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Children's Evaluations About Lying for Prosocial and Antisocial Reasons

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Abstract: Children's reasoning and evaluations about lying have been the subject of much research during the past two decades. However, these studies are seen to have been carried out in a limited number of countries. Therefore, the present study examines the evaluations of Turkish children between the ages of 4 and 8 regarding prosocial and antisocial lies. The study uses picture cards to present the children with vignettes in which a protagonist lies for their own or others' benefit. The results show that children found telling lies to be more acceptable in the context of prosocial stories, with prosocial lies being found to be more acceptable among 8-year-old children compared to 4- and 5-year-old children. Due to this research having been pioneering in a different country, the study discusses the findings through intracultural and intercultural factors.

Keywords: Prosocial lie, antisocial lie, evaluation of lying, moral development, moral reasoning

Öz: Çocukların yalana ilişkin muhakeme ve değerlendirmeleri, son yirmi yılda pek çok araştırmanın konusu olmuştur. Ancak bu çalışmaların sınırlı sayıdaki ülkelerde gerçekleştiği görülmektedir. Bu nedenle şimdiki çalışmada 4-8 yaşları arasındaki Türk çocuklarının prososyal ve antisosyal yalanlara ilişkin değerlendirmeleri incelenmiştir. Çocukların yalana ilişkin değerlendirmelerinin ölçümünde, prososyal ve antisosyal içerikli yalan söylenen hikâyeler resimli kartlarla çocuklara anlatılmıştır. Sonuçlar, çocukların prososyal niyetle yalan söylenen öykülerde yalan söyleme davranışlarını daha kabul edilebilir bulduklarını ve bu tür prososyal yalanların 8 yaşındaki çocuklarda 4 ve 5 yaşındaki çocuklara göre daha kabul edilebilir bulunduğunu göstermiştir. Mevcut araştırma batılı toplumlar dışında gerçekleştirilmesi açısından öncü olduğu için bulgular kültür içi ve kültürler arası faktörler üzerinden tartışılmıştır.

Anahtar Kelimeler: Prososyal yalan, antisosyal yalan, yalana ilişkin değerlendirmeler, ahlaki gelişim, ahlaki muhakeme

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Introduction

Although generally dominant views about lying are found such as it corrupts society, damages social relations, and to restrict harmony between people, such behaviors can still be encountered in all societies. In fact, people are often opposed to lying and view themselves as honest; however, examples from daily life and research findings have revealed most people to lie more than they think they do (DePaulo et al., 1996).

The fact that people often tell lies may suggest that lying is a part of human social nature and that social functioning may also be restricted in its absence. When examining the literature, not only adults but children as well are seen to evaluate lies according to type (DePaulo et al., 2004; Evans & Lee, 2013). Some research has distinguished lying in its most general forms to involve antisocial lies that are told to protect one's self-interests (Lee, 2013) and prosocial lies that are told to protect others (Sierskma et al., 2019).

While many studies are found regarding dishonesty in adults, the number of studies focusing on when children start to lie and how they deceive others has only been addressed in studies more recently (Evans & Lee, 2013). These studies show that children can tell lies and intend to deceive others in parallel with their development of theory-of-mind and executive functioning abilities (Evans & Lee, 2013; Polak & Harris, 1999).

The focus of some studies conducted with children on lying has covered children's moral and conceptual understanding of lying (i.e., their judgments and evaluations about lying). The results obtained in empirical studies are consistent with the argument that children develop an understanding of lying from an early age (Eskritt et al., 2017). According to researchers, even 3-year-old children can notice misstatements and rule violations during communication. Children evaluate others according to their moral behaviors; they may also view intentional moral violations negatively, refer to individuals and even inanimate objects as being good, and reach judgments about the need to punish those who act antisocially (Killen et al., 2011; Van de Vondervoort & Hamlin, 2017; Wynn & Bloom, 2014).

The literature also shows that around the age of four, children understand that all lies are not equal and that lies told for the benefit of another can be judged more positively than lies that benefit the person telling them. As such, preschool children are able to be discriminating in their understanding of the types of lies. While studying evaluations about lying, research has focused on how participants reason about scenarios involving lying, whether they find lying acceptable, how they evaluate prosocial and antisocial lies, and their attitudes toward lying in certain hypothetical situations (Fu et al., 2001; Lee et al., 2001; Xu et al., 2009; see also

Guo & Rochat, 2022). One study conducted in this framework (Bussey, 1999) found 4-year-old children to evaluate prosocial lies more positively than antisocial lies. Bussey explained this result with the justification that children do not encounter negative reactions from their environment in terms of lies told to resolve negative feelings about others. Lavoie et al.'s (2017) study found a similar result. Younger children have been observed to evaluate lying to be wrong but to start to consider some lying to be acceptable in regard to the context and purpose as they get older. In another study about prosocial lies, Walper and Valtin (1992) concluded 6- and 8-year-old children to evaluate prosocial lies negatively and only 10-year-old children to evaluate such lies positively.

Accordingly, children's evaluation of lying behaviors are actually seen to shift from considering it to be inappropriate to considering that more acceptable forms of lying exist. One reason for this may be the higher level of reasoning in children's evaluations of lying, as well as their cognitive development regarding lie-telling behaviors. The idea that one's understanding of the mental state forms the basis of how individuals' moral judgments develop actually came from Kohlberg (1975), who can be considered one of the pioneers in this field. Children's ability to understand different minds and perspectives taken has an important function in their social lives. With these abilities, children can differentiate between accidental and purposeful behaviors and desires and also distinguish between truth and lies. Due to children's role in making sense of the social world and human interactions, as well as their understanding of their state of mind, being so critical (Mull & Evans 2010), the representation of different minds in the context of lying seems important in predicting and understanding the emerging behavior. From the age of 4, children begin to understand that they can potentially manipulate the mental states of others and even deliberately deceive others. Appropriate responses also begin to appear likely to emerge during social interactions by being aware of others' mental states. Understanding others' intentions from behavioral cues by empathizing with others is important in showing how successful people can be in predicting their future behaviors, thoughts, and feelings and in mitigating socially stressful or negative situations. Consistent with the explanations from the theory of mind literature, the participant group in this study starts at 4 years of age.

The level of parental education is also known to contribute to children's theory of mind and cognitive skills (Cutting & Dunn, 1999). The quality of communication between parents and children positively affects both language development and theory of mind abilities. Research has shown highly educated parents to be more knowledgeable about child development, communicate more effectively with their children, and

provide them with higher levels of cognitive stimulation and emotional support (Davis & Kean, 2005). Kağıtçıbaşı (1989) stated that highly educated mothers who have greater vocabulary and verbal communication skills use explanation-based child-rearing methods that support their child's cognitive, social, and language development more than parenting based on teaching by showing. Parental education level has also been a major demographic variable examined by research aimed at understanding the contexts of child development (Duncan & Magnuson, 2003). Therefore, the current study also examines the effect of parental education level on how children evaluate lying.

Another reason for shifting the reasonability of lying to an acceptable form is likely to involve a reflection of their evolving understanding of social situations. The fact that sociocultural norms have become more effective in this behavioral and perceptual change is also a kind of explanation for why prosocial lies that look out for the well-being of others are more acceptable. Consistent with this approach, many of the studies examining children's evaluations of lying have focused on cultural differences. For example, Lee et al.'s (1997) study examined Canadian and Chinese children according to their categorization and evaluations about telling the truth and prosocial lying. Their study told children stories about lying that included prosocial behaviors such as helping other people and avoiding getting hurt. Their results showed Chinese children to evaluate prosocial lies more positively than Canadians. Another study by Mojdehi et al. (2022) examined 5- to 11-year-old Iranian and Canadian children's moral judgments about lying and found Iranian children to evaluate the protagonist's lie more positively in scenarios involving politeness compared to their Canadian peers. These results indicate that people do not have universal moral values about lying or telling the truth. As such, the level of acceptability of lying can be said to likely vary from culture to culture.

In Türkiye with its completely different social dynamics, however, how children evaluate different types of lying is unknown. Collectivistic and individualistic values are enmeshed with each other in Türkiye (Kagitcibasi & Ataca, 2005), and given the instability of cultural values and attitudes in Türkiye, evaluations regarding moral situations and lying can differ. This situation prevents one from putting forward a clear view on how to evaluate lies told for prosocial reasons and lies told for antisocial reasons. The lack of studies on children in Türkiye also limits the interpretation of cultural differences and similarities regarding how lying is evaluated. Aydın et al.'s (2022) recent research on this subject studied children between the ages of 9 to 13 years old. Considering that children's conceptual understanding of lying develops from an early age, how younger children handle this issue still remains uncertain in Türkiye. In addition, most of the studies conducted in Western societies also seem to have focused on the middle childhood period (Lee et al., 1997; Lee et al., 2001;

Mojdehi et al., 2022). The literature shows a limited number of studies to have been carried out on preschool children's judgments about lying, and how children evaluate lying is also unknown in Türkiye, which has a dominant autonomous-relational social structure (Kagitcibasi, 2013). The answers to this intriguing question clearly need to be explained. Therefore, this study examines 4- to 8-year-old Turkish children's evaluations of prosocial and antisocial lies and also investigates whether the level of children's acceptance of prosocial and antisocial lies differs significantly according to age. The study will also examine whether a significant difference exists regarding the acceptability of prosocial and antisocial lies in terms of gender, with the final aim being to examine whether a significant difference exists regarding the acceptability of prosocial and antisocial lies in terms of parental education levels.

Method

Participants

The study has 138 children from three different cities of Türkiye (Afyon, Ankara, and Konya) participating in the first stage. However, the study's analysis was carried out over 119 children (65 girls and 54 boys) due to a total of 19 children being unable to distinguish between lies and truth. The children's ages range from 4 to 8 years (M_{age} = 76.33 months). When considering the number of participants by age group, 28 of the children are in the 4-year-old group, 22 in the 5-year-old group, 22 in the 6-year-old group, 22 in the 7-year-old group, and 25 in the 8-year-old group. In terms of educational level, 29 (24.4%) mothers are primary school graduates, 31 (26.1%) are high school graduates, 11 (9.2%) have an associate degree, and 35 (29.4%) have undergraduate degrees.

Materials

Children's Evaluations About Lying

The study uses the Reasonability of Prosocial Lie Test-Child Form developed by Aydın et al. (2022) to measure how children evaluate prosocial and antisocial lies. This test was previously used over a Turkish sample to measure how children aged 9-13 evaluate lying. Thus, in order for the current study to use this form over a sample of preschool children, language simplifications were made to the stories. The stories were also supported with picture cards based on the stories in the test (see Appendices A & B). Reducing the language load in the stories and supporting them with picture cards were considered to be more appropriate for this age group so as to facilitate their ability to comprehend the stories.

This test has seven stories that include different lying behaviors, four of which are self-directed (antisocial) while three involve other-oriented (prosocial) lying. The stories with prosocial content are referred to here as the Gift, Collaboration, and Allergy stories. In each of these stories, the protagonist tells a lie for the benefit of others, and the children are to evaluate whether the lie is acceptable or not. The stories about lying with antisocial content are referred to as the Telephone, Trash, Competition, and Water stories. In each of these stories, the protagonists tell a lie for their own benefit, and the children are to evaluate whether the lie is acceptable or not.

In the original study, Aydın et al. (2022) used scenarios in which the protagonists could make a choice in such a way that a cost would accrue to the other party or to themselves, leaving them in a dilemma about telling the truth or lying. However, because the participants in the current study are much younger, the attempt was made to alleviate the language load and free the stories of the dilemma aspect. Moreover, Aydın et al. reported that ending the story with honesty or a lie did not affect the results of the children's evaluations. Therefore, the present study has the stories end with the protagonist lying. After each story is told to the children with the picture cards, the children are asked two control questions to see if they understood the event in the story. The children are then asked a question about the acceptability of the protagonist's behavior, rating the acceptability over a 3-point Likert-type scale (1 = not acceptable, 3 = acceptable). This 3-point scale was preferred over the original 5-point Likert-type scale so as to avoid having the younger children encounter problems in rating the questions; the options are also supported with images corresponding to different emojis (1 = sad facial expression; 2 = indecisive facial expression; 3 = approving facial expression).

Obtaining a higher score on the test indicates the child to have a higher level of acceptability regarding lying. When presenting the stories, attention was paid to have the gender of the protagonist be the same as the gender of the participant child. Accordingly, both the forms and pictures for the test were created separately for boys and girls. The content of the stories remained the same for both sets of the test's forms and pictures, with the only differences being the name of the protagonist and the gender shown on the cards.

Procedure

Permission was obtained to conduct the study from the ethics committee of Selcuk University Faculty of Letters with Decision No. 2022/93. Afterward, kindergartens affiliated with universities as well as private kindergartens were contacted. Informed consent forms and demographic information forms were distributed to the mothers

through the institutions. The study was then carried out in an empty classroom within the kindergarten with the children who participated in the study. At the same time, children were given brief information about the application. During this phase, children who did not want to participate were not included in the study, regardless of if their parents had given permission. The application was carried out face-to-face with the children and took approximately 15-20 minutes for each child.

Results

Firstly, descriptive statistics are given regarding how the children evaluated the different stories, after which construct validity analyses were carried out to determine the validity of the measurement tool over this age group. Afterwards, the analysis results are presented with regard to whether or not children's evaluations of lying differ according to age, gender, and mother's education level. The study also examines the mean scores of the children's evaluation about the lying stories. Accordingly, the children were observed to find prosocial lies to be more acceptable (Allergy, Gift, and Collaboration stories, respectively) compared to antisocial lies. The results are given in Table 1.

Table 1.

Means and Standard Deviations for the Stories in the Contexts of Prosocial and Antisocial Lies (Item Analysis)

Stories about Lying	M	SD
Gift[1]	1.76	.84
Collaboration[1]	1.63	.84
Allergy[1]	2.02	.91
Telephone[2]	1.02	.20
Trash[2]	1.01	.09
Competetion[2]	1.01	.09
Water[2]	1.01	.09
Prosocial Lies	1.80	.72
Antisocial Lies	1.01	.07

Note: [1] Involves a prosocial lie; [2] Involves an antisocial lie. Also, the italicized headings of *Prosocial Lies* and *Antisocial Lies* show the average scores for each of the two types of stories (i.e., prosocial and antisocial).

For the construct validity, the study first tests the suitability of the data for factor analysis. The Kaiser-Meyer-Olkin test for sampling adequacy was applied for this purpose and found to be .59, and Bartlett's test of sphericity was found to be significant. The next step of the study examined communalities, and the model proposed to remove two stories (i.e., the Trash and Water stories). After removing these stories, the analysis was repeated, and the data were determined to be suitable for factor analysis. Next, a principal component analysis was performed using the varimax rotation technique. The results show the test to be gathered under two factors with eigenvalues greater than 1. These two factors were observed to explain 81.53% of the variance in the test scores. The analyses also showed the items in each factor to have loadings greater than .40, with none of the items to have loadings greater than .40 for more than one factor. No changes were made at this stage, as the model does not recommend discarding items. According to the results, the stories that evaluate lies told with prosocial intention were found to be loaded on the first factor and the antisocial lies told for self-benefit to be loaded on the second factor (see Table 2).

After the exploratory factor analysis, Cronbach's alpha values of internal consistency were examined for the test. The item-total correlations of the items in the test were observed to be greater than .20, and no need exists to remove any item. Cronbach's alpha as obtained for the overall test was measured as .67.

Table 2.

Factor Loadings

Stories about Lying	Factor 1	Factor 2
Collaboration[1]	.88	
Gift[1]	.84	
Allergy[1]	.80	
Telephone[2]		.97
Competetion[2]		.97

Note: [1] Involves a prosocial lie; [2] Involves an antisocial lie.

After the validity and reliability analyses, an independent sample t-test and analysis of variance (ANOVA) were performed to see whether age, gender, or education level of the children's mothers had an effect on the children's evaluation about lying. In this context, ANOVA was carried out first to examine whether children's evaluations about prosocial lies differ according to age or not, and the

results show significant differences to be found for the Gift story ($F_{(4, 114)} = 3.74$, $p < .01$). Tukey's test was used to look at the differences according to age group and revealed the 8-year-old children to find this prosocial lie to be more acceptable than the 5- and 7-year-old children. ANOVA was then carried out to test whether significant differences exist according to age for the Collaboration story, another prosocial lie story. The results show no significant difference to exist regarding age ($F_{(4, 114)} = 1.15$, $p > .05$). The ANOVA results for the last prosocial lie story (i.e., the Allergy story) showed significant differences to occur according to age group ($F_{(4, 114)} = 4.44$, $p < .01$). Tukey's test was used to look at the differences according to age group and revealed 8-year-old children to find this prosocial lie to be more acceptable compared to the 4- and 5-year-old children. Finally, when taking into account the total scores from the prosocial lie stories, significant differences were found regarding age ($F_{(4, 114)} = 3.41$, $p < .05$), with Tukey's Test indicating the 8-year-old children to generally find prosocial lies to be more acceptable compared to the 4- and 5-year-old children.

ANOVA was similarly performed to test whether differences were found regarding children's evaluations about antisocial lies in terms of age. According to the results from the analysis, no significant differences were found with respect to age when evaluating the antisocial lie stories of Telephone ($F_{(4, 114)} = .88$, $p > .05$) and Competition ($F_{(4, 114)} = 1.10$, $p > .05$). The means and standard deviations obtained from the stories according to age group are presented in Table 3.

Table 3.

Means and Standard Deviations for Prosocial and Antisocial Lie Stories According to Age

	Age 4		Age 5		Age 6		Age 7		Age 8	
Stories about Lying	M	SD	M	SD	M	SD	M	SD	M	SD
Gift[1]	1.68	.83	1.50	.58	1.79	.83	1.54	.83	2.28	.89
Collaboration[1]	1.41	.73	1.58	.77	1.79	.83	1.50	.83	1.84	.98
Allergy[1]	1.63	.78	1.66	.81	2.04	.90	2.21	.93	2.52	.87
Telephone[2]	1.09	.42	1.04	.20	1.00	0	1.00	0	1.00	0
Competetion[2]	1.04	.21	1.00	0	1.00	0	1.00	0	1.00	0

Note: [1] Involves a prosocial lie; [2] Involves an antisocial lie.

An independent samples t-test analysis was conducted to examine whether children's evaluations about prosocial lying differ by gender. According to the results from the analysis, no significant differences were observed in the girls' and boys' scores regarding their evaluations of the Gift ($t_{(117)} = -0.06$, $p > .05$), Collaboration

($t_{(117)}$ = -0.88, p > .05), or Allergy ($t_{(117)}$ = -1.28, p > .05) stories about prosocial lies. Similarly, the results from the independent samples t-test analysis found no significant differences to have occurred in terms of gender for the children's evaluations about the Telephone ($t_{(117)}$= -0.32, p > .05) and Competition ($t_{(117)}$ = -0.91, p > .05) stories that concern antisocial lies. The means and standard deviations for the boys' and girls' evaluations about the stories are given in Table 4.

Table 4.

Means and Standard Deviations for the Prosocial and Antisocial Lie Stories According to Gender

	Boys		Girls	
Stories of Lying	M	SD	M	SD
Gift[1]	1.76	.75	1.77	.91
Collaboration[1]	1.55	.79	1.69	.88
Allergy[1]	1.90	.87	2.12	.94
Telephone[2]	1.02	.13	1.03	.24
Competetion[2]	1.00	0	1.01	.12

Note: [1] Involves a prosocial lie; [2] Involves an antisocial lie.

Finally, ANOVA was conducted to examine whether the children's evaluations about lying differ in terms of their mother's education level. The results show the acceptability of lying to differ significantly according to mother's education level for the Gift story ($F_{(4, 114)}$ = 6.35, p < .001), which involves a prosocial lie. Tukey's test showed the children of mothers with a graduate, undergraduate, or associate degree educational level to find this type of prosocial lie to be more acceptable compared to the children of mothers with just a primary school education level. ANOVA was then conducted to test whether significant differences were found for the Collaboration story in terms of the education level of the children's mothers. The ANOVA results show significant differences to exist for this story ($F_{(4, 114)}$ = 6.53, p < .001). Accordingly, the children of mothers with a graduate, undergraduate, or associate degree educational level were observed to find this type of prosocial lie to be more acceptable compared to the children of mothers with just an elementary school education level. ANOVA was then conducted to test whether significant differences exist in terms of the education level of the children's mothers for the Allergy story. The ANOVA results showed significant differences to exist for this story ($F_{(4, 114)}$ = 3.51, p < .05). Tukey's test revealed the children of mothers with an

associate degree educational level to find this prosocial lie to be more acceptable than those whose mothers are high school graduates. Finally, when taking into account the overall scores for the prosocial lie stories, the ANOVA results indicate significant differences to occur regarding the educational level of the children's mothers ($F_{(4, 114)} = 7.45$, $p < .001$). According to Tukey's test results, the children of mothers with graduate, undergraduate, and associate degree educational levels were observed to find prosocial lies to be more acceptable compared to the children of mothers with just an elementary school education level. No significant differences were found when examining the results regarding the evaluations about antisocial lies in terms of the education level of the children's mothers. The results are presented in Table 5.

Table 5.

Means and Standard Deviations for the Prosocial and Antisocial Lie Stories According to Mother's Education Level

	Primary School		High School		Associate		Under-graduate		Graduate	
Stories of Lying	M	SD	M	SD	M	SD	M	SD	M	SD
Gift[1]	1.24	.57	1.67	.83	2.36	.67	1.94	.83	2.15	.90
Collaboration[1]	1.13	.51	1.48	.85	2.18	.87	1.80	.75	2.15	.98
Allergy[1]	1.79	.94	1.71	.90	2.63	.50	2.20	.86	2.30	.94
Telephone[2]	1.07	.37	1.00	0	1.00	0	1.02	.17	1.00	0
Competetion[2]	1.03	.18	1.00	0	1.00	0	1.00	0	1.00	0

Note: [1] Involves a prosocial lie; [2] Involves an antisocial lie.

Discussion

This study aimed to examine how 4- to 8-year-old children in Türkiye evaluate prosocial and antisocial lies and to find out whether their evaluations about lying differ significantly regarding certain demographic variables. The children were observed to find prosocial lies to be more acceptable than antisocial lies. While no significant differences were observed regarding their evaluations about lying according to gender, the demographic variables of age and mother's education level were found to have some effect on the children's evaluations.

When first discussing the results in terms of which kind of lies are considered reasonable, the children can be said to evaluate prosocial lies more positively and

acceptably. This result is consistent with other studies in the literature (Bussey, 1999; Lavoie et al., 2017). The results indicate the children to not consider prosocial lies to be morally wrong because that they can increase kindness and others' psychological well-being. The underlying intention for lying and the results of lying also appear important in children's judgments about lies. As such, the children were seen to generally pay attention to the well-being of others in their evaluations.

In the antisocial lying scenarios applied in this study, the protagonists have motivations such as hiding a transgression or reflecting themselves to be better than they are. Thus, these protagonists tell lies for their own benefit in order to feel better. With regard to the children's evaluations of antisocial lies, they considered the lies to be less plausible, which is consistent with the literature (Aydın, 2022; Aydın et al., 2022). This result suggests that children evaluate these types of lies to be unacceptable, despite being for one's own benefit.

Another discussion can be made about younger age groups' low level of acceptability regarding lies with antisocial content. Some findings occur in the literature showing children in middle childhood and even older to find lies to be more acceptable even when told with individual motivations (e.g., Aydin, 2022; Aydin & Balim, 2021). When considering how the participant group's ages in the present study vary between 4 and 8 years, children with cognitive levels that are not suited for reasoning about lying may not evaluate antisocial lies to be acceptable because the individuals' relationships are not impaired and this type of lying has been transferred to them and normalized as a bad phenomenon. On the other hand, people tell lies more easily for their own benefit as they get older, and they use such lies more frequently in daily life. Thus, seeing them evaluate lying as being more acceptable in scenarios where their judgments about antisocial lies are being measured can appear normal.

The analysis of whether children's evaluations about the different types of lies differ significantly by age showed their evaluations about lies with antisocial content to not differ according to age. However, upon examining the findings in terms of prosocial lies, significant differences in terms of age were found with regard to the children's evaluations of the two different prosocial lie stories (the Gift and Allergy stories). Namely, 8-year-old children were observed to consider the prosocial lies in these stories to be more acceptable compared to the 4- and 5-year-old children. Different results are encountered when reviewing previous studies. For example, Mojdehi et al.'s (2022) study reported 5-, 7-, 9-, and 11-year-old children to show no age differences in terms of their evaluations on the acceptability of lies for politeness. Aydın's (2022) study conducted with 9- to 13-year-old children found no significant difference regarding the children's evaluations of prosocial lies in terms of age.

Demedardi et al.'s (2021) study of 144 children between the ages of 4-11 stated age to have a significant effect, similar to the current study. Another study conducted with 4- to 5-year-old preschool children (Vendetti et al., 2019) found 4-year-old children to not be able to significantly distinguish prosocial lies from antisocial lies, whereas five-year-olds were able to evaluate antisocial liars more negatively than prosocial liars. The participant groups in these two studies should be noted to both involve four-year-olds. When considering that the ages of the participants in the two studies from the previous paragraph coincide with post-middle childhood stages, the different findings obtained regarding age in the current study may result from the differences in children's cognitive and social development levels with respect to age, where the cognitive skills of children aged from 4 to 8 may not have a clear effect on the older (8-year-old) age group or be expected to make a difference in children aged 4-8. For example, 3- to 5-year-old children experience significant changes regarding their theory-of-mind abilities, and these abilities have a fundamental role in children's judgments about lies. "Understanding that others may have different mental states and intentions, and understanding that others' behavior would be affected by these states" (Astington & Jenkins, 1995, p. 151), has not yet fully developed in four-year-olds (Karakelle, 2012). In fact, the findings from Aydin's (2022) study on how children who are successful at understanding the mind and emotions find lying to be more acceptable also supports the current interpretation. Namely, 4- to 5-year-old children have more difficulty understanding that others may lie with good intentions, and therefore the fact that these children have lower levels of acceptability when evaluating prosocial lies can be considered to be an expected result.

Another conclusion from the present study is that the children's evaluations of prosocial and antisocial lies did not differ significantly in terms of gender. Similar results are also found when reviewing the literature (e.g., Demedardi et al., 2021). This result is reasonable for this age group, as they've not yet fully become involved in socialization processes. However, testing whether similar results can be achieved for older age groups where children interact more with their peers, teachers, and other systems in society is one of the questions that await answers in future research.

The findings on children's evaluation about lying differ according to the education level of their mothers. Aydın (2022) examined the evaluations of 9- to 13-year-old children about lying and reported children to find prosocial lies to be less acceptable in line with increases in their mother's education level (Aydin, 2022). However, the current study has found the opposite result. One possible interpretation in this regard may be that the reasoning skills of 4- to 8-year-old children, who are less adequate in terms of cognitive and social evaluations, have also developed based on their mother's education level. The children of mothers with higher education levels can be said to make more progress in various fields such as the qualified child-mother relationship

and language development (Umek et al., 2008). This indicates support from adults to possibly be important for young children's moral reasoning skills. Other factors may help explain these findings, such as children in the 9-13 age group being less impacted by their mother's education levels; their reasoning skills and cognitive capacities having reached a certain level, and their peer environment, whereas the reasoning skills of children in the preschool period are affected by parents' education levels and many other parent-related factors that promote children's reasoning skills (Walker & Taylor, 1991; Walker et al., 2000).

Regarding the effect of mother's education level, one more issue needs to be clarified based on the results. The reason why no significant difference was found in the Allergy story compared to the other prosocial lie stories may be due to the story's content. The children may have generally been indicated to approve of the lie in the Allergy story as physical discomfort may have been caused to someone else if a lie is not told with prosocial intent. The frequencies (see Table 1) also show this story to involve the most acceptable type of lie. In this respect, the effect of the education level of the children's mothers not being observable as it was in the other prosocial lie stories is a reasonable result.

Mentioning the cultural differences and similarities would be appropriate regarding the results obtained in the present study. In general, findings similar to previous studies can be said to have been reached regarding the differences in terms of age and gender (Bussey, 1999; Lavoie et al., 2017). One possible explanation for the similarities is that the study's participant group is young children. Similar results being found in different societies regarding this age group that has just begun socialization processes and for whom the school factor is not yet able to show its full effect can be considered reasonable. However, measuring parental socialization goals and the self-construal of children and parents are appropriate options for making definitive explanations on this issue. For example, Aydin et al.'s (2022) study with an older age group in Türkiye reported family processes to have an effect on children's evaluations about lying. Therefore, including such variables in future studies will facilitate explanations and enable more valid comparisons.

Some suggestions can be made as a result of the present study. When considering that studies examining children's evaluations about lies are limited in number and that the group included in the current study was examined for the first time in the Turkish sample, the need clearly exists for future studies on this subject. For example, cognitive skills are widely known to change significantly in early childhood, so the question of how theory-of-mind and moral reasoning abilities affect children's judgments about lies is worth examining. In addition, people try to preserve the

emotional state and well-being of others in prosocial lying. Therefore, social skills such as friendship relations, as well as the understanding of one's mental state are also likely to affect judgments about lying. Similarly, empathy and emotion understanding skills, which are critical for social-cognitive aspects, may also play an important role in the assessment of lies.

One of the factors that might affect people's judgments and evaluations about lying could be subjective well-being. Studies have shown a relationship to exist between subjective well-being and prosocial behaviors, with those who feel happy being found to engage in more prosocial behaviors (Thoits & Hewitt, 2001). One missing aspect in the literature involves the relationship between how one evaluates prosocial lies and their subjective well-being. When considering that taking action for the needs of another person plays an important role in the emergence of prosocial behaviors, the fact that the prosocial lie scenarios created in the current study are based on someone else's needs suggests that investigating prosocial behavior and prosocial lying through similar connections would be useful.

Familial factors can also be said to be effective as individual factors regarding evaluations about lying. Some studies occurred in the last few years that examined the relationships among the lying behaviors of older children, their judgments about lying, and familial factors (Aydın, 2022; Dykstra et al., 2019; Mojdehi et al., 2022), but limited results and explanations occurred regarding how these mechanisms work in preschool children. Revealing whether various factors such as parental socialization goals and parenting behaviors and styles influence children's assessments about lying may contribute to the literature.

Although this study has many unique aspects with regard to the participants' age group and method, it also has some limitations. First of all, due to the outbreak of the pandemic during the time of the research, schools and families preferred researchers to not contact children. This prevented the researcher from having access to a large number of participants. Although the number of participants for each age group was sufficient, describing the situation by reaching more participants and by considering the gender balance may be useful in future studies. Additionally, the fact that the participants were selected from a limited region of Türkiye may be considered another limitation that reduces the study's generalizability. This study selected participants from central Türkiye. However, due to even the western and eastern regions of Türkiye having different cultural tendencies, examining the differences between regions is suggested in terms of the acceptability of lying. Examining how children's evaluations about lying differ by including both metropolitan and smaller cities, as well as including groups

from different socioeconomic levels are other suggestions that could contribute to the literature.

In conclusion, despite having some limitations, the present study should be stated to have reserved many firsts. In summary, this study examined how the evaluations of children between the ages of 4-8 (i.e., who are in early and middle childhood) about lies being told with different intentions vary and found the children's evaluations of prosocial lies to be able to differ according to age and mother's education level. No effect from gender was also concluded to have occurred regarding the evaluations about prosocial lies. Children in this age group evaluated prosocial lies as being more acceptable than antisocial lies. Another important finding is that the demographic variables in the study did not have significant effects on how children evaluate antisocial lies.

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Appendices

A. An Example of a Scenario in the Prosocial Context

A friend of Aleyna *(Turkish female name)* bought a gift-book for her. Aleyna did not like this gift at all. Her friend asked Aleyna if she liked the gift.

Aleyna said she liked the gift.

Did Aleyna like the gift? *(Control Question 1)*

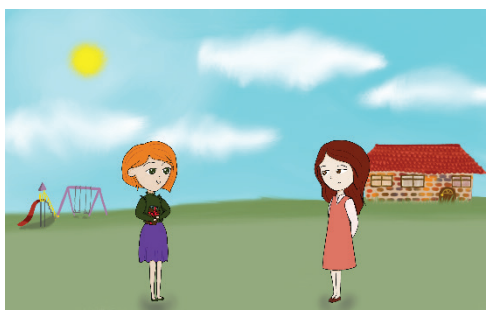
Did Aleyna tell the truth or lie? *(Control Question 2)*

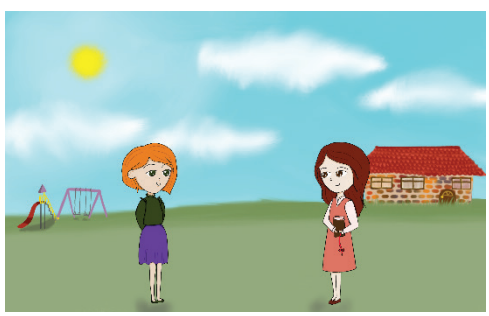
How acceptable do you think it is for Aleyna to lie?

1- Unacceptable

2- Undecided

3- Acceptable





Appendices

B. An Example of a Scenario in the Antisocial Context

Berke *(Turkish male name)* spent time on his friend's phone for a long time, and the phone's battery died. When his friend got his phone back, he saw that the battery had died earlier. His friend asked Berke if he had played with the phone.

Berke said he didn't spend time on the phone.

Did Berke spent time on the phone? *(Control Question 1)*

Did Berke told the truth or a lie? *(Control Question 2)*

How acceptable do you think it is for Berke to lie?

1- Unacceptable

2- Undecided

3- Acceptable