# THE RELATIONSHIP BETWEEN THE INDIVIDUAL VALUES OF MOTHERS OF CHILDREN AGED 60 TO 72 MONTHS AND THE PROSOCIAL BEHAVIOR OF THEIR CHILDREN<sup>1</sup>

### Seyma Türen and Meral Taner Derman

Abstract: This study examined the relationship between the individual values of mothers of children aged 60 to 72 months and the children's prosocial behavior. The research was implemented using the relational screening model, a quantitative research method. The study group, which was determined by a simple non-selective sampling method, included 300 children aged 60 to 72 months attending preschool in the Istanbul province of Türkiye in the 2020–2021 academic year, and their mothers. The data collection tools used were the Individual Values Inventory, the Preschool Positive Social Behavior Scale, and a demographic information form. Scores for the mothers in the study group were highest for the values of sharing and respect, and lowest for trust and forgiveness; their children received above-average scores in their prosocial behavior. In addition, there was no statistically significant relationship between the individual values of the mothers and the prosocial behaviors of their children. These findings are discussed and suggestions are made for new research, along with practical ideas for teachers and families.

**Keywords:** mothers' values, individual values, prosocial behaviors, preschool children

**Şeyma Türen** MA (corresponding author) is a Research Assistant in the Department of Preschool Education, Faculty of Education, Istanbul Okan University, P.O. Box 34959, Istanbul, Türkiye. Email: <a href="mailto:seymaturen@hotmail.com">seymaturen@hotmail.com</a>

Meral Taner Derman PhD is an Associate Professor in the Department of Early Childhood Education, Faculty of Education, Bursa Uludag University, P.O. Box 16059, Bursa, Türkiye. Email: <a href="mailto:mtaner@uludag.edu.tr">mtaner@uludag.edu.tr</a>

**Data availability:** The datasets generated or analyzed during the current study are available from the corresponding author on reasonable request.

<sup>&</sup>lt;sup>1</sup> This article was produced from the master's thesis prepared by the first author under the supervision of the second author.

Values have long captivated the interest of social scientists, who consider them essential for understanding human behavior (Kuşdil & Kâğıtçıbaşı, 2000). As one of the most important determinants of behavior, values define individuals and societies, and can be used to monitor changes over time and explain the fundamental motivations behind behaviors and attitudes (Schwartz, 2006; Yiğittir, 2012). Values can be regarded as long-term chosen qualities that guide behavior (Bayly & Bumpus, 2020; Tezcan, 2018; Ulusoy & Dilmaç, 2020). Many other definitions have also been provided in the literature. Four characteristics are common to most of these definitions: values (a) are beliefs or concepts about desirable end states or behaviors, (b) transcend specific situations, (c) guide the selection and evaluation of behaviors and events, and (d) are ranked according to relative significance (Aavik & Allik, 2002; Schwartz & Bilsky, 1987). In addition, despite these differences of definition, there is broad agreement across the social sciences that values play a key role in directing the lives of individuals (Acun et al., 2013).

Individuals acquire values through socialization, particularly in early childhood, facilitating children's adaptation as compliant members of society (Murphy et al., 1997; Şahin, 2021). However, individuals do not prioritize all values equally; rather, each establishes a personalized value system, shaping their lives according to the values they deem important (Bardi & Schwartz, 2003; Bilsky & Schwartz, 1994; Cheung & To, 2019; Hostetter, 2003; Parks-Leduc et al., 2015). Individual values vary among people, but people can be grouped by the particular values they hold (Roy, 2003). In addition, values guide individuals in determining their priorities, and also have an impact on important cultural preferences, such as those that shape motherhood practices (Köybaşı, 2016; Moors, 1996).

Various classifications of values have been proposed in the literature. For example, Allport et al. (1960) categorized values into aesthetic, theoretical, economic, political, social, and religious; Rokeach (1973) suggested terminal and instrumental; and Schwartz (1994) used many classifications, such as self-direction, stimulation, hedonism, achievement, power, security, conformity, tradition, benevolence, and universalism. Singelis et al. (1995) focused on individualism and collectivism. Anderson and Roy (1996: cited in Roy, 2003) developed a measurement tool by focusing on individual values such as honesty, trust, discipline, respect, commitment, sharing, and forgiveness, and argued that, for the holistic development and wellbeing of an individual, one's values should be integrated into such areas as family, work, mental health, physical health, and emotional and social life. The present study follows Roy's (2003) classification of individual values, focusing on the values of discipline, responsibility, trust, forgiveness, honesty, sharing, respect, and truthfulness.

Values accepted by individuals and societies are kept alive by being transmitted and maintained from each generation to the next (Aydın & Sulak, 2015). The emergence of people as social individuals depends on many factors (Çekin, 2013). Social development occurs when people establish good relationships with others in society and behave in ways appropriate to community

life. Children become socialized — adapt and integrate into their society — by acquiring behaviors that are accepted in their community and learning their role in it (Çubukçu & Gültekin, 2006; Darmon, 2023). These "prosocial behaviors" can be seen as a general expression of the competencies in interpersonal relations that are essential in developing adaptation behaviors in the socialization process; in other words, prosocial behaviors are the competencies that form the basis for the socialization process (Sert Ağır, 2017).

Prosocial behaviors — also called positive social behaviors — aim to improve the welfare of other people. They represent a broad category of voluntary actions such as helping, comforting, forgiving, and cooperating (Dovidio & Banfield, 2015; Schroeder & Graziano, 2015; Williams & Berthelsen, 2017). Prosocial behaviors are crucial to the quality of interactions between individuals and groups (Eisenberg, Spinrad, et al., 2015). They are defined by the norms of a society: the prosocial behaviors that are considered important for social functioning can thus vary from one society to the next (Hogg & Vaughan, 2010; Knafo & Plomin, 2006; Kumru et al., 2004).

Children exhibit prosocial behaviors in the first years of their lives (Grueneisen & Warneken, 2022; Svetlova et al., 2010). Prosocial behaviors emerge in the second year of life or even earlier. Some authors have reported that 12- to 24-month-old infants show prosocial behaviors such as helping, comforting, sharing, and cooperating (Brownell, 2013; Köster et al., 2016). However, although prosocial behaviors do begin to emerge in the early years, the skills exhibited at this age are elementary. The development of prosocial behaviors therefore continues through adolescence and beyond (Malti & Dys, 2018; San Bayhan & Artan, 2011).

By mastering prosocial behavior, children learn to become contributing members of society (Sondhi et al., 2021). The preschool period is a critical stage for the development of prosocial behaviors (Eisenberg, Eggum, et al., 2015). In this period, children branch out from individual relationships and begin to learn prosocial behaviors through interacting with groups of their peers in an environment where their social competencies are supported (Hastings et al., 2014; Hay et al., 2004). The ability to exhibit prosocial behaviors in this period is of great importance both individually and socially (Wu & Hong, 2022), as it contributes to the development of children's self-confidence and is effective in reducing aggression (Chen et al., 2002; Girard et al., 2021). Individuals who exhibit prosocial behaviors in childhood are likely to have more positive social relationships in later life (Eisenberg et al., 2006).

It is essential that children not only acquire prosocial behaviors, but also that they learn how to put them into practice. Some children start to exhibit prosocial behaviors at an early age, but in others these behaviors are delayed. It has been considered worth investigating over the years whether a difference in the age of onset of prosocial behaviors is caused by factors in home life (e.g., Tsomokos & Flouri, 2024), by the people who take care of the child (e.g., Wong, 2021), or by the child's own character (e.g., Uzmen & Mağden, 2002). Because prosocial behaviors strongly affect the quality of children's social relationships, it is important to determine family characteristics associated with these behaviors. For example, Scrimgeour et al.'s (2013) study

involving 58 two-parent families found cooperative parenting had a positive association with children's prosocial behaviors. In a meta-analysis conducted by Wong et al. (2021), it was found that different aspects of parenting are associated with various prosocial behaviors. Tsomokos and Flouri (2024) examined the impact of physical and emotional home environments on children's prosocial behaviors, and found that the emotional climate of the home has a stronger influence than the physical environment, and that the mother's emotional sensitivity and her application of harsh discipline play significant roles in prosocial behavior. Although the importance of family environments that support children's prosocial behaviors is recognized (Ferreira et al., 2016), the relationships between different aspects of parenting and prosocial behaviors are not fully understood and warrant comprehensive examination (Carlo et al., 2011).

In light of the above information, a literature review on related topics was conducted, and found a limited number of studies examining the relationships between preschool children's prosocial behaviors and parental variables. The relationships between children's prosocial behaviors and factors such as parental warmth (Daniel et al., 2016), tendency to love children (Salıkutluk, 2017), emotion regulation (Xiao et al., 2018), and attitudes (Arslan & Yanık, 2024) have been examined. However, studies focusing only on mothers are quite limited. The literature does provide discussions of the relationships between children's prosocial behaviors and factors that include mothers' childhood traumatic experiences (Liu & Wang, 2024), maternal warmth (Sun et al., 2024), maternal behaviors (Garner, 2006), and maternal prosocial behaviors (Çubukçu & Bahçeli Kahraman, 2023). No national or international studies were found that examined the relationship between children's prosocial behaviors and mother's individual values that help to shape their behavior. Our study thus aims to contribute to the field by answering the following research question: "Is there a significant relationship between the individual values of the mothers of 60- to 72-month-old children and their children's prosocial behaviors?"

#### Method

## Research Design

The research was conducted using the relational screening model, a quantitative research method, in order to examine the relationship between the individual values held by mothers of 60-to 72-month-old children and their children's prosocial behaviors. The relational screening model aims to determine the existence of, or degree of, covariation between two or more variables (Fraenkel & Wallen, 2005; Karasar, 2012).

# Study Group

The study group consisted of 300 children aged 60 to 72 months who were continuing their preschool education in the Ministry of National Education schools in Tuzla and Pendik districts of Istanbul province during the 2020–2021 academic year, and the 300 mothers of these children. The study group was chosen by a simple non-selective sampling method, in which the probability of selection of each individual is the same, and the selection of one person does not influence the

selection of other individuals (Büyüköztürk et al., 2018). Demographic information about the children and their mothers is provided in Tables 1 and 2 respectively.

Table 1. Demographic Information About the Children (N = 300)

Variable	Group	n	%
Age	60–66 months	118	39.3
	67–72 months	182	60.7
Gender	Girl	150	50.0
	Boy	150	50.0
Duration of preschool education	Less than 1 year	154	51.3
	1 year	64	21.4
	2 years or more	82	27.3
Number of siblings	0	67	22.3
	1	156	52.0
	2 or more	77	25.7
Birth order	First	140	46.7
	Second	111	37.0
	Third or later	49	16.3

Table 1 shows that more children were at the upper end of the age range (67–72 months), with an equal number of girls and boys. Just over half had been at preschool for less than 1 year.

Table 2. *Demographic Information About the Mothers (N* = 300)

Variable	Group	n	%
Family structure	Nuclear	266	88.7
	Extended	34	11.3
Perceived	Low	20	6.7
economic status	Moderate	148	49.3
	High	119	39.7
	Very high	13	4.3
Family union	Parents together	290	96.7
	Parents separated	10	3.3
Age	23–29	44	14.7
	30–34	106	35.3
	35–39	91	30.3
	40 or over	59	19.7
Education status	Elementary school	39	13.0
	Middle school	37	12.3
	High school	88	29.3
	Associate degree	46	15.3
	Bachelor's degree	75	25.0
	Postgraduate	15	5.0
Working status	Working	102	34.0
	Not working	198	66.0

Table 2 shows that most families in the study live in a nuclear family structure, with only a small number in an extended family structure. Nearly half of the families perceive their economic status as medium, while a significant number see it as high, and fewer consider it low or very high. The majority of parents are together, with only a few being separated. Most mothers are between 30 and 39 years old, and their education levels vary, with the highest number being high school graduates. While some mothers are employed, most do not work.

#### **Data Collection Tools**

The Individual Values Inventory (Asan et al., 2008) was used to determine the individual values held by the mothers in our sample, and the Preschool Prosocial Behavior Scale (Çelik Kahraman, 2019) was used to measure the prosocial behavior of the children. A demographic information form was developed by the researchers and used to collect demographic information about both children and mothers.

## Individual Values Inventory

The Personal Values Inventory developed by Roy (2003) was adapted into Turkish by Asan et al. (2008), and validity and reliability studies were carried out. In addition, a linguistic equivalence study was conducted to check for errors during the translation of test items into Turkish and to determine the extent to which each test item expressed the intended meaning. The correlation results, which should be compared with the Schwartz Values Scale (Schwartz, 1992), were analyzed for validity. Eight items with factor load values below .30 were removed from the original 55-item scale. Asan et al. divided the remaining 47 items into five subdimensions: Discipline and Responsibility ("I can balance being free-spirited and self-controlled."), Trust and Forgiveness ("I can forgive someone when they hurt my feelings."), Honesty and Sharing ("I believe that honesty is effective."), Respect and Truthfulness ("I respect others' perspectives."), and Sharing and Respect ("I believe that sharing is the foundation of a good and healthy relationship.").

There are no reverse items on the scale, so a high score in any subdimension signifies that the respondent places importance on the characteristics evaluated by that subdimension. A scale is considered to be reliable if the Cronbach's alpha coefficient has a value between .60 and .80 (Hair et al., 2010; Kalaycı, 2010). Asan et al. (2008) reported Cronbach's alpha reliability scores for the subdimensions of the scale varying from .60 to .71, while the total Cronbach's alpha reliability score was .63. It can thus be said that the scale has the necessary reliability both in total and in each subdimension (Asan et al., 2008). In this research, the scale's total Cronbach's alpha reliability score was 0.74.

#### Preschool Prosocial Behavior Scale

The scale, developed by Çelik Kahraman (2019), comprises illustrated scenarios containing 14 hypothetical problem situations for children aged 48 to 72 months. In the validity studies of the scale, Çelik Kahraman sought expert opinions to assess content validity. To determine construct validity, item difficulty indices, item distinctiveness indices, and point-biserial correlation

coefficients were calculated, followed by confirmatory factor analyses. Finally, various test statistics were conducted to evaluate the reliability of the scale.

The 14 problem situations are divided into five subdimensions: Empathy (2), Sharing (4), Cooperation (2), Helping (4), and Communication Skills (2). Some examples of problem situations: "Kerem and his friend were riding their bikes when Kerem failed to notice a large rock on the ground, hit it, and fell. How do you think Kerem felt in this situation?", and "While having breakfast with his family, Kerem heard a meowing sound coming from a tree. When he looked outside, he saw a small kitten stuck on a branch, unable to climb down. What do you think happened next?" Children's answers are scored by giving 1 point if it is a prosocial answer and 0 points if it is not a prosocial answer. A higher score means the child has developed more strongly prosocial reactions to hypothetical situations, while a lower score indicates less development of prosocial responses.

An analysis known as the Kuder-Richardson-20 reliability coefficient (KR-20) was applied. In tests where items are scored as 1 and 0, KR-20 can be used to calculate the reliability coefficient for the whole test (Bardhoshi & Erford; 2017; Baykul, 2021). The KR-20 score for the Preschool Prosocial Behavior Scale for children aged 61 to 72 months was .80, showing that the scale is reliable and valid (Çelik Kahraman, 2019). In the present study, the KR-20 score was .73.

## Demographic Information Form

In the demographic information form created by the researchers, there are questions about the child's gender, age, number of siblings, birth order, duration of preschool education attendance, as well as information about the parents' age, educational level, work status, family association, family structure, and perceived economic status.

# Data Collection

Permission was obtained from Bursa Uludag University Social and Humanities Research and Publication Ethics Committee to collect research data (Session Date: 25.02.2020; Number of Sessions: 2020-02). We then were granted permission by the Istanbul Provincial Directorate of National Education to make the application (Number: 59090411-20-E.6677992). After all the necessary permits were obtained, we met with directors of Ministry of National Education schools in the Tuzla and Pendik districts of Istanbul province and informed them of the nature of the research. After receiving approval from the directors of the institution, preschool teachers were interviewed, and the research was explained to the teachers.

With the support of the teachers, an informed consent form, demographic information form, and the Individual Values Inventory were delivered to the mothers of the children. Teachers returned any forms that had been sent back within 10 days. The Preschool Prosocial Behavior Scale was administered to children of mothers who had accepted and signed the informed consent form and completely filled out the demographic information form and the Individual Values Inventory.

Before the Preschool Prosocial Behavior Scale was administered, a researcher met with the child one-on-one and gave them information about the process. If the child agreed to participate, the Preschool Prosocial Behavior Scale was administered in a quiet classroom provided by the director of the institution. The child was presented with a scenario involving a hypothetical problem situation along with its accompanying picture. At the end of the scenario, the child was asked, "What do you think happened next?" or "How did the child in the picture feel?" The child was given the time needed to think about the answers to these questions and was supported in giving multiple answers and explaining the answers. After all 14 of the scenarios were explained, the child's concerns, if any, were answered, and they were thanked for their assistance and directed back to their classroom. The interviews took an average of 20 to 25 minutes.

#### Data Analysis

The data obtained were analyzed using the SPSS 26.0 statistical package. To determine which analyses to use, the researchers first checked whether the data showed a normal distribution. The Shapiro-Wilks test is used to examine normality in studies where the group size is less than 50; for larger groups, the Kolmogorov-Smirnov test is used (Büyüköztürk, 2018). Since each study group consisted of 300 people, the Kolmogorov-Smirnov test was applied. It showed that none of the subdimensions of either the Individual Values Inventory or the Preschool Prosocial Behavior Scale had a normal distribution (p < .05). However, these results may have been affected by the size of the study group. For this reason, it is considered important to look at the skewness and kurtosis values before deciding on normality (Field, 2009). The skewness and kurtosis values of the scales are shown in Table 3.

Table 3. Skewness and Kurtosis Values of the Scales

Scale	Subdimension	n	Skewness	Kurtosis
Individual Values	Discipline and Responsibility	300	-0.49	0.17
Inventory	Trust and Forgiveness	300	0.15	0.67
	Honesty and Sharing	300	-0.72	0.96
	Respect and Truthfulness	300	-0.33	2.40
	Sharing and Respect	300	-1.02	1.61
Preschool Prosocial	Empathy	300	-4.71	20.40
Behavior Scale	Sharing	300	0.33	-0.57
	Cooperation	300	-1.14	0.33
	Helping	300	-0.94	0.40
	Communication Skills	300	0.42	-0.66
	Overall Scale	300	-0.31	0.11

Skewness and kurtosis values between +2 and -2 indicate a normal distribution (George & Mallery, 2019; Gravetter & Wallnau, 2014). However, the Respect and Truthfulness subdimension of the Individual Values Inventory had a value of 2.40 for kurtosis, and the Empathy subdimension of the Preschool Prosocial Behavior Scale had a skewness of -4.71 and a kurtosis of 20.40. In

order to understand the source of these asymmetries, the answers and outliers of the study group were examined, revealing that the lopsided distributions were due not to a few highly atypical responses but to the overall pattern of responses from the participant group as a whole. The observed kurtosis and skewness could not be set aside, and thus the data did not show a normal distribution. Due to the failure of some subdimensions in both scales to meet the normality assumption, the relationship between the scales was analyzed using the non-parametric Spearman Correlation method.

Spearman Correlation analysis was used to determine the relationship between mothers' individual values and their children's prosocial behaviors. Two variables whose correlation coefficient is less than .30 in absolute value are deemed to be weakly related; an absolute value between .30 and .70 indicates a moderate relationship; and one greater than .70 indicates a strong relationship. A correlation coefficient with an absolute value of 1 indicates a perfect positive or negative correlation between the two variables, while 0 shows that they are not related at all (Büyüköztürk et al., 2020). In line with these definitions, the findings were evaluated by considering the correlation values observed between the variables analyzed. The findings obtained from the analysis were construed at a 95% confidence interval and .05 significance level.

## **Findings**

After using the Individual Values Inventory to determine the individual values of the mothers and the Preschool Prosocial Behavior Scale to measure the prosocial behaviors of their 60- to 72-month-old children, the relationship between the two groups was examined. The descriptive statistical results of the findings obtained from the Individual Values Inventory are shown in Table 4.

Table 4	. Descriptive	Statistical	Results	Related	to the	Individual	Values	Inve	ntory (	N =	300)
						_					

Individual Values	Min	Max	$ar{X}$	SD
Discipline and Responsibility	2.44	5.00	4.13	0.47
Trust and Forgiveness	1.33	4.17	2.71	0.45
Honesty and Sharing	2.22	5.00	4.05	0.43
Respect and Truthfulness	1.33	4.83	3.30	0.39
Sharing and Respect	2.00	5.00	4.37	0.50

The item averages for the subdimensions of the Individual Values Inventory in Table 4 show that the mothers in the study group identified "Sharing and Respect" as the most important values, followed by "Discipline and Responsibility", "Honesty and Sharing", "Respect and Truthfulness", and lastly, "Trust and Forgiveness".

Table 5 shows the descriptive statistical results of the findings obtained from the Preschool Prosocial Behavior Scale.

Table 5. Descriptive Statistical Results	of the Preschool Prosocial Behavior Scale	(N = 300)

Prosocial Behavior	Min	Max	$ar{X}$	SD
Empathy	1	2	1.96	.19
Sharing	0	4	1.51	1.02
Cooperation	0	2	1.62	.55
Helping	0	4	2.84	1.09
Communication Skills	0	2	0.65	.62
Overall Scale	2	14	8.60	2.31

Descriptive statistical analysis was performed by scoring the subdimensions of the Preschool Prosocial Behavior Scale and the overall scale, as presented in Table 5. A prosocial answer scores 1, and a non-prosocial answer scores 0 on the 14-item scale; thus, the range of possible scores is 0 to 14. The lowest overall score for the children in the study group was 2 points, and the highest 14; the average score was 8.60 points.

Table 6 presents the results of the Spearman Correlation analysis that was conducted to determine the relationships between the individual values of the mothers participating in the study and their children's prosocial behaviors.

Table 6. The Results of Spearman Correlation Analysis Showing the Relationship Between the Individual Values That Mothers Have and the Prosocial Behavior of Their Children (N = 300)

Prosocial						
Behavior Individual Values		Discipline and Responsibility	Trust and Forgiveness	Honesty and Sharing	Respect and Truthfulness	Sharing and Respect
Emmathy	$r_{\rm s}$	05	03	00	07	00
Empathy	p	.31	.60	.96	.22	.94
Sharing	$r_{\rm s}$	03	07	00	04	01
Sharing	p	.57	.20	.99	.48	.78
Company	$r_{\rm s}$	.02	02	.06	03	02
Cooperation	p	.71	.61	.29	.54	.64
Halning	$r_{\rm s}$	.04	03	.05	.05	.04
Helping	p	.40	.51	.30	.36	.45
Communication Skills	$r_{\rm s}$	01	07	.04	.02	.04
	p	.82	.19	.40	.72	.46
0 11 0 1	$r_{\rm s}$	.00	07	.06	00	.01
Overall Scale	p	.89	.17	.25	.99	.77

Table 6 shows that there is a weak relationship between all subdimensions of the Individual Values Inventory (Discipline and Responsibility, Trust and Forgiveness, Honesty and Sharing,

Respect and Truthfulness, Sharing and Respect) and all subdimensions of the Preschool Prosocial Behavior Scale (Empathy, Sharing, Cooperation, Helping, Communication Skills), as well as the overall scale. It is concluded that there is no statistically significant relationship in any of them, since *p* is always greater than .05.

#### **Results and Discussion**

This study aimed to examine the relationship between the individual values of mothers of children aged 60 to 72 months and the prosocial behavior of their children. The Individual Values Inventory was used to determine the individual values of the mothers in the study group, and through descriptive statistics, it was determined that the subdimension of Sharing and Respect had the highest mean value, while Trust and Forgiveness had the lowest. This is consistent with Yılmaz (2013), who found that the highest average value in his sample group was for sharing, with trust and forgiveness the lowest. Similarly, Saracaloğlu and Gerçeker (2018) stated that the sharing and respect values in the group they studied were highest, while Parlar and Cansoy (2016) and Gözüm et al. (2021) found that trust and forgiveness values ranked lower than other values.

The Preschool Prosocial Behavior Scale, with scores ranging from 0 to 14, was used to measure the prosocial behaviors of the 60- to 72-month-old children in our study. The lowest overall score obtained was 2 points and the highest was 14. The mean score of the children in our study group was 8.6. Other studies have painted a complex picture of children's prosociality. While some children exhibit prosocial behaviors at an early age, others begin to show these behaviors at later stages (Bağcı Çetin & Öztürk Samur, 2018). A study by Paulus (2018) revealed that some children are less inclined toward prosocial behaviors, and that this tendency is associated with both individual temperament traits and social experiences. Salerni and Caprin (2022) found that children attending preschool were significantly less likely to display prosocial behaviors in response to requests from others than were their peers who did not attend preschool.

Our findings do align with those of several other studies conducted with preschool children. In a study of the prosocial and aggressive behaviors of preschool children in Bosnia and Herzegovina, Bulić and Pinkas (2016) found more prosocial than aggressive behavior. They also found that these behaviors differed significantly by gender, and sometimes by age. In a study conducted in Türkiye, Öngören (2022) reported that "prosocial behavior levels were high and [that] students' prosocial behaviors don't significantly differ in terms of [the] gender variable" (p. 112). However, they did find that prosocial scores varied by age, and by length of time in preschool. Saygılı and Akkaynak (2021) and Yazıcı and Salıkutluk (2018) also found that the prosocial behaviors of the preschool children in their studies were either above average, or high.

There was no statistically significant positive or negative relationship between mothers' individual values and their children's prosocial behaviors. Thus a mother's high or low score in the subdomains of individual values did not have an effect on the increase or decrease of their children's score in prosocial behavior.

There are studies in the literature that state that some variables pertaining to mothers affect the prosocial behavior of children. In regard to one of these variables, parental attitudes, it was determined that there was a positive relationship between a mother having an authoritative attitude and positive social behaviors on the part of her children (Gülay, 2016), while a mother's democratic attitude positively affected children's social skills (Özyürek, 2015). There are also studies that show that both mothers' attitudes and prosociality levels impact their children's prosocial behavior (Çubukçu & Bağçeli Kahraman, 2023; Genç, 2021). In the study conducted by Newton et al. (2014), it was found that there is a bidirectional relationship between maternal sensitivity and the prosocial behavior of children.

However, it is seen in the literature that, in addition to the studies already cited, some national and international studies indicate that certain characteristics of mothers do not positively influence children's prosocial behaviors, and these overlap with our findings. For example, Eisenberg et al. (1992) found that "parental reinforcement of compliant prosocial behaviors was negatively related to children's compliance with a peer's request for prosocial behavior" (p. 19). A study conducted by Akbaş and Temiz (2015) with mothers and children aged 60 to 66 months found that mothers' empathy skill levels were not very effective in teaching empathy skills to children. Similarly, Lipsitt (1993) concluded that mothers' empathy skills did not predict children's empathy skills. Kienbaum et al. (2001), in their research with 5-year-old children, found that mothers' behaviors did not directly affect their children's sympathetic, prosocial reactions to distress. Ferreira et al.'s (2016) study with 36- to 72-month-old children determined that the quality of teacher-child and father-child relationships had a direct relationship with children's prosocial behaviors; in contrast, the quality of mother-child relationships was not directly related to children's prosocial behaviors.

When evaluating the results, an important consideration is that all the children in the study group were in preschool educational institutions, where both teachers and peers can provide models for prosocial behaviors (Gülay Ogelman et al., 2024). Other studies in Türkiye have shown that as the length of time children attend preschool increases, their prosocial behavior also increases. Salıkutluk (2017), in their study conducted with 5- to 6-year-old children, found that the prosocial behaviors of children who received preschool education for 2 years or more were higher than those of children who were in their first year. Similarly, a study conducted by Karaman and Dincer (2020) with children aged 25 to 72 months found that children who had been in preschool for more than 6 months had higher prosocial behavior scores than did beginners. The effect of preschool education on prosocial behavior is also seen in research conducted in the international literature. In Ireland, a study by McTaggart et al. (2020) that examined the development of social and emotional competencies of preschool children found a greater increase in their prosociality scores than in other subscales during the preschool period. In Ethiopia, Guta et al. (2017) investigated the impact of preschool education at the first stage of primary school, and reached the conclusion that preschool makes a positive contribution to children's prosocial behavior. Research also indicates that participating in activities with peers makes an important contribution to

children's prosocial behaviors (Eisenberg & Mussen, 1989; Fortuna & Knafo, 2015; Hastings et al., 2014).

There may thus be several reasons for the absence of a significant relationship between mothers' individual values and their children's prosocial behaviors in the findings of this study. Mothers' scores on the Individual Values Inventory would not necessarily have correlated with their reinforcement of their children's prosocial behaviors, such as sharing, helping, and cooperating, even though such reinforcement may have been successful in encouraging their children to behave prosocially. In addition, only the values of mothers were examined in the present research. The values of fathers involved in the family, or of individuals who care for the children while the parents work, can also impact children's behavior. The fact that all the children in the study group attended preschool is also thought to have had a significant effect on the prosocial behaviors they exhibited. Children who go to school communicate and interact with their peers and may learn prosocial behaviors from them. In addition to these factors, biological factors (e.g., the hereditary characteristics of the children) and environmental factors (e.g., the value system and cultural structure of the society, and the family's level of attention to prosociality) can also impact prosocial behavior.

## Suggestions

In light of the findings, we offer the following suggestions. This research was conducted in Istanbul province. Expanding new research to including families and children from different cultures in different cities of Türkiye would help reveal the extent to which both values and prosocial behaviors are influenced by culture. Our research investigated mothers's values only. It would be worthwhile to look at the values of fathers and of people who provide child care. As the literature shows that preschool education impacts prosocial behavior, a longitudinal study comparing children's behavior at the beginning and at the end of their preschool education might help to better understand this effect. We also recommend that preschool teachers include classroom activities that model prosocial behaviors in order to promote their usage by students. In addition, they can foster prosocial behaviors through peer interaction by supporting their students to cooperate with each other while pursuing classroom activities. Training that raises awareness of the importance of prosocial behavior could also be organized for families.

#### References

- Aavik, T., & Allik, J. (2002). The structure of Estonian personal values: A lexical approach. *European Journal of Personality, 16*(3), 221–235. <a href="https://doi.org/10.1002/per.439">https://doi.org/10.1002/per.439</a>
- Acun, İ., Yücel, C., Önder, A., & Tarman, B. (2013). Değerler: Kim ne kadar değer veriyor? [Values: Who attributes how much value?]. *Usak University Journal of Social Sciences*, 6(1), 180–197. <a href="https://dergipark.org.tr/tr/pub/usaksosbil/issue/21644/232682">https://dergipark.org.tr/tr/pub/usaksosbil/issue/21644/232682</a>
- Akbaş, B., & Temiz, G. (2015). 60-66 aylık çocukların empati beceri düzeylerinin anne empati beceri düzeyi açısından incelenmesi [An investigation of the empathy skills levels of children of ages between 60- 66 months with respect to their mothers empathy skills levels]. *Trakya University Journal of Education*, 5(2), 106–112. <a href="https://dergipark.org.tr/tr/pub/trkefd/issue/21482/230211">https://dergipark.org.tr/tr/pub/trkefd/issue/21482/230211</a>
- Allport G. W., Vernon P. E., & Lindzey G. (1960) A study of values (3rd ed.). Houghton Mifflin.
- Arslan, R., & Yanık, D. (2024). Okul öncesi dönemdeki çocukların prososyal davranışları ile anne-baba tutumları arasındaki ilişkinin incelenmesi [Investigation of the relationship between prosocial behaviors of preschool children and their parental attitudes]. *Milli Eğitim Dergisi [Journal of National Education]*, 53(243), 1587–1604. <a href="https://doi.org/10.37669/milliegitim.1247922">https://doi.org/10.37669/milliegitim.1247922</a>
- Asan, T., Ekşi, F., Doğan, A., & Ekşi, H. (2008). Bireysel değerler envanteri'nin dilsel eşdeğerlik geçerlik ve güvenirlik çalışması [Linguistic equivalence, validity and reliability study of individual values inventory]. *Marmara University Atatürk Education Faculty Journal of Educational Sciences*, 27, 15–38. <a href="https://dergipark.org.tr/tr/pub/maruaebd/issue/365/2046">https://dergipark.org.tr/tr/pub/maruaebd/issue/365/2046</a>
- Aydın, E., & Sulak, S. E. (2015). Sınıf öğretmeni adaylarının "değer" kavramına yönelik metafor algıları [Metaphor perception of prospective primary school teachers for "value" concept]. *Bartin University Journal of Faculty of Education, 4*(2), 482–500. <a href="https://dergipark.org.tr/en/pub/buefad/issue/3818/51365">https://dergipark.org.tr/en/pub/buefad/issue/3818/51365</a>
- Bağcı Çetin, B., & Öztürk Samur, A. (2018). 60-72 aylık çocukların prososyal davranışları ile anne-babalarınınprososyal 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]. *Erzincan University Journal of Education Faculty*, 20(1), 1–17. https://doi.org/10.17556/erziefd.286651
- Bardhoshi, G., & Erford, B. T. (2017). Processes and procedures for estimating score reliability and precision. *Measurement and Evaluation in Counseling and Development*, 50(4), 256–263. <a href="https://doi.org/10.1080/07481756.2017.1388680">https://doi.org/10.1080/07481756.2017.1388680</a>

- Bardi, A. & Schwartz, S. H. (2003). Values and behavior: Strength and structure of relations. *Personality and Social Psychology Bulletin, 29*(10), 1207–1220. https://doi.org/10.1177/0146167203254602
- Baykul, Y. (2021). Eğitimde ve psikolojide ölçme: Klâsik test teorisi ve uygulaması [Measurement in education and psychology: Classical test theory and practice] (4th ed.). Pegem Akademi.
- Bayly, B. L., & Bumpus, M. F. (2020). Patterns and implications of values similarity, accuracy, and relationship closeness between emerging adults and mothers. *Journal of Moral Education*, 49(4), 496–511. https://doi.org/10.1080/03057240.2019.1669545
- Bilsky, W., & Schwartz, S. H. (1994). Values and personality. *European Journal of Personality*, 8(3), 163–181. <a href="https://doi.org/10.1002/per.2410080303">https://doi.org/10.1002/per.2410080303</a>
- Brownell, C. A. (2013). Early development of prosocial behavior: Current perspectives. *Infancy*, *18*(1), 1–9. <a href="https://doi.org/10.1111/infa.12004">https://doi.org/10.1111/infa.12004</a>
- Bulić, A., & Pinkas, G. (2016). The manifestation of prosocial and aggressive behavior of preschool children depending on sex and age. *Human Research in Rehabilitation*, *6*(2), 36–45. https://doi.org/10.21554/hrr.091606
- Büyüköztürk, Ş. (2018). Sosyal bilimler için veri analizi el kitabı [Handbook of data analysis for social sciences] (24th ed.). Pegem Akademi.
- Büyüköztürk, Ş., Çokluk, Ö., & Köklü, N. (2020). *Sosyal bilimler için istatistik* [Statistics for social sciences] (24th ed.). Pegem Akademi.
- Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2018). *Bilimsel araştırma yöntemleri* [Scientific research methods] (24th ed.). Pegem Akademi.
- 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. <a href="https://doi.org/10.1177/0165025410375921">https://doi.org/10.1177/0165025410375921</a>
- Çekin, A. (2013). İmam hatip lisesi öğrencilerinin prososyal da [A quantitative analyze on İmam Hatip High School student's prosocial behavior tendency]. *The Journal of International Social Research*, 6(28), 34–45.
- Çelik Kahraman, S. (2019). Okul öncesi prososyal davranış ölçeğinin geliştirilmesi ve 48-72 aylık çocuklarda prososyal davranışların bazı değişkenlere göre incelenmesi [The development of preschool prosocial behavior scale and investigation of prosocial behavior in 48-72 months children according to some variables; Unpublished master's thesis]. Gazi University.

- Chen, X., Liu, M., Rubin, K. H., Cen, G.-Z., Gao, X. & Li, D. (2002). Sociability and prosocial orientation as predictors of youth adjustment: A seven-year longitudinal study in a Chinese sample. *International Journal of Behavioral Development*, 26(2), 128–136. https://doi.org/10.1080/01650250042000690
- Cheung, M. F. Y., & To, W. M. (2019). An extended model of value-attitude-behavior to explain Chinese consumers' green purchase behavior. *Journal of Retailing and Consumer Services*, 50, 145–153. <a href="https://doi.org/10.1016/j.jretconser.2019.04.006">https://doi.org/10.1016/j.jretconser.2019.04.006</a>
- Çubukçu, A., & Bağçeli Kahraman, P. (2023). Predictive power of prosocial behaviors of mothers and their parental attitudes on 48- to 72-month-old children's prosocial behaviors. *HAYEF: Journal of Education*, 20(2), 170–176. <a href="https://doi.org/10.5152/hayef.2023.46">https://doi.org/10.5152/hayef.2023.46</a>
- Çubukçu, Z., & Gültekin, M. (2006). Social skills that need to be gained by primary school students. *Bilig*, 37, 155–174. <a href="https://dergipark.org.tr/en/pub/bilig/issue/25369/267789">https://dergipark.org.tr/en/pub/bilig/issue/25369/267789</a>
- Daniel, E., Madigan, S., & Jenkins, J. (2016). Paternal and maternal warmth and the development of prosociality among preschoolers. *Journal of Family Psychology*, *30*(1), 114–124. https://doi.org/10.1037/fam0000120
- Darmon, M. (2023). Socialization. John Wiley & Sons.
- Dovidio, J. F., & Banfield, J. C. (2015). Prosocial behavior and empathy. *International Encyclopedia of the Social & Behavioral Sciences*, *2*(19), 216–220. https://doi.org/10.1016/B978-0-08-097086-8.24024-5
- Eisenberg, N., Eggum, N. D., & Spinrad, T. L. (2015). The development of prosocial behavior. In D. A. Schroeder & W. G. Graziano (Eds.), *The Oxford handbook of prosocial behavior* (pp. 114–136). Oxford University Press. <a href="https://doi.org/10.1093/oxfordhb/9780195399813.013.008">https://doi.org/10.1093/oxfordhb/9780195399813.013.008</a>
- Eisenberg, N., Fabes, R. A., & Spinrad, T. L. (2006). Prosocial development. In N. Eisenberg (Eds.), *Handbook of child psychology: Vol 3. Social, emotional, and personality development* (5th ed., pp. 649–718). John Wiley & Sons, Inc.
- Eisenberg, N., & Mussen, P. H. (1989). *The roots of prosocial behavior in children*. Cambridge University Press. <a href="https://doi.org/10.1017/CBO9780511571121">https://doi.org/10.1017/CBO9780511571121</a>
- Eisenberg, N., Spinrad, T. L., & Knafo-Noam, A. (2015). Prosocial development. In M. E. Lamb & R. M. Lerner (Eds.), *Handbook of child psychology and developmental science* (7th ed., pp. 1–47). John Wiley & Sons.
- Eisenberg, N., Wolchik, S. A., Goldberg, L., & Engel, I. (1992). Parental values, reinforcement, and young children's prosocial behavior: A longitudinal study. *The Journal of Genetic Psychology*, *153*(1), 19–36. https://doi.org/10.1080/00221325.1992.10753699

- Ferreira, T., Cadima, J., Matias, M., Vieira, J. M., Leal, T., & Matos, P. M. (2016). Preschool children's prosocial behavior: The role of mother–child, father–child and teacher–child relationships. *Journal of Child and Family Studies*, *25*(6), 1829–1839. https://doi.org/10.1007/s10826-016-0369-x
- Field, A. (2009). Discovering statistics using SPSS (3rd ed.). SAGE Publications.
- Fortuna, K., & Knafo, A. (2015). Parental and genetic contributions to prosocial behavior during childhood. In L. M. Padilla-Walker & G. Carlo (Eds.), *Prosocial development: A multidimensional approach* (pp. 70–89). Oxford University Press. <a href="https://doi.org/10.1093/acprof:oso/9780199964772.003.0004">https://doi.org/10.1093/acprof:oso/9780199964772.003.0004</a>
- Fraenkel, J. R., & Wallen, N. E. (2005). *How to design and evaluate research in education* (6th ed.). Mc Graw Hill.
- Garner, P. W. (2006). Prediction of prosocial and emotional competence from maternal behavior in African American preschoolers. *Cultural Diversity and Ethnic Minority Psychology*, *12*(2), 179–198. <a href="https://doi.org/10.1037/1099-9809.12.2.179">https://doi.org/10.1037/1099-9809.12.2.179</a>
- Genç, F. G. (2021). The investigation of the relation between prosocial behaviors and attitudes of mothers and prosocial behaviors of preschoolers [Unpublished master's thesis]. Gazi University.
- George, D., & Mallery, P. (2019). *IBM SPSS statistics 25 step by step: A simple guide and reference* (15th ed.). Routledge.
- Girard, L. C., Girolametto, L., Weitzman, E., & Greenberg, J. (2011). Training early childhood educators to promote peer interactions: Effects on children's aggressive and prosocial behaviors. *Early Education and Development*, 22(2), 305–323. <a href="https://doi.org/10.1080/10409281003668060">https://doi.org/10.1080/10409281003668060</a>
- Gözüm, P., Gözüm, K., & Deligöz, O. (2021). Üniversitelerde akademik ve idari personelin bireysel değerler algı düzeylerinin belirlenmesi (Burdur ili örneği) [Determination of individual perception levels of academic and administrative staff in universities (Burdur province example)]. Süleyman Demirel University Visionary Journal, 12(31), 800–811. <a href="https://doi.org/10.21076/vizyoner.879485">https://doi.org/10.21076/vizyoner.879485</a>
- Gravetter, F. J., & Wallnau, L. B. (2014). *Essentials of statistics for the behavioural sciences* (8th ed.). Wadsworth.
- Grueneisen, S., & Warneken, F. (2022). The development of prosocial behavior—from sympathy to strategy. *Current Opinion in Psychology*, 43, 323–328. https://doi.org/10.1016/j.copsyc.2021.08.005

- Gülay, H. (2016). Annelerin tutumları ile 5–6 yaş çocuklarının saldırganlık, olumlu sosyal davranış ve akran şiddetine maruz kalma düzeyleri arasındaki ilişkilerin incelenmesi [Investigation of relations between the maternal styles and aggression, prosocial behavior and peer victimization levels of their 5–6 year old children]. *Duzce University Journal of Social Sciences*, *I*(1), 31–48. <a href="https://dergipark.org.tr/en/pub/dusbed/issue/22643/241888">https://dergipark.org.tr/en/pub/dusbed/issue/22643/241888</a>
- Gülay Ogelman, H., Koyutürk Koçer, N., & Göktaş, İ. (2024). Okul öncesi dönemde olumlu sosyal davranış: 2010-2022 yılları arasında tamamlanmış tezlerin incelenmesi [Social behavior during preschool period: Examination of dissertations completed between years 2010–2022]. *Igdir University Journal of Social Sciences*, *35*, 178–196. https://doi.org/10.54600/igdirsosbilder.1389035
- Guta, B. S., Tarekegne, W. M., & Tegegne, W. F. T. (2017). The effect of pre-school education to students' learning experience in first cycle primary schools. *International Journal of Sciences: Basic and Applied Research (IJSBAR), 31*(1), 324–340. <a href="https://www.gssrr.org/index.php/JournalOfBasicAndApplied/article/view/6409">https://www.gssrr.org/index.php/JournalOfBasicAndApplied/article/view/6409</a>
- Hair, J. F., Jr., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Prentice Hall.
- Hastings, P. D., Utendale, W. E., & Sullivan, V. (2014). The socialization of prosocial development. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization: Theory and research* (pp. 638–664). Guilford Publications.
- Hay, D. F., Payne, A., & Chadwick, A. (2004). Peer relations in childhood. *Journal of Child Psychology and Psychiatry*, 45(1), 84–108. <a href="https://doi.org/10.1046/j.0021-9630.2003.00308.x">https://doi.org/10.1046/j.0021-9630.2003.00308.x</a>
- Hogg, M. A., & Vaughan, G. M. (2010). Essentials of social psychology. Pearson Education.
- Hostetter, S. J. (2003). *Institutional culture in the Bible college and its relationship to organizational members' values* [Unpublished doctoral dissertation]. Trinity International University.
- Kalaycı, Ş. (2010). SPSS uygulamalı çok değişkenli istatistik teknikleri [SPSS applied multivariate statistical techniques]. Asil.
- Karaman, N. N., & Dinçer, Ç. (2020). Okul öncesi dönem çocuklarının prososyal davranışlarının bazı değişkenler açısından incelenmesi [An analysis of several variables that affect preschool children's prosocial behavior]. *Journal of Early Childhood Studies*, 4(3), 639–664. <a href="https://doi.org/10.24130/eccd-jecs.1967202043236">https://doi.org/10.24130/eccd-jecs.1967202043236</a>
- Karasar, N. (2012). *Bilimsel araştırma yöntemi* [Scientific research method] (23rd ed.). Nobel Akademik.

- Kienbaum, J., Volland, C., & Ulich, D. (2001). Sympathy in the context of mother–child and teacher–child relationships. *International Journal of Behavioral Development*, *25*(4), 302–309. <a href="https://doi.org/10.1080/01650250143000076">https://doi.org/10.1080/01650250143000076</a>
- 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. <a href="https://doi.org/10.1037/0012-1649.42.5.771">https://doi.org/10.1037/0012-1649.42.5.771</a>
- Köster, M., Ohmer, X., Nguyen, T. D., & Kärtner, J. (2016). Infants understand others' needs. *Psychological Science*, *27*(4), 542–548. <a href="https://doi.org/10.1177/0956797615627426">https://doi.org/10.1177/0956797615627426</a>
- Köybaşı, F. (2016). Öğretmen adaylarının bireysel değer yönelimleri ile akademik motivasyonları arasındaki ilişkinin incelenmesi [An examination of the relationship between teacher candidates' ındividual value trends and academic motivations]. *Inonu University Journal of the Graduate School of Education*, *3*(6), 34–44. <a href="https://dergipark.org.tr/en/pub/inujgse/issue/27483/296293">https://dergipark.org.tr/en/pub/inujgse/issue/27483/296293</a>
- Kumru, A., Carlo, G., & Edwards, C. P. (2004). Olumlu sosyal davranışların ilişkisel, kültürel, bilişsel ve duyuşsal bazı değişkenlerle ilişkisi [Relational, cultural, cognitive, and affective predictors of prosocial behaviors]. *Turkish Journal of Psychology, 19*(54), 109–128. http://digitalcommons.unl.edu/famconfacpub/129
- Kuşdil, M. E., & Kâğıtçıbaşı, Ç. (2000). Türk öğretmenlerin değer yönelimleri ve Schwarz Değer Kuramı [Value orientations of Turkish teachers and Schwartz's theory of values]. *Turkish Journal of Psychology*, 15(45), 59–80. http://hdl.handle.net/11452/20898
- Lipsitt, N. (1993). Development of empathy in children: The contribution of maternal empathy and communication style [Unpublished doctoral dissertation]. Case Western Reserve University.
- Liu, Q., & Wang, Z. (2024). Intergenerational pathways linking mothers' childhood traumatic experiences and preschoolers' prosocial behaviors. *Early Education and Development*, 1–16. <a href="https://doi.org/10.1080/10409289.2024.2404820">https://doi.org/10.1080/10409289.2024.2404820</a>
- Malti, T., & Dys, S. P. (2018). From being nice to being kind: Development of prosocial behaviors. *Current Opinion in Psychology*, 20, 45–49. https://doi.org/10.1016/j.copsyc.2017.07.036
- McTaggart, V., McGill, R., & Stephens, S. (2020). An examination of the development of children's social and emotional competencies in pre-school. *International Journal of Early Years Education*, 192(12), 1–19. <a href="https://doi.org/10.1080/09669760.2020.1865134">https://doi.org/10.1080/09669760.2020.1865134</a>
- Moors, G. (1996). The valued child: The effect of values on the transition to motherhood [Research report]. Stockholms Universitet.

- Murphy, E. F., Jr., Snow, W. A., Carson, P., & Zigarmi, D. (1997). Values, sex differences and psychological androgyny. *International Journal of Value-Based Management*, *10*, 69–99. <a href="https://doi.org/10.1023/A:1007721420898">https://doi.org/10.1023/A:1007721420898</a>
- Newton, E. K., Laible, D., Carlo, G., Steele, J. S., & McGinley, M. (2014). Do sensitive parents foster kind children, or vice versa? Bidirectional influences between children's prosocial behavior and parental sensitivity. *Developmental Psychology*, 50(6), 1808–1816. https://doi.org/10.1037/a0036495
- Öngören, S. (2022). Prosocial behaviors of students attending pre-school education institutions. *International Online Journal of Educational Sciences, 14*(1), 112–124. https://iojes.net/?mod=makale\_tr\_ozet&makale\_id=51074
- Özyürek, A. (2015). Okul öncesi çocukların sosyal beceri düzeyleri ile anne tutumları arasındaki ilişkinin incelenmesi [An examination of the relation between social skills of preschool children and mother's child-rearing attitudes]. *Milli Eğitim Dergisi [Journal of National Education]*, 45(206), 106–120. <a href="https://dergipark.org.tr/en/pub/milliegitim/issue/36144/406112">https://dergipark.org.tr/en/pub/milliegitim/issue/36144/406112</a>
- Paulus, M. (2018). The multidimensional nature of early prosocial behavior: A motivational perspective. *Current Opinion in Psychology*, 20, 111–116. <a href="https://doi.org/10.1016/j.copsyc.2017.09.003">https://doi.org/10.1016/j.copsyc.2017.09.003</a>
- Parks-Leduc, L., Feldman, G., & Bardi, A. (2015). Personality traits and personal values: A meta-analysis. *Personality and Social Psychology Review, 19*(1), 3–29. https://doi.org/10.1177/1088868314538548
- Parlar, H., & Cansoy, R. (2016). Öğretmen adaylarının öğretmenlik mesleğine yönelik tutumlarının bir yordayıcısı olarak bireysel değerler [Personal values as a predictor of prospective teachers' attitude towards teaching profession]. *Marmara University Atatürk Faculty of Education Journal of Educational Sciences*, 44(44), 125–142. <a href="https://doi.org/10.15285/maruaebd.286490">https://doi.org/10.15285/maruaebd.286490</a>
- Rokeach, M. (1973). The nature of human values. Free Press.
- Roy, A. (2003). Factor analysis and initial validation of the personal values inventory. [Doctoral dissertation, Tennessee State University]. ETD Collection for Tennessee State University. <a href="https://digitalscholarship.tnstate.edu/dissertations/AAI3107463">https://digitalscholarship.tnstate.edu/dissertations/AAI3107463</a>
- Salerni, N., & Caprin, C. (2022). Prosocial behavior in preschoolers: Effects of early socialization experiences with peers. *Frontiers in Psychology, 13*, Article 840080. <a href="https://doi.org/10.3389/fpsyg.2022.840080">https://doi.org/10.3389/fpsyg.2022.840080</a>

- Salıkutluk, Y. Z. (2017). Çocukların prososyal davranışlarının ebeveynlerin prososyal davranışları ve çocuk sevme eğilimleriyle ilişkisi [The relations of children's prosocial behaviors to parents' prosocial behaviors and tendency to liking children; Unpublished master's thesis]. Akdeniz University.
- San Bayhan, P., & Artan, İ. (2011). *Çocuk gelişimi ve eğitimi* [Child development and education]. Morpa Kültür.
- Saracaloğlu, A. S., & Gerçeker, C. S. (2018). Relationship between individual social responsibilities and personal values of teacher candidates. *International Education Studies*, *11*(10), 64–77. https://doi.org/10.5539/ies.v11n10p64
- Saygılı, N., & Akkaynak, M. (2021). 60–72 aylık çocukların ahlaki yargı düzeyleri ile prososyal davranışları arasındaki ilişkinin incelenmesi [Investigation of the relationship between moral judgment levels and prosocial behaviors of 60- to 72-month-old children]. *Academic Journal of History and Idea*, 8(1), 339–358. <a href="https://doi.org/10.46868/atdd.95">https://doi.org/10.46868/atdd.95</a>
- Schroeder, D. A., & Graziano, W. G. (2015). The field of prosocial behavior: An introduction and overview. In D. A. Schroeder & W. G. Graziano (Ed.) *The Oxford handbook of prosocial behavior* (pp. 3–34). Oxford University Press. <a href="https://doi.org/10.1093/oxfordhb/9780195399813.013.32">https://doi.org/10.1093/oxfordhb/9780195399813.013.32</a>
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In M. P. Zanna (Ed.), *Advances in experimental social psychology*, (Vol. 25, pp. 1–65). Academic Press. <a href="https://doi.org/10.1016/S0065-2601(08)60281-6">https://doi.org/10.1016/S0065-2601(08)60281-6</a>
- Schwartz, S. H. (1994). Are there universal aspects in the structure and contents of human values? *Journal of Social Issues*, 50(4), 19–45. <a href="https://doi.org/10.1111/j.1540-4560.1994.tb01196.x">https://doi.org/10.1111/j.1540-4560.1994.tb01196.x</a>
- Schwartz, S. H. (2006). Les valeurs de base de la personne: Théorie, mesures et applications [The basic values of the person: Theory, measurements and applications]. *Revue française de sociologie*, 47(4), 929–968. <a href="https://doi.org/10.3917/rfs.474.0929">https://doi.org/10.3917/rfs.474.0929</a>
- Schwartz, S. H., & Bilsky, W. (1987). Toward a universal psychological structure of human values. *Journal of Personality and Social Psychology*, *53*(3), 550–562. https://doi.org/10.1037/0022-3514.53.3.550
- Scrimgeour, M. B., Blandon, A. Y., Stifter, C. A., & Buss, K. A. (2013). Cooperative coparenting moderates the association between parenting practices and children's prosocial behavior. *Journal of Family Psychology*, 27(3), 506–511. <a href="https://doi.org/10.1037/a0032893">https://doi.org/10.1037/a0032893</a>

- Sert Ağır, M. (2017). Acquisition of prosocial behaviors for social adjustment in classroom: Group guidance example. *Istanbul Journal of Social Sciences*, 18, 1–32. <a href="http://www.istjss.org/Article/161-acquisition-of-prosocial-behaviors-for-social-adjustment-in-classroom-group-guidance-example">http://www.istjss.org/Article/161-acquisition-of-prosocial-behaviors-for-social-adjustment-in-classroom-group-guidance-example</a>
- Singelis, T. M., Triandis, H. C., Bhawuk, D. P. S., & Gelfand, M. J. (1995). Horizontal and vertical dimensions of individualism and collectivism: A theoretical and measurement refinement. *Cross-Cultural Research*, *29*(3), 240–275. https://doi.org/10.1177/106939719502900302
- Sondhi, V., Beniwal, A., & Ganotra, S. (2021). Understanding the relationship between prosocial behaviours and parenting styles in young adults. *Indian Journal of Positive Psychology*, 12(2), 180–185.
- Sun, J., Liu, J., Liu, M., Feng, Y., & Li, Y. (2024). Maternal warmth and prosocial behaviors among Chinese preschool children: The roles of social competence sibling presence. *Early Education and Development*, *35*(4), 691–703. https://doi.org/10.1080/10409289.2023.2200338
- Svetlova, M., Nichols, S. R. & Brownell, C. A. (2010). Toddlers' prosocial behavior: From instrumental to empathic to altruistic helping. *Child Development*, 81(6), 1814–1827. <a href="https://doi.org/10.1111/j.1467-8624.2010.01512.x">https://doi.org/10.1111/j.1467-8624.2010.01512.x</a>
- Şahin, M. (2021). Değerlerin tanımı ve sınıflandırılması [Definition and classification of values]. In T. Kamer (Ed.) *Toplum ve kültür bağlamında karakter ve değerler eğitimi* [Character and values education in the context of society and culture] (pp. 41–63). Pegem Akademi.
- Tezcan, M. (2018). *Değerler eğitimi: Sosyolojik yaklaşım* [Values education: Sociological approach]. Anı.
- Tsomokos, D. I., & Flouri, E. (2024). The impact of the indoor home environment on children's prosocial behaviour. *Journal of Environmental Psychology*, 98, 102405. https://doi.org/10.1016/j.jenvp.2024.102405
- Ulusoy, K., & Dilmaç, B. (2020). *Değerler eğitimi* [Values education] (6th ed.). Pegem Akademi.
- Uzmen, S., & Mağden, D. (2002). Okulöncesi eğitim kurumlarına devam eden altı yaş çocuklarının prososyal davranışlarının resimli çocuk kitapları ile desteklenmesi [Enhancing six-year-old preschool children's prosocial behaviors by using picture books]. *Marmara University Atatürk Education Faculty Journal of Educational Sciences*, 15(15), 193–212. <a href="https://dergipark.org.tr/tr/pub/maruaebd/issue/371/2547">https://dergipark.org.tr/tr/pub/maruaebd/issue/371/2547</a>

- Williams, K. E., & Berthelsen, D. (2017). The development of prosocial behaviour in early childhood: Contributions of early parenting and self-regulation. *International Journal of Early Childhood*, 49, 73–94. <a href="https://doi.org/10.1007/s13158-017-0185-5">https://doi.org/10.1007/s13158-017-0185-5</a>
- Wong, T. K. Y., Konishi, C., & Kong, X. (2021). Parenting and prosocial behaviors: A meta-analysis. *Social Development*, 30(2), 343–373. <a href="https://doi.org/10.1111/sode.12481">https://doi.org/10.1111/sode.12481</a>
- Wu, Y. E., & Hong, W. (2022). Neural basis of prosocial behavior. *Trends in Neurosciences*, 45(10), 749–762. https://doi.org/10.1016/j.tins.2022.06.008
- 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
- Yazıcı, Z., & Salıkutluk, Y. Z., (2018). Sosyal, beşeri ve idari bilimler'de akademik araştırmalar 3 [Academic research in social, human, and administrative sciences 3]. In A. Kodaman & E. İ. Işıklı (Eds.), *Ebeveynlerin prososyal davranışlarıyla çocukların pro-sosyal davranışları arasındaki ilişki* [The relationship between the prosocial behavior of parents and the prosocial behaviors of children] (pp. 411–430). Gece Library.
- Yiğittir, S. (2012). İlköğretim 5.sınıf öğrencilerinin değer yönelimlerinin rokeach ve schwartz değer sınıflandırmasına göre değerlendirilmesi [Evaluation of 5th grade primary school students' value tendencies according to the value classifications of Rokeach and Schwartz]. *Dicle University Journal of Ziya Gokalp Education Faculty, 19*, 1–15. <a href="https://dergipark.org.tr/tr/pub/zgefd/issue/47945/606592">https://dergipark.org.tr/tr/pub/zgefd/issue/47945/606592</a>
- Yılmaz, K. (2013). The relationship between personal values and religious tendency among Turkish university students. *Balikesir University the Journal of Social Sciences Institute*, *16*(29), 129–146.