regulation skills as well as understanding the emotions of others, predicts prosocial behaviours at a higher rate. Children may not perform prosocial behaviour when they achieve perspective taking for a situation or person. Similarly, children may not perform prosocial behaviour from time to time when they regulate their feelings towards a situation or person. This situation may be related to many factors such as the children's wishes, needs and emotional state in the process. However, as understood from this study and other studies with similar findings in the literature, both perspective taking and emotional regulation affect children's prosocial behaviour, and it can be said that children who can regulate their emotions are more likely to perform prosocial behaviours.

As in all studies, there are some limitations in this study. For example, the explanation of prosocial behaviors was examined by considering only two variables in this study, and other possible variables were not included. In future studies, models including other variables related to prosocial behaviors can be established.

AUTHOR CONTRIBUTION

- The first author has made substantial contributions to conception and design, acquisition of data, and reviewing and editing.
- The second author has been involved in drafting the manuscript, analyzing and interpreting of data, writing and revising it critically for important intellectual content
- The third author has investigated and reviewed the manuscript and given final approval of the version to be published.

REFERENCES

- Astington, J. W., & Jenkins, J. M. (1995). Theory of mind development and social understanding. *Cognition & Emotion*, 9(2-3), 151–165. <https://doi.org/10.1080/02699939508409006>
- Apaydın Demirci, Z., Arslan, E., & Temel, M. (2020). Okul Öncesi Dönemdeki Çocukların Duygu Düzenleme ve Kişiler Arası Problem Çözme Becerilerinin İncelenmesi. *Türk Eğitim Bilimleri Dergisi*, 18(2), 406–421. <https://doi.org/10.37217/tebd.714803>
- Aslan, D., & Köksal-Akyol, A. (2016). Çocuklar için Bakış Açısı Alma Testi (ÇBT)'nin Geliştirilmesi. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi (KEFAD)*, 17,3, 207-221.
- Bal, Ö., & Temel, Z. F. (2014). Okul öncesi eğitim kurumlarına devam eden 4-6 yaş çocuklarının kişiler arası problem çözme ve bakış açısı alma becerileri arasındaki ilişkinin incelenmesi. *Trakya Üniversitesi Eğitim Fakültesi Dergisi*, 4(1), 156-169.
- Balçıklı, G. S., & Yıldırım, İ. (2018). Elit salon hokeyi oyuncularında empatik beceri ile prososyal davranışlar arasındaki ilişki. *Gazi Beden Eğitimi ve Spor Bilimleri Dergisi*, 23(1), 1-8.
- Batson, C. D. (1987). Prosocial motivation: Is it ever truly altruistic? In L. Berkowitz, (Ed.), *Advances in experimental social psychology*, 20 (pp. 65–122). San Diego, CA: Academic Press. [https://doi.org/10.1016/S0065-2601\(08\)60412-8](https://doi.org/10.1016/S0065-2601(08)60412-8)
- Batum, P., & Yagmurcu, B. (2007). What counts in externalizing behaviours? The contributions of emotion and behaviour regulation. *Current Psychology*, 25, 272-294.
- Carlo, G., Knight, G. P., McGinley, M., Goodvin, R., & Roesch, S. C. (2010). The developmental relations between perspective taking and prosocial behaviors: A meta-analytic examination of the task-specificity hypothesis. In B. Sokol, U. Müller, J. Carpen-dale, A. Young, & G. Iarocci (Eds.), *Self and social regulation: Social interaction and the development of social understanding and executive functions* (pp. 234–269). Oxford: Oxford University Press
- Choi, J. (2005). *Social interdependence and social dominance: Determinants of children's bullying, victimization, and prosocial behaviours*. University of Minnesota.
- Cigala, A., Mori, A., & Fangareggi, F. (2014). Learning others' point of view: Perspective taking and prosocial behaviour in preschoolers. *Early Child Development and Care*, 185(8), 1199–1215. <https://doi.org/10.1080/03004430.2014.987272>
- Denham, S. A. (1986). Social Cognition, prosocial behavior, and emotion in preschoolers: Contextual validation. *Child Development*, 57(1), 194. <https://doi.org/10.2307/1130651>
- Denham, S. A., Blair, K. A., DeMulder, E., Levitas, J., Sawyer, K., Auerbach-Major, S., & Queenan, P. (2003). Preschool emotional competence: Pathway to social competence? *Child Development*, 74(1), 238–256. <https://doi.org/10.1111/1467-8624.00533>
- Dixon, J. A., & Moore, C. F. (1990). The development of perspective taking: Understanding differences in information and weighting
- Eisenberg, N. (2003). Prosocial behavior, empathy, and sympathy. In M. H. Bornstein, L. Davidson, C. L. M. Keyes, & K. A. Moore (Ed.), *Well-being: Positive development across the life course* (253–265). Mahwah, NJ: Erlbaum.
- Eisenberg, N., & Mussen, P. (1989). *The roots of prosocial behavior in children*. Cambridge, England: Cambridge University Press.

- Eisenberg, N., Fabes, R. A., Nyman, M., Bernzweig, J., & Pinuelas, A. (1994). The relations of emotionality and regulation to children's anger-related reactions. *Child Development, 65*(1), 109. <https://doi.org/10.2307/1131369>
- Eisenberg, N., Fabes, R. A., & Spinrad, T. L. (2006). Prosocial development. In N. Eisenberg, W. Damon, & R. M. Lerner (Eds.), *Handbook of child psychology: Vol. 3, Social, emotional, and personality development* (6th ed., pp. 646–718). Hoboken, NJ: Wiley.
- Eisenberg, N., Eggum, N. D., & Di Giunta, L. (2010). Empathy-related responding: Associations with prosocial behavior, aggression, and intergroup relations. *Social Issues and Policy Review, 4*(1), 143–180. <https://doi.org/10.1111/j.1751-2409.2010.01020.x>
- Eisenberg, N., Michalik, N., Spinrad, T. L., Hofer, C., Kupfer, A., Valiente, C., Liew, J., Cumberland, A., & Reiser, M. (2007). The relations of effortful control and impulsivity to children's sympathy: A longitudinal study. *Cognitive Development, 22*(4), 544–567. <https://doi.org/10.1016/j.cogdev.2007.08.003>
- Eisenberg, N. (2003). Prosocial behavior, empathy, and sympathy. In M.H. Bornstein, L. Davidson, C.L.M. Keyes, ve K.A. Moore (Eds.) *Well-Being: Positive development across the life course*, 253-265. Mahwayh, NJ: Earlbaum.
- Eisenberg, N., Sadovsky, A., Spinrad, T. L., Fabes, R. A., Losoya, S. H., Valiente, C., Reiser, M., Cumberland, A., & Shepard, S. A. (2005). The relations of problem behavior status to children's negative emotionality, effortful control, and impulsivity: Concurrent relations and prediction of change. *Developmental Psychology, 41*(1), 193–211. <https://doi.org/10.1037/0012-1649.41.1.193>
- Ensor, R., Spencer, D., & Hughes, C. (2011). 'You Feel Sad?' Emotion Understanding Mediates Effects Of Verbal Ability And Mother-Child Mutuality On Prosocial Behaviors: Findings from 2 years to 4 years. *Social Development, 20*(1), 93–110. <https://doi.org/10.1111/j.1467-9507.2009.00572.x>
- Erel, S. (2016). Okul öncesi dönemdeki çocuklarda bakış açısı alma becerileri, duygu düzenleme ve ahlak gelişiminin davranış sorunları ile ilişkisi. Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü, Yüksek lisans tezi
- Field, A. (2009). *Discovering statistics using SPSS*. London: SAGE.
- George, D., & Mallery, P. (2010). *Spss for windows step by step: A simple guide and reference*. Allyn and Bacon.
- Genal, S. (2018). *Okul öncesi eğitiminden yararlanan 5-6 yaş çocuklarının sosyal duygusal yeterlilikleri ile bakış açısı alma becerilerinin incelenmesi* (Master's thesis, Eğitim Bilimleri Enstitüsü).
- Gross, J. J., & Thompson, R. A. (2007). Emotion Regulation: conceptual Foundations. James Gross (Ed.). *Handbook of Emotion Regulation* (3-24). New York: Guilford Press.
- Hastings, P. D., Rubin, K. H., & DeRose, L. (2005). Links among gender, inhibition, and parental socialization in the development of Prosocial Behavior. *Merrill-Palmer Quarterly, 51*(4), 467–493. <https://doi.org/10.1353/mpq.2005.0023>
- 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://doi.org/10.1037/0012-1649.21.1.46>
- Izard, C., Fine, S., Schultz, D., Mostow, A., Ackerman, B., & Youngstrom, E. (2001). Emotion knowledge as a predictor of social behavior and academic competence in children at risk. *Psychological Science, 12*(1), 18–23. <https://doi.org/10.1111/1467-9280.00304>
- Knafo, A., & Plomin, R. (2006). Prosocial behavior from early to middle childhood: Genetic and environmental influences on stability and change. *Developmental Psychology, 42*(5), 771–786. <https://doi.org/10.1037/0012-1649.42.5.771>
- Kuhlmeier, V. A., Dunfield, K. A., & O'Neill, A. C. (2014). Selectivity in early prosocial behavior. *Frontiers in Psychology, 5*. <https://doi.org/10.3389/fpsyg.2014.00836>
- Liew, J., Eisenberg, N., Spinrad, T. L., Eggum, N. D., Haugen, R. G., Kupfer, A., Reiser, M. R., Smith, C. L., Lemery-Chalfant, K., & Baham, M. E. (2010). Physiological regulation and fearfulness as predictors of young children's empathy-related reactions. *Social Development, 20*(1), 111–134. <https://doi.org/10.1111/j.1467-9507.2010.00575.x>
- Mertler, C. A., & Vanatta, R. A. (2005). *Advanced and multivariate statistical methods: Practical application and interpretation* (3rd ed.). Glendale, CA: Pyrczak Publishing.

- Pallant, J. (2007). *SPSS survival manual: A Step by Step Guide to Data Analysis Using SPSS for Windows (Version 12)* 2nd ed. New York: Open University Press.
- Paulus, M. (2018). The multidimensional nature of early prosocial behavior: a motivational perspective. *Current Opinion in Psychology*, 20, 111-116. <https://doi.org/10.1016/j.copsyc.2017.09.003>
- Peck, S. D. (2003). Measuring sensitivity moment-by-moment: A microanalytic look at the transmission of attachment. *Attachment & Human Development*, 5(1), 38-63. <https://doi.org/10.1080/1461673031000078661>
- Saygılı, N., & Akkaynak, M. (2021). 60-72 aylık çocukların Ahlaki Yargı Düzeyleri ile Sosyal Davranışları Arasındaki ilişkinin İncelenmesi. *Akademik Tarih ve Düşünce Dergisi*, 8(1). <https://doi.org/10.46868/atdd.95>
- Scarpelli-Dwyer, J. M. (2011). *Attention to emotional cues, affective perspective taking, and arousal in shy children*. Unpublished doctoral thesis, Kent State University Graduate School of Education, OH.
- Scrimgeour, M. B., Davis, E. L., & Buss, K. A. (2016). You get what you get and you don't throw a fit!: Emotion socialization and child physiology jointly predict early prosocial development. *Developmental Psychology*, 52(1), 102-116. <https://doi.org/10.1037/dev0000071>
- Selman, R. L. (1971). Taking another's perspective: Role-taking development in early childhood. *Child Development*, 42(6), 1721. <https://doi.org/10.2307/1127580>
- 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>
- Spence, S. H. (2003). Social skills training with children and young people: Theory, evidence and Practice. *Child and Adolescent Mental Health*, 8(2), 84-96. <https://doi.org/10.1111/1475-3588.00051>
- Sze, J. A., Gyurak, A., Goodkind, M. S., & Levenson, R. W. (2012). Greater emotional empathy and prosocial behavior in late life. *Emotion*, 12(5), 1129. <https://doi.org/10.1037/a0025011>
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (New International Ed.). Harlow: Pearson
- Taylor, Z. E., Eisenberg, N., Spinrad, T. L., Eggum, N. D., & Sulik, M. J. (2013). The relations of ego-resiliency and emotion socialization to the development of empathy and prosocial behavior across early childhood. *Emotion*, 13(5), 822-831. <https://doi.org/10.1037/a0032894>
- 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. <https://doi.org/10.2307/1166137>
- Toi, M., & Batson, C. D. (1982). More evidence that empathy is a source of altruistic motivation. *Journal of Personality and Social Psychology*, 43, 281-292. *Issues and Policy Review*, 4, 143-180. <https://doi.org/10.1111/j.1751-2409.2010.01020.x>
- Underwood, B., & Moore, B. (1982). Perspective-taking and altruism. *Psychological Bulletin*, 91, 143-173. <https://doi.org/10.1037/0033-2909.91.1.143>
- Wellman, H. M., Cross, D., & Watson, J. (2001). Meta-analysis of theory-of-mind development: The truth about false belief. *Child Development*, 72(3), 655-684. <https://doi.org/10.1111/1467-8624.00304>
- Xiao, S. X., Spinrad, T. L., & Carter, D. B. (2018). Parental emotion regulation and preschoolers' prosocial behavior: The mediating roles of parental warmth and inductive discipline. *The Journal of genetic psychology*, 179(5), 246-255. <https://doi.org/10.1080/00221325.2018.1495611>
- Yagmurlu, B., Sanson, A., & Köymen, S. B. (2005). Ebeveynlerin ve çocuk mizacının olumlu sosyal davranış gelişimine etkileri: Zihin kuramının belirleyici rolü. *Türk Psikoloji Dergisi*, 20(55), 1.
- Zimmerman, S. M., Phelps, E., & Lerner, R. M. (2007). Intentional self-regulation in early adolescence: Assessing the structure of selection, optimization, and Compensation Processes. *International Journal of Developmental Science*, 1(3), 272-299. <https://doi.org/10.3233/dev-2007-1310>