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# Interpersonal Problem-solving Skills Analysis: 5–8 Years Old Children's Different Variables

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#### Abstract

This study evaluates the interpersonal problem-solving abilities of 5-8 years old children in terms of different variables. The differentiation of interpersonal problem solving skills of 5-8 years old children attending preschool and 1<sup>st</sup> grade of primary school according to the demographic characteristics (child's gender, parents' age, parents' education, parents' occupation) was investigated. From among the quantitative research methods the survey model was employed. The research study group is composed of 5-8 years old children during the 2020-2021 school year in independent kindergarten, preschool and the first two grades of primary school, which are affiliated with the Directorate of National Education in Ercis District of Van-Turkey. The data of the research was collected by the "Personal Information Form" developed by the researcher and the "Child Interpersonal Relations and Attitudes Assessment (CIRAA)" developed by Holliman (2010) which was adapted to Turkish after being tested for validity and reliability. 452 children were subjected to the "Child Interpersonal Relations and Attitudes Assessment (CIRAA)" and "Personal Information Form" during the data collection process. Materials in the scale were directed to only one of the parents of 452 children and the answers given were marked. According to the research results, children's interpersonal problem-solving abilities differ significantly in terms of gender as a variable. It has been observed that the interpersonal problem-solving abilities of children differs significantly in terms of the occupation of the father, as well as the the age and education level of the mother. In subsequent studies, comparative studies are recommended, together with the measurement tools applied by children.

Key Words: Interpersonal problem solving skills, interpersonal relationships, early childhood education

#### Introduction

The word problem is a concept based on the Latin word "Problema." Its meaning is derived from the word proballo, which is "prominent obstacle." As a world, the word problem is used as "issue" in Arabic (Kalaycı, 2001). There are many different definitions of the term, problem. According to Dewey, a problem is, "Everything that confuses the human mind structure, challenges our minds, and puts belief into uncertainty." Cuceloglu (1997) states that a problem occurs when a goal that an individual wants to reach is blocked. According to Bingham (2004), problems are obstacles against an individual's efforts to achieve a goal. Problems are situations or events that require time to solve (Sheffield & Cruikshank, 2005). In gaining a place in society, children should

acquire social skills such as solving the problems they encounter in their environment and maintaining interpersonal communication. According to Anlıak and Dincer (2005a), one of the skills required in social life is to communicate and interact with other people. It is normal for people to encounter interpersonal problems and difficulties during this communication. Since they are in the process of socializing, the children who start school encounter several interpersonal problems in the school environment (Cüceloğlu, 1997). Children who gain the skills to solve interpersonal problems in early childhood can establish high-quality and better relationships in their future lives (Anlıak & Dincer, 2005a; Dincer & Göktas, 2019; Yoleri, 2014).

Early childhood can construct a healthy future, but it can be the basis of the problems to be encountered in the future life as well (Anlıak, 2004; Cağdas & Secer, 2002; Oktay, 1992). Children face various problems related to daily life in the preschool period (Yıldırım, 2019). They may encounter bad examples, and since they learn very fast unwanted behavior may occur due to these examples. In such a case, the reasons behind the unwanted behavior should be identified (Kargi & Erkan, 2004). Determining the causes of the encountered problems and developing solutions to solve them provides an opportunity for children to evaluate their efforts and come up with new ideas (Thornton, 1998). Preschool education programs' objectives should include providing interpersonal problem-solving skills and establishing healthy relationships (Anlıak & Dincer, 2005b). According to Dekovic, Slagt, Asscher, and Boendermaker (2011), supporting social skills in the early years of childhood helps exhibit positive behaviors and reduce problem status. With the social change of the world, children may face various problems due to decreasing social support, incorrect use of technology, stress, and difficulties in daily life (Battistich et al. 1989). However, children may not be adequately equipped to solve these problems (Atici, 2008). To solve social problems, children should gain communication skills and work collaboratively; express their feelings and thoughts; grasp and understand the perspectives of individuals with different lifestyles, daily needs, and characteristics; use effective problem-solving skills when their interests, needs, beliefs, and ideas conflict.

Children who have problem-solving skills cope better with the difficulties of daily life (Battistich et al. 1989). Also, children who receive adequate adult support in the face of these problems and can solve their problems will gain many competencies such as self-expression, entrepreneurship, creativity, and self-confidence (Yıldırım, 2019).

This study aims to determine and evaluate children's interpersonal problem solving skills in terms of different variables to develop them. Supporting interpersonal relationships in early childhood is important for the social development and improvement of academic skills in the following years. Problem-solving skills that people have are very important during their interactions with each other. According to Ocak (2010), early positive relationships between children and adults are critical in the acquisition of children's interpersonal problem-solving skills and has an important role in how a child negotiates the conflicts and manages relationships with peers. Regarding the relevant literature, the studies involving the support and development of children's interpersonal problem-solving skills in Turkey are limited (Alemdar-Coşkun, 2016; Anlıak, 2004; Bal, 2013; Dilber, 2015; Dinçer, 1995; Dincer and Göktac, 2019; Kaytez and Kadan, 2016; Kesicioğlu, 2015; Mercan, 2019; Özdil, 2008; Yoleri, 2014), and the existing studies were conducted in recent years. Therefore, evaluating interpersonal problem solving skills in terms of different variables will reveal children's problem solving skills and help to support them.

# **Methodology:**

In this study, the survey model, one of the quantitative research methods, was used. The survey model is a research model that aims to collect data for revealing certain characteristics of a group. (Buyukozturk et al. 2008). In this study, the differentiation of interpersonal problem solving skills of 5-8 years old children attending preschool and 1<sup>st</sup> grade of primary school according to the demographic characteristics (child's gender, parents' age, parents' education, parents' occupation) was investigated. For this purpose, the following question was addressed:

Do interpersonal problem solving skills of children attending preschool education institutions and 1<sup>st</sup> grade differ according to the following variables?

- a) Child's gender,
- b) Mother's age,
- c) Father's age,
- d) Mother's education,
- e) Father's education,
- f) Mother's occupation,
- g) Father's occupation

#### **Study Group**

The study group consists of 5-8 years old children in the Ercis district of Van in the 2020-2021 academic year, who were attending independent kindergartens affiliated to Ercis District National Education Directorate, kindergartens within the primary school, and 1<sup>st</sup>-grade students. The study aims to examine children's interpersonal problem solving skills in terms of different variables. The data collection tool of the study was the "Child Interpersonal Relationships and Attitudes Assessment (CIRAA)," and it should be filled by the parents of the children who were included in the study (mother or father). Accordingly, the "Child Interpersonal Relationships and Attitudes Assessment (CIRAA)" and "Personal Information Form" were administered to the parents of 452 children. The study group was selected using the convenience sampling method, which brings speed and practicality to the study. In this method, the researcher determines a working group close and easily accessible (Yıldırım & Simsek, 2006). Frequency analysis was conducted to measure the sociodemographic characteristics of the children in the study group and their families in Table 1.

Variable	Group	Ν	%
Child's conder	Female	236	%52.2
Child's gender	Male	216	%47.8
	29-year-old or younger	150	%33.2
Mother's Age	30-39-year-old	251	%55.5
Mother's Age	40-49-year-old	49	%10.8
	50-year-old or older	2	%0.4
	29-year-old or younger	33	%7.3
Eatharla A an	30-39-year-old	286	%63.3
Fainer's Age	40-49-year-old	117	%25.9
	50-year-old or older	16	%3.5
Mother's Education	Primary or Secondary School Graduate High School Graduate University Graduate	241 110 89	%53.3 %24.3 %19.7 %2.7
	Post Graduate	12	70 2. 7
Father's Education	Primary or Secondary School Graduate High School Graduate University Graduate	138 147 145 22	%30.5 %32.5 %32.1 %4.9
	Housewife	377	%83.4
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

	Civil servant	45	%10.0
Mother's	Worker	4	%.9.0
Profession	Self-employed	10	%2.2
	Other jobs	16	%3.5
	Unemployed	18	%4.0
Father's	Civil servant	133	%29.4
Profession	Worker	101	%22.3
FIDIESSIDII	Self-employed	115	%25.4
	Other jobs	85	%18.8

 Table 1. Demographic Information of the Children in the Study Group

Regarding the participants' answers, as seen in Table 1. 47.8% of the 452 children are boys, and 52.2% are girls. 50% attend preschool, and 50% are 1st grade. Regarding the ages of the mothers, there are 150 (33.2%) children whose mother is younger than 29, 251 (55.5%) children with 30-39-year-old mother, 49 (10.8%) children with 40-49-year-old mother, and 2 (.4%) children whose mother is older than 50. Regarding the ages of the fathers, there are 33 (%7.3) children whose father is younger than 29, 286 (%63.3) children with 30-39-year-old father, 117 (%25.9) children with 40-49-year-old father, and 16 (%3.5) children whose father is older than 50. The education of the mothers is as follows: 241 (53.3%) mothers are primary and secondary school graduates, 110 (24.3) are high school graduates, 89 (19.7%) are university graduates, and 12 (2.7%) of them have a master's degree. The education of the fathers is as follows: 138 (%30.5) fathers are primary and secondary school graduates, 147 (32,5) are high school graduates, 145 (%32.1) are university graduates, and 22 (%4.9) of them have a master's degree. The occupations of the mothers are: most of them, 377 (83.4%), are housewives, 45 (10%) mothers are civil servants, 4 (9%) of them are workers, 10 (2.2%) are self-employed, and the number of mothers doing other occupations is 16 (3.5%). The occupations of the fathers are: 18 (%4) of them are unemployed, 133 (%29.4) fathers are civil servants, 101 (%22.3) of them are workers, 115 (%25.4) are self-employed, and the number of fathers doing other occupations is 85 (%18.8).

# **Data Collection Tools**

"Child Interpersonal Relationships and Attitudes Assessment (CIRAA)" developed by Holliman (2010) and "Personal Information Form" were used in the study to examine children's interpersonal problem solving skills in terms of different variables.

# Child Interpersonal Relationships and Attitudes Assessment Instrument (CIRAA)

CIRAA was developed as a parent report instrument congruent with child-centered play therapy philosoph by Holliman (2010).

Holliman (2010) had studied, several steps in developing the Child Interpersonal Relations and Attitudes Assessment (CIRAA): first procedures were taken to develop the instrument and generate items. Second, steps were taken to ensure face validity. Third, a pilot study and analysis of initial pilot study data were conducted. Fourth, a sample of 136 children from local elementary schools were administered a battery of instruments, including the CIRAA. Finally, analyses were conducted to establish factor structure, scale reliability, inter-item reliability, concurrent validity and scale sensitivity. Five categories were derived from the literature review and parent interviews and items were developed for the instrument. Cronbach's alpha was conducted for total scale and all subscales and eliability scores for the total score and subscales were acceptable, with an overall reliability coefficient of .93 (Holliman, 2010).

# The categories/subscales are: social skills, self-concept, disruptive behaviors, self-direction/self-responsibility, and coping skills.

The validity and reliability studies of the scale were conducted by Celebi and Seker (2020) in Turkey. The adaptation study of the scale was carried out, 300 parents in Van-Turkey and overall reliability coefficient ( $\alpha$ ) was 0.68; a scale with Cronbach's Alpha value between 0.60 and 0.79 is within acceptable limits except reliability (Alpar, 2016). And according to Celebi and Seker's

study, the scale results show that the CIRAA is a valid and reliable tool for evaluating the interpersonal problem solving skills of children in Turkey (2020). The CIRAA carries the evaluation criteria of interpersonal problem solving skills, it was chosen by taking expert opinions. The expert opinions about the scale items focused on three main titles; early childhood process, culture and language. The assessment scale CIRAA not only tend to be focused on problem behaviors of children, but also is focused on internal factors such as self-direction or self-acceptance (Holliman, 2010).

In this study the CIRAA scale is used to determine interpersonal problem-solving skills of the children. There are 30 items in the inventory, and the items are measured by a 5-point Likert-type scale consisting of the options "I strongly agree, agree, undecided, disagree and strongly disagree."The administration of the scale takes 8-10 minutes and is filled by the parents. Cronbach Alpha internal consistency coefficient was referred to in order to establish reliability of this study. As a result of the statistical analysis, Cronbach Alpha internal consistency coefficient was found as .82. According to Tezbasaran (1997) a reliability coefficient deemed satisfactory in a scale should be close to 1 as much as possible and so according to these results, reliability of the scale can be said to be at a high level.

# **Findings and Conclusion:**

Independent t-test was performed to reveal the significance of the difference between interpersonal problem-solving skills according to the gender of the children in Table 2.

Group	Ν	Average	Standard Deviation	Т	Df	Р
Female	236	2.0373	.46752	-2.281	450	.023
Male	216	2.1422	.50985	-2.272	436.654	.024

 Table 2. Children's Gender: T-test Analysis for Interpersonal Problem-Solving Skills

As seen in Table 2. the result of the t-test performed to compare children's Interpersonal Problem-Solving Skills, a significant difference was found between genders (p> 0.05). It was found that boys have higher interpersonal problem-solving skills than girls. A significant difference was found between the interpersonal problem-solving skills of the children according to gender. Kaytez and Kadan (2016) found in their study that boys' destructive problem-solving cases were higher than girls'. Similarly, in the study conducted by Dilber (2015), boys' average peer compelling solution scores were higher than girls'. On the other hand, according to Apaydin-Demirci, Arslan, and Temel (2020), girls are more successful in solving interpersonal problems than boys. Crombie and Gold (1989) have found that girls' problem-solving skills are higher than boys'. Walker, Irving, and Berthelsen (2002) reported that girls produce more perfect answers to social problems than boys. The reason for the different results in these studies may be due to working with different sample groups. Besides, when there is a problem among the boys, they do not think emotionally; they develop effective solutions and eliminate the problem without further ado. For example, Düz (2016) found that the average scores of the solutions that boys generated for the peer problems were higher than girls'.

Group	Ν	x	SD	Var. K	KT	df	KO	F	Р
29- year- old or younger	150	2.1686	.52387	Between Groups	2.424	3	.808	3.413	.017
30-39- year- old	251	2.0324	.46764	Within Group	106.070	448	.237		

40-49- year- old	49	2.1419	.46783	Overall	108.494	457		
50- year- old or older	2	1.5714	.00000					
Overall	452	2.0874	.49047					

Table 3. Child's Mother's Age: One-Way Variance Analysis for Interpersonal Problem-Solving Skills

As seen in Table 3. statistically significant difference was found in the One-Way Variance analysis performed to test whether the Interpersonal relationships and attitudes of the participants differed significantly according to the mother's age (p < 0.05). Since the variances of the groups were homogeneously distributed, the Tukey Test, one of the Post-Hoc tests, was used to reveal the source of the difference (95% confidence) in Table 3.1.

(I)		Avera ge	Standar		95% Co Interval	onfidence
Mother' s Age	(J) Mother's Age	Differ ence (I-J)	Deviatio n	Р	Lower Limit	Upper Limit
29-	30-39-year-old	.1361 3*	.05022	.03 5	.0066	.2656
year- old or	40-49-year-old	.0266 9	.08006	.98 7	1798	.2331
younger	50-year-old or older	.5971 4	.34635	.31 2	2960	1.4903
20.20	29-year-old or younger	- .1361 3*	.05022	.03 5	2656	0066
year- old	40-49-year-old	- .1094 4	.07599	.47 5	3054	.0865
	50-year-old or older	.4610 1	.34543	.54 1	4298	1.3518
40-49-	29-year-old or younger	- .0266 9	.08006	.98 7	2331	.1798
year- old	30-39-year-old	.1094 4	.07599	.47 5	0865	.3054
	50-year-old or older	.5704 6	.35102	.36 5	3347	1.4756
50- year- old or older	29-year-old or younger	- .5971 4	.34635	.31 2	- 1.4903	.2960
	30-39-year-old	- .4610 1	.34543	.54 1	- 1.3518	.4298

	40-49-year-old	- .5704 6	.35102	.36 5	- 1.4756	.3347
* The ave	erage difference is sig	gnificant	at 0.05 lev	vel.		

# **Table 3.1. Tukey Test Results**

The comparison of Interpersonal Problem-Solving Skills according to mothers' age in Table 3.1. shows that the highest average belongs to the 29-year-old or younger mothers group (X = 2.16). This is followed by 40-49-year-old (X=2,14) and 30-39-year-old mothers (X=2.03); the lowest average is observed in the 50-year-old or older mothers group (X=1,57). The direction of the difference was found as (29-year-old or younger) > (30-39-year-old). Children whose mothers are 29-year-old or younger have higher interpersonal problem-solving skills than children whose mothers are 30-39-year-old.

A significant difference was found between children's interpersonal problem-solving skills according to the mother's age. Ozyürek et al. (2018) reported that problem-solving skills scale scores of the children whose mothers were 26-30-year-old were higher than those of children whose mothers were 31-35-year-old. The result of this study is in line with the result of the current study. On the other hand, in the study conducted by Dilber (2015), the scores that children whose mothers were 31-35-years-old achieved from the mother solution and total solution sub-dimensions of the interpersonal problem-solving test were higher than the scores of the children whose mothers were under 30-year-old. However, no significant difference was found in other sub-dimensions. The different results in the studies can be explained by the attitudes of mothers towards their children.

One-way analysis of variance was performed to determine the significance of the difference in interpersonal problem-solving skills by the children's fathers' age in Table 4.

Group	Ν	x	SD	Var. K	KT	Df	KO	F	Р
29-	33	2.2136	.62781	Between	.572	3	.191	.791	.499
year-				Groups					
old or									
younger									
30-39-	286	2.0798	.48605	Within	107.922	448	.241		
year-				Group					
old									
40-49-	117	2.0716	.46948	Overall	108.656	452			
year-									
old									
50-	16	2.0804	.40095						
year-									
old or									
older									
Overall	452	2.0874	.49047						

Table 4. Child's Father Age: One-Way Variance Analysis for InterpersonalProblem-Solving Skills

In view of Table 4. as a result of the variance analysis, no significant difference was found between children's interpersonal problem-solving skills according to the father's age. Mercan (2019) found in his study that there was no significant difference between the scores of children on the problem-solving scale according to the father's age, which supports the result of the current study. In the study conducted by Dilber (2015), the peer/mother total solution scores of children whose fathers were 31-35-year-old were higher than those whose fathers were 30-year-old and

younger. In the same study, no significant difference was found between the scores that children achieved in other sub-dimensions of the interpersonal problem-solving test and the father's age. The absence of a significant difference in the current study may be because most fathers (63.3%) were in the 30-39-year-old group.

One-way analysis of variance was performed to determine the significance of the difference in interpersonal problem-solving skills by the children's mothers' education in Table 5.

Group	Ν	x	SD	Var. K	KT	Df	KO	F	Р
Primary									
or				Between					
Secondary	241	2.1391	.51837	Groups	1.405	3	.468	1.960	.119
School				Groups					
Graduate									
High				Within					
School	110	2.0372	.44579	Group	107.089	446	.239		
Graduate				Oloup					
University	80	2 0225	16611	Overall	108 404	451			
Graduate	09	2.0225	.40041	Overall	106.494	431			
Post	12	1 0021	40208						
Graduate	12	1.7921	.40398						
Overall	452	2.0874	.49047						

 

 Table 5. Child's Mother's Education: One-Way Variance Analysis for Interpersonal Problem-Solving Skills

As seen in Table 5. the result of the variance analysis, no significant difference was found between children's interpersonal problem-solving skills according to the mother's education. In their study, Bozkurt-Yukcu and Demircioglu (2017) concluded that there is no significant difference between children's social problem-solving skills according to their mother's education. In their study, Serin and Derin (2008) found no significant relationship between problem-solving skill perceptions of primary school students according to their mother's education. The findings of these studies are consistent with the findings of the current study. On the other hand, Alemdar-Coşkun (2016) reported a significant difference between children's problem-solving skills according to their mother's education. They reported that problem-solving skills of children whose mothers were high school graduates or less were higher than children whose mothers were university graduates or more.

One-way analysis of variance was performed to determine the significance of the difference in interpersonal problem-solving skills by the children's fathers' education in Table 6.

Group	Ν	x	SD	Var. K	KT	df	KO	F	Р
Primary or Secondary School Graduate	138	2.1674	.52613	Between Groups	2.104	3	.701	2.953	.032
High School Graduate	147	2.1063	.48948	Within Group	106.390	448	.237		
University Graduate	145	2.0102	.46312	Overall	108.494	451			
Post Graduate	22	1.9697	.35194						

Overall	458	2.0874	.49047				
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# Table 6. Child's Father's Education: One-Way Variance Analysis for Interpersonal Problem-Solving Skills

In view of table 6. statistically significant difference was found in the One-Way Variance analysis performed to test whether the interpersonal relationships and attitudes of the participants differed significantly according to the father's education (p < 0.05). Since the variances of the groups were homogeneously distributed, the Tukey Test, one of the Post-Hoc tests, was used to reveal the source of the difference (95% confidence) in Table 6.1.

(I) Father's	(I) Father's	Average	Standa rd		95% C Interval	onfidence
Educatio n	Education	Differenc e (I-J)	Deviat ion	р	Lower Limit	Upper Limit
Primary or	High School Graduate	.06110	.05776	.715	0878	.2101
Seconda ry	University Graduate	.15718*	.05795	.035	.0077	.3066
School Graduate	Yüksek lisans	.19766	.11187	.291	0908	.4861
High School	Primary or Secondary School Graduate	06110	.05776	.715	2101	.0878
Graduate	University Graduate	.09607	.05704	.333	0510	.2432
	Yüksek lisans	.13656	.11140	.611	1507	.4238
Universi ty	Primary or Secondary School Graduate	15718*	.05795	.035	3066	0077
Graduate	High School Graduate	09607	.05704	.333	2432	.0510
	Yüksek lisans	.04048	.11150	.984	2470	.3280
Post Graduate	Primary or Secondary School Graduate	19766	.11187	.291	4861	.0908
	High School Graduate	13656	.11140	.611	4238	.1507
	University Graduate	04048	.11150	.984	3280	.2470
*. The ave	rage difference is	significant a	at 0.05 lev	vel.		

# Table 6.1. Tukey Test Results

As seen in Table 6.1 the comparison of Interpersonal Problem-Solving Skills according to fathers' education shows that the highest average belongs to the Primary or Secondary School Graduates group (X = 2.16). This is followed by High School Graduates (X=2,10) and University Graduates groups (X=2.01); the lowest average is observed in the Post Graduates group (X=1,96).

The direction of the difference was found as (Primary or Secondary School Graduate) > (Post Graduate). Children whose fathers are primary or secondary school graduates have higher interpersonal problem-solving skills than children whose fathers are postgraduates. Kaytez and Kadan (2016) found that children whose fathers were primary school graduates had higher mean scores in the destructive problem-solving sub-dimension. Serin and Derin (2008) reported no significant difference between primary school students' problem-solving skills according to their father's education.

One-way analysis of variance was performed to determine the significance of the difference in interpersonal problem-solving skills by the children's mothers' occupation in Table 7.

Group	Ν	x	SD	Var. K	KT	df	KO	F	Р
Housewife	377	2.1060	.49359	Between Groups	1.344	4	.336	1.401	.233
Civil servant	45	1.9640	.47000	Within Group	107.151	447	.240		
Worker	4	1.9286	.27077	Overall	109.496	451			
Self- employed	10	2.2143	.64486						
Other jobs	16	1.9583	.35246						
Overall	452	2.0870	.49047						

 

 Table 7. Child's Mother's Profession: One-Way Variance Analysis for Interpersonal Problem-Solving Skills

As seen in Table 7. a result of the variance analysis, no significant difference was found between children's interpersonal problem-solving skills according to the mother's occupation. It is thought that this situation arises because the majority of the mothers in the study group (83.4%) were housewives. Temiz (2019) found in his study that children's social problem-solving skills did not differ according to the mother's occupation. Dilber (2015) reported that the mother's occupation does not affect the child's interpersonal problem-solving skills. These results are in line with the result of the current study.

One-way analysis of variance was performed to determine the significance of the difference in interpersonal problem-solving skills by the children's fathers' occupation in Table 8.

Group	N	x	SD	Var. K	KT	df	KO	F	Р
Unem ploye d	18	2.41 53	.671 41	Between Groups	5.443	4	1.3 61	5.9 02	.0 00
Civil servan t	133	1.96 10	.413 55	Within Group	103.0 51	44 7	1.2 31		
Work er	101	2.09 81	.437 21	Overall	108.4 94	45 1			
Self- emplo yed	115	2.07 95	.523 42						
Other jobs	85	2.21 40	.517 15						
Overa 11	452	2.08 74	.490 47						

 

 Table 8. Child's Father's Profession: One-Way Variance Analysis for Interpersonal Problem-Solving Skills

In view of Table 8. statistically significant difference was found in the One-Way Variance analysis performed to test whether the Interpersonal relationships and attitudes of the participants differed significantly according to the father's occupation (p < 0.05).

Since the variances of the groups were homogeneously distributed, Tamhane's T2 test, one of the Post-Hoc tests, was used to reveal the source of the difference (95% confidence) in Table 8.1.

(I) Father's	(J) Father's	Average	Standa	р	95% Confidence				
Profession	Profession	Differen rd			Interval				
		ce (I-J)	Deviati		Lower	Upper			
			on		Limit	Limit			
	Civil servant	.45437	.16227	.109	0597	.9684			
Unemploy ed	Worker	.31728	.16412	.504	1997	.8343			
	Self- employed	.33584	.16561	.437	1836	.8553			
	Other jobs	.20134	.16790	.939	3221	.7247			
Civil servant	Unemploye d	45437	.16227	.109	9684	.0597			
	Worker	13709	.05638	.148	2966	.0224			
	Self- employed	11853	.06057	.411	2898	.0528			
	Other jobs	25303*	.06658	.002	4422	0639			
Worker	Unemploye d	31728	.16412	.504	8343	.1997			
	Civil servant	.13709	.05638	.148	0224	.2966			
	Self- employed	.01856	.06538	1.000	1664	.2035			
	Other jobs	11594	.07099	.668	3174	.0855			
Self- employed	Unemploye d	33584	.16561	.437	8553	.1836			
	Civil servant	.11853	.06057	.411	0528	.2898			
	Worker	01856	.06538	1.000	2035	.1664			
	Other jobs	13450	.07436	.527	3452	.0762			
Other jobs	Unemploye d	20134	.16790	.939	7247	.3221			
	Civil servant	.25303*	.06658	.002	.0639	.4422			
	Worker	.11594	.07099	.668	0855	.3174			
	Self- employed	.13450	.07436	.527	0762	.3452			
*. The average difference is significant at 0.05 level.									

# Table 8.1 Tamhanes T2 Test Analysis

As seen in table 8.1. the comparison of Interpersonal Problem-Solving Skills according to fathers' occupation shows that the highest average belongs to the Unemployed Fathers group (X =

2.41). It is followed by the Other Job owners (X=2,21), Workers (X=2.09), and Self-employed fathers (X=2.07); the lowest average is observed in the Civil servant fathers group (X=1,96).

The direction of the difference was found as (Other jobs) >(Civil servant). Children whose fathers have other jobs have higher interpersonal problem-solving skills than children whose fathers are civil servants. A significant difference was found between children's interpersonal problem-solving skills according to their father's occupation. It was concluded that children whose fathers have "Other jobs" have higher interpersonal problem-solving skills than children whose fathers are "Civil servants."

Temiz (2019) found no significant difference in Wally Social Problem-Solving Test scores according to the father's education and father's profession. In the study conducted by Bozkurt-Yükcü and Demircioglu (2017), no significant difference was found between the education and professions of the children's fathers and their Wally Social Problem-Solving Detective Game Test scores. Dilber (2015) concluded that the mean scores of non-peer compelling solutions of children whose fathers work in education are higher than the average scores of children whose fathers work in other occupational groups. In the same study, no significant difference was found between the other sub-dimensions of the interpersonal problem-solving test according to the father's occupation. Family structure and the interaction of other adults in the family with children can affect children's interpersonal problem-solving skills.

# **Conclusion:**

Consequently, it was concluded that the interpersonal problem-solving skills of boys are higher than girls. Children whose fathers are primary or secondary school graduates have higher interpersonal problem-solving skills than children whose fathers are postgraduates. Moreover, children whose fathers have other jobs were found to have higher interpersonal problem-solving skills than children whose fathers are civil servants. Besides, children whose mothers are 29-year-old or young have higher interpersonal problem-solving skills than children whose mothers are 30-39-year-old.

# Suggestions:

Cıraa was used as the study aimed to evaluate from an outside perspective. In subsequent studies, comparative studies are recommended, together with the measurement tools applied by children.

Based on the research results, the following suggestions were submitted to researchers, educators, and parents.

Suggestions for Researchers

- To administer supportive training programs in future studies.
- To plan longitudinal studies.
- To perform in-depth research by using mixed-method.
- To plan comparative studies involving family child-rearing attitudes.

Suggestions for Educators

- To organize seminars on problem solving and interpersonal problem solving for parents.
- To plan activities that support children's interpersonal problem-solving skills.
- To plan activities with family participation that support interpersonal problem-solving skills of children and parents.

# **References:**

Alemdar-Coşkun, M. (2016). Problem çözme eğitim programının anasınıfına devam eden çocukların problem çözme becerileri ile kişiler arası problem çözme becerilerine etkisi (Doktora Tezi). Gazi Üniversitesi.

Alpar, R. (2016). Spor, sağlık ve eğitim bilimlerinden örneklerle uygulamalı istatistik ve geçerlikgüvenirlik Spss'de çözümleme adımları ile birlikte. Detay Yayıncılık.

Anlıak, Ş. (2004). Farklı eğitim yaklaşımları uygulayan okul öncesi eğitim kurumlarında kişiler arası problem çözme becerisi programının etkisinin incelenmesi (Yayımlanmamış doktora tezi). Ege Üniversitesi.

Anlıak, Ş. & Dinçer, Ç. (2005a). Farklı eğitim yaklaşımları uygulayan okul öncesi eğitim kurumlarına devam eden çocukların kişiler arası problem çözme becerilerinin değerlendirilmesi. Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi, 38(1), 149-166.

Anlıak Ş. & Dinçer Ç. (2005b). Okul öncesi dönemde kişiler arası bilişsel problem çözme becerilerinin geliştirilmesi. Eğitim Araştırmaları, 20, 122-134.

Apaydın-Demirci, Z., Arslan, E. & Temel, M. (2020). Okul öncesi dönemdeki çocukların duygu düzenleme ve kişiler arası problem çözme becerilerinin incelenmesi. Türk Eğitim Bilimleri Dergisi, 18(2), 910-925.

Bal, Ö. (2013). Okul öncesi eğitim kurumlarına devam eden 4-6 yaş çocukların kişilerarası problem çözme becerileri ve bakış açısı alma becerileri arasındaki ilişkinin incelenmesi (Yayımlanmamış yüksek lisans tezi). Gazi Üniversitesi.

Battistich, V., Solomon, D., Watson, M., Solomon, J., & Schaps, E. (1989). Effects of an elementary school program to enhance prosocial behavior on children's cognitive-social problem solving skills and strategies. Journal of Applied Developmental Psychology, 10(2), 147-169.

Bingham, A. (2004). Çocuklarda problem çözme yeteneklerinin geliştirilmesi. (F. Oğuzkan, Çev.). Milli Eğitim Bakanlığı Yayınları.

Bozkurt-Yükçü, Ş. & Demircioğlu, H. (2017). Okul öncesi dönemdeki çocukların sosyal problem çözme becerilerinin çeşitli değişkenler açısından incelenmesi. Erken Çocukluk Çalışmaları Dergisi, 1(2), 216-238.

Büyüköztürk, Ş., Kılıç-Çakmak, E., Akgün, Ö. E., Karadeniz, Ş. & Demirel, F. (2008). Bilimsel araştırma yöntemleri. Pegem Akademi Yayınları.

Crombie, G., & Gold, D. (1989). Compliance and problem-solving competence in girls and boys. The Journal of Genetic Psychology, 150(3), 281–291.

Cüceloğlu, D. (1997). İnsan ve davranışı. Remzi Kitabevi.

Çağdaş, A. (2003). Anne-baba-çocuk iletişimi. Eğitim Kitabevi.

Çelebi, E. F. & Şeker, P. T. (2020). Erken çocukluk dönemi kişiler arası problem çözme becerileri ölçeği geçerlik ve güvenirlik çalışması. Gelecek Vizyonlar Dergisi (Future Visions Journal), 11, 32-38. Doi: 10.29345/futvis.120.

Dekovic, M., Slagt, M. I., Asscher, J. J. & Boendermaker, L. (2011). Effects of early prevention programs on adult criminal offending: a meta analysis. Clinical Pschology Review, 31(4), 532-544.

Dilber, M. (2015). Okul öncesi çocukların ahlaki yargı düzeyleriyle kişilerarası problem çözme becerileri arasındaki ilişkinin incelenmesi (Yüksek lisans tezi). Gazi Üniversitesi.

Düz, H. (2016). Okul öncesi dönem çocuklarda kişilerarası sorun çözme becerilerinin incelenmesi: Kuzey Kıbrıs örneği (Yüksek lisans tezi). Doğu Akdeniz Üniversitesi.

Holliman, R. P. (2010). The development of the child interpersonal relationship and attitudes assessment for child centered play therapy (Doctoral dissertation, University of North Texas).

Kalaycı, N. (2001). Sosyal bilgilerde problem çözme ve uygulamalar. Gazi Kitabevi.

Kargı, E. & Erkan, S. (2004). Okul öncesi dönem çocuklarının sorun davranışlarının incelenmesi (Ankara İli Örneği). Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 27, 135-144.

Kaytez, N. & Kadan, G. (2016). Okul öncesi dönem çocuklarında akademik benlik saygısı ile kişiler arası problem çözme becerilerinin incelenmesi. Eğitim ve Öğretim Araştırmaları Dergisi, 5(Özel Sayı), Makale No: 38

Kesicioğlu, O. S. (2015). Okul öncesi dönem çocukların kişilerarası problem çözme becerilerinin incelenmesi. Eğitim ve Bilim, 40 (177), 327-347 http://dx.doi.org/10.15390/EB.2015.3240.

Mercan, M. (2019). Okul öncesi eğitim kurumlarına devam eden 5-6 yaş çocuklarının öz düzenleme becerileri ile akademik benlik saygıları ve kişilerarası problem çözme becerileri arasındaki ilişkinin incelenmesi (Yayımlanmış yüksek lisans tezi). Gazi Üniversitesi.

Mercan, M. & Özbey, S. (2020). Okul öncesi eğitim kurumlarına devam eden 5-6 yaş çocuklarının akademik benlik saygıları ile kişilerarası problem çözme becerileri arasındaki ilişkinin incelenmesi. Uluslararası Güncel Eğitim Araştırmaları Dergisi (UGEAD), 6(2), 473-494.

Ocak, S. (2010). The effects of child-teacher relationships on interpersonal problem-solving skills of children. Infants and Young Children, 23(4), 312–322.

Özdil, G. (2008). Kişilerarası problem çözme becerileri eğitim programının okul öncesi kurumlara devam eden çocukların kişilerarası problem çözme becerilerine etkisi (Yayınlanmamış yüksek lisans tezi). Adnan Menderes Üniversitesi.

Özyürek, A., Çetin, A., Şahin, D., Yıldırım, R. & Evirgen, N. (2018). Okul öncesi dönem çocuklarda problem çözme becerilerinin bazı değişkenler açısından incelenmesi. Uluslararası Erken Çocukluk Eğitimi Çalışmaları Dergisi, 3(2), 32-41.

Serin, N. B. & Derin, R. (2008). İlköğretim öğrencilerinin kişilerarası problem çözme becerisi algıları ve denetim odağı düzeylerini etkileyen faktörler. Uluslararası İnsan Bilimleri Dergisi, 5(1), 1-18.

Sheffield, L. J. & Cruikshank, D. E. (2004). Teaching and learning mathematics: pre – kindergarten through middle school. Wiley

Shure, M. B. & Spivack, G. (1982). Interpersonal problem-solving in young Children: a cognitive approach to prevention. American Journal of Community Psychology, 10(3), 341-356.

Temiz, D. (2019). Okul öncesi dönem çocuklarının sosyal problem çözme becerilerinin incelenmesi (Yüksek lisans tezi). Trakya Üniversitesi.

Thornton, S. (1998). Çocuklar problem çözüyor. (Ö. Kumrular, Çev.). Gendaş Yayınları.

Walker, S., Irving, K. & Berthelsen, D. (2002). Gender influences on preschool children's social problem-solving strategies. The Journal of Genetic Psychology, 163(2), 197–209.

Yıldırım, A. & Şimşek, H. (2006). Sosyal bilimlerde nitel araştırma yöntemleri. Seçkin Yayıncılık. Yıldırım, A. (2019). Erken çocukluk dönemindeki çocuklarda problem çözme. B. Akman (Ed.). Erken çocuklukta matematik eğitimi. Pegem Akademi Yayınları.

Yoleri, S. (2014). Investigation of relationship between the skills to solve interpersonal problems and concept development of preschool children. Education and Science, 39(173), 82-90.