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AN INVESTIGATION OF THE PROBLEM BEHAVIOR OF PRESCHOOL CHILDREN IN TERMS OF DIFFERENT VARIABLES

(Research article)

Corresponding author:

Semanur Sancılı 

Yildiz Technical University

semanursancili.ss@gmail.com

Mehmet Nur Tuğluk 

Yildiz Technical University

mntugluk@yildiz.edu.tr

Biodatas:

Semanur Sancılı graduated from the Department of Preschool Education and Guidance and Psychological Counseling at Ankara University in 2018. She is a student currently pursuing her master degree at Yildiz Technical University in Turkey. Her research interest is preschool education.

Mehmet Nur Tuğluk is an assistant professor at the Department of Early Childhood Education at Yildiz Technical University in Turkey. His research interests are social sciences and humanities, education, educational sciences, preschool education, curriculum development and, teaching methods.

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Semanur Sancılı

semanursancili.ss@gmail.com.

Mehmet Nur Tuğluk

mntugluk@yildiz.edu.tr.

Abstract

In this study, it was aimed to examine the relationship between the problem behaviors exhibited by preschool children in terms of the parental gender, age, education level, perceived income level, the age of the child, and the number of siblings. For this purpose, the research adopted the scanning pattern in the relational screening model. The participants of the study were composed of 4-6 years of children living in Istanbul, Turkey using convenience sampling method. The data were collected online via the Participation Acceptance Form, General Information Form, and Strengths and Challenges Questionnaire (SCQ) in 2020-2021 school year. The data about the participant children were collected through their volunteer parents. The data obtained were analyzed using the SPSS statistical package program. The results revealed that there was a significant relationship between the gender of the parent and social behavior; between educational level and emotional problems; between perceived income level and social behavior, between attention deficit and hyperactivity, amongst peer problems, emotional problems and behavioral problems; whereas there was no significant relationship between parental age and child problem behaviors. Although a significant relationship was not observed between the number of siblings and problem behaviors of the children, a significant relationship was found between the children's age and peer problems.

Keywords: preschool period, child problem behaviors, parents, parental parameters

1. Introduction

General definitions of normal behavior include statistical deviation, sociocultural norms and mental health definitions. Statistical deviation refers to the state of showing more or less expected emotion, behavior and cognition in accordance with the age. Children who display some emotions, behaviors and cognitions less or more than their peers are considered abnormal. Sociocultural norms include beliefs and expectations of certain groups that certain emotions, behaviors and cognitions are unacceptable. Behaviors other than these expectations are considered to be abnormal. Mental health definitions include a theoretical or clinical perspective on dysfunctions (Parriz & Troy, 2009). Problem behaviors are inappropriate behaviors that contain signs of the development of behavioral problems, different from normal or expected behavior, contradictory, complex, threatening to children's well-being and mental health, threatening or weakening caregivers' coping skills (Papatheodorou, 2005). On the other hand, Bakırcıoğlu (2015) defines adaptation as "The ability of an individual to establish and maintain a balanced relationship between his or her own self and the environment he / she is in." Children who have difficulty in establishing this balance, who cannot show the developmental characteristics required by their age, who have difficulties in their relationships

with their environment and who need support exhibit maladaptive behaviors or some emotional and behavioral problems (Çetinkaya, 2018; Bakırcıoğlu, 2015).

Some of the behaviors that the child exhibits are characteristic features specific to the age and developmental period. For example, problems such as disciplinary problems and irritability can be seen in the periods when the child is in need of autonomy and is just starting to walk. The desire to attract attention between the ages of 3-5, not doing the desired thing, and conflicts experienced while playing with peers are part of the developmental transition (Campell, 1995; Çetinkaya, 2018). Although these behaviors disturb parents and caregivers, they must include some components to be treated as a problem. These are: (i) the behavior exhibited has an effect on children's emotions, well-being and education, (ii) the behavior exhibited has an effect on the physical safety, well-being and education of other children, (iii) the behavior exhibited has an effect on the learning process and in any environment. intervention in the work (Papatheodorou, 2005).

There are many different classifications for problem behaviors. The most commonly used classification from preschool to adolescence is externalization and internalization behaviors as given below (Beg et al., 2007).

- a. Externalizing behaviors are behaviors related to action such as aggressive, impulsive, hostile, opposing and destructive behaviors (Achenbach et al., 1987). These behaviors represent socially unacceptable behaviors that may be a potential threat to others (Mesman, 2000). These children lack self-control and have an active attitude towards the environment and are in constant conflict with the environment (Delfos, 2004). In this study, externalizing behaviors will be discussed as aggression, criminal behavior, attention deficit and hyperactivity. Aggression is behavior that aims to harm others physically or psychologically (APA, 2020). Harming people and animals, being rude, breaking down things, sneaking into someone's home, making fun of people, starting fights, constant tension are among the symptoms of aggressive behavior (Bakırcıoğlu, 2015). Criminal behavior reflects non-violent antisocial behaviors such as lying, cheating, and stealing (Liu, 2004). Attention deficit and hyperactivity are defined by attention deficit, hyperactivity and impulsivity behaviors (Çetinkaya, 2018). Difficulty in devoting yourself to a particular task, easy distraction, quitting the work started, avoiding work that requires intense mental effort, moving in one's seat, being in a constant state of motion, not being able to sit in the same place for a certain period of time, talking too much, interrupting words, waiting in line shows symptoms such as difficulty, running uncontrollably, jumping (Seven, 2019).
- b. Internalizing behaviors are introverted problems such as sadness, worry, fear, guilt, and social withdrawal, where anxiety is at the center. Internalizing behavior can cause denial, impatience, incomprehension and anxiety (Campell, 1995; Delfos, 2004). Internalizing behaviors do not pose a potential threat to others. Although situations such as social withdrawal and sadness can be observed by others, the subjective mood underlying internalizing behavior is not easily noticed (Mesman, 2000). Children who suffer from internalizing behavior lack assertiveness and avoid social environments, so it is difficult for them to get in touch with their peers (Delfos, 2004). These problems may be accompanied by somatic complaints such as headache, abdominal pain, nausea. Internalizing behaviors may result in situations such as dropping out of school, substance use, and suicide at later ages (Liu et al., 2011).

There are various risk factors for problem behaviors. These are child-related factors such as gender, poor conflict management skills, poor social skills, impulsivity, difficult temperament, low school readiness, language and learning disorders; parental relationship factors such as harsh and ineffective parenting skills, poor self-adjustment ability, low cognitive stimuli; school and peer factors such as inefficient teacher reactions, classroom tension, peer rejection, poor communication with parents, small school class, insufficient resources; poverty, parental unemployment, parental criminal activities, parental substance absence, parental mental disorders, marital disputes, single parenting, sibling disputes, stressful life events are considered as social / family factors (Webster-Stratton, 2001; Aylward, 2003; Parritz, Troy, 2009; Papatheodorou, 2005).

Past and current behaviors are the best predictors of future behaviors (Sprague, Walker, 2000). Emotional and behavioral problems experienced in pre-school years during subsequent childhood life and school entry are of considerable importance (Mesman et al., 2001). Therefore, problem behaviors that occur in the preschool period should be addressed in the early period. It is hoped that this research will provide a perspective on the problem behavior of preschool children and will guide families, teachers and researchers. In this context, the research question of the study was formulated as; ***“Do the problem behaviors exhibited by children differ in terms of their parents’ age, gender, perceived income level, education level, as well as the age of the child and the number of siblings?”***

2. Method

2.1. Research Model

In line with the purpose of the research, this study was carried out in 2020-2021 school year utilizing the relational scanning model, which is widely used in social sciences. In this method, also known as correlational research, the relationship between two or more variables is examined without interfering with these variables (Büyüköztürk et al., 2019).

2.2. Participants

The population of the study consists of 307 children between the ages of 4-6 living in Istanbul. The sampling method of the research was determined as easy sampling, one of the non-random sampling methods. With this method, it is aimed to reach the number of respondents until the required number is reached and to minimize the limitations such as time, money and labor (Büyüköztürk et al., 2019). 341 parents and children were reached within the scope of the research. When the data were examined, a study group of 307 people was formed by excluding the children outside the characteristics of the sample group. Table 1 below illustrates the demographic information about the participant parents in the study.

Table 1. *Demographic information about the participant parents*

		n	%
Gender	Female	289	94,1
	Male	18	5,9
Age	20-30	37	12,1
	30-40	207	67,2
	40-50	63	20,5
Education level	Elementary	7	2,3
	Lower secondary	17	5,5
	Upper secondary	68	22,1
	Higher education	176	57,3
	Master's/PhD	39	12,7
Perceived income level	Low	22	7,2
	Average	256	83,4
	High	29	9,4
Number of children	1	137	44,6
	2	131	42,7
	3+	39	12,7
Total		307	100

As it is seen in Table 1, 289 (94.1%) of the parents participating in the study are female and 18 (5.9) of them are male. 37 of the parents (12.1%) are in the 20-30 age range, 207 (67.2%) are in the 30-40 age range, 63 (20.5%) are in the 40-50 age range. When the education level of the parents was examined, 7 (2.3%) parents were primary school, 17 (5.5%) parents were secondary school, 68 (22.1%) high school, 176 (57.3%) parents were undergraduate, 39 (12.7%) it is seen that the parent has a master's / doctorate level. When the perceived income level is examined, it is seen that 22 (7.2%) parents have low income perception, 256 (83.4%) parents have a perception of average income, and 29 (9.4%) parents have a high income perception. 137 of the parents (44.6%) have a single child, 131 (42.7%) have 2 children, and 39 (12.7) have 3 or more children.

Below are the data about the age of the participant children (See Table 2).

Table 2. *Data about the age of the children*

Age	n	%
4	105	34,2
5	117	38,1
6	85	27,7
Total	307	100,0

As is seen in Table 2, 105 (34.2%) children participating in the study are four years old, 117 (38.1%) are five years old, and 8 (27.7%) children are six years old.

2.3. Data collection tools

Within the scope of the study, the following data collection tools were utilized:

2.3.1. Participation Acceptance Form: The form was prepared by the researchers to make sure about the voluntary participation of the parents in the study group.

2.3.2. General Information Form: This form was also developed by the researchers in order to collect data about the gender, age, education level, perceived income level of the participating parents, and the number of their children.

2.3.3. Strengths and Difficulties Questionnaire (SDQ): The questionnaire was first developed by Robert Goodman (1997) to screen emotional and behavioral problems through a form for children between the ages of 4-6 from the viewpoints of parents, and through another form for adolescents aged 11-16 from the viewpoints of their teachers. In this study, the SDQ Parent Form was used to screen children's emotional and behavioral problems. The form consisted of 25 items about positive and negative behaviors. Validity and reliability study of the adaptation of the questionnaire to Turkish was carried out by Güvenir, Özbek, Baykara, Arkar, Şentürk and İncekaş (2008). The form was grouped under five headings: **Attention deficit / hyperactivity**, **Behavioral problems**, **Emotional problems**, **Peer problems** and **Social behaviors**. In that 3-point Likert-type form, all items except for the items with different orientations were scored as; 0 for "not correct", 1 for "partially true", and 2 for "absolutely correct". Reverse coding was used for 5 items with different orientations (items 7, 11, 14, 21 and 25). Although each title was evaluated within itself and separate points between 0-10 were obtained for each, "Total Difficulty Score" between 0-40 could be obtained with the sum of the first four titles. Cronbach's Alpha values for the reliability of the scale were 0.84 for the total difficulty score; 0.73 for emotional problems; 0.65 for behavioral problems; 0.80 for attention deficit / hyperactivity; 0.37 for peer problems; It was calculated as 0.73 for social behavior (Güvenir et al., 2008). Within the scope of this research, Cronbach Alpha (α) values were 0.60 for the total difficulty score; 0.64 for emotional problems; 0.54 for behavioral problems; 0.60 for attention deficit / hyperactivity; 0.37 for peer problems; and for social behavior it was calculated as 0.65.

All these data collection tools were converted into online forms, and the data were collected in distance.

2.4. Analysis of the data

The obtained data were analyzed using the SPSS 25 statistical package program. Descriptive statistics for the scales were obtained and in order to decide which test type to use during the analyzes, the graphs showing the normality distribution and the skewness and kurtosis values were examined. Within the scope of this study, the skewness and kurtosis values were evaluated between the limits of -1 and +1 (Tabachnick & Fidell, 2001). It was examined whether there was any difference between the total scores obtained from the scales according to the variables of gender, age, education level, perceived income level, number of children and age of the child. Independent Sample T Test was used when comparing the average of two independent groups among normally distributed data. When the difference between groups emerged as a result of the Independent Sample T Test, the Tukey test was conducted to determine in which group the difference was significant. One-way Analysis of Variance (ANOVA) was used when comparing the means of more than two groups. The Mann Whitney U Test, one of the paired comparisons, was used when analyzing the data that did not show normal distribution, and the Kruskal Wallis H Test was used when comparing the mean of more than two groups. When the difference between groups emerged as a result of the Kruskal

Wallis H Test, the Mann Whitney U test was conducted to determine in which group the difference was significant. Bonferroni correction was made in order to reduce the error rate, as paired comparisons were made in multiple groups during the Mann Whitney U Test. As a result, a new significance level was obtained by dividing the significance level, $p < 0.05$, by the number of groups. As a result of the descriptive statistics, the arithmetic mean of the Strengths and Difficulties Questionnaire (\bar{x}) is 18,21; standard deviation (ss) 4.94; the minimum value was 9.00 and the maximum value was 39.00. The skewness value of this dimension was 699; kurtosis value was calculated as 700.

3. Findings

Findings of the study are presented via tables referring to different research parameters stated in the research question; **“Do the problem behaviors exhibited by children differ in terms of their parents’ age, gender, perceived income level, education level, as well as the age of the child and the number of siblings?”** (See Tables 3- 16).

Table 3. *Independent Sample of Parents' Strengths and Difficulties Survey Social Behaviors and Emotional Problems Sub-Scores T-Test Results*

	Gender	n	\bar{x}	ss	sd	t	p
Social Behavior	Female	289	7,51	2,03	305	2,158	,03
	Male	18	6,44	1,91			
Emotional Problems	Female	289	2,35	2,12	305	,250	,80
	Male	18	2,22	1,62			

p<0,05

In Table 3, the results of the Independent Sample T Test conducted to determine whether the total scores of the Social Behaviors and Emotional Problems sub-dimension of the Strengths and Difficulties of the Children differ according to the gender of the parents. Accordingly, the scores obtained by the children in the social behavior sub-dimension differ significantly according to the parents' gender ($t(305) = 2.158$, $p < 0.05$). The effect size calculated as a result of the analysis ($\eta^2 = 0.015$) shows that this difference is moderate.

Table 4. Mann Whitney U Test results on Strengths and Difficulties Questionnaire in terms of parents' gender, attention deficit and hyperactivity, peer problems and behavioral problems

SDQ Sub-Dimensions	Gender	n	Median	z	U	p
Attention deficit and Hyperactivity	Female	289	5,00	-1,845	1933,00	,06
	Male	18	5,50			
Peer problems	Female	289	2,00	-,436	2444,50	,66
	Male	18	3,00			
Behavioral problems	Female	289	2,00	-,771	2325,50	,44
	Male	18	2,00			

Table 4 shows the result of the Mann Whitney U test conducted to determine whether the total scores of the Children's Strengths and Difficulties Questionnaire sub-dimensions of Attention Deficit and Hyperactivity, Peer Problems and Behaviors differ according to the gender of the parents. Accordingly, no significant difference was observed between the assessment of attention deficit and hyperactivity sub-dimension of the mothers (median = 5.00) and the assessment of the fathers (median = 5.50) ($U = 1933.00$; $z = -1.845$, $p > 0.05$). There was no significant difference between the evaluation of the peer problems sub-dimension of the mothers (median = 2.00) and the evaluation of the fathers (median = 3.00) ($U = 2445.50$; $z = -, 436$, $p > 0.05$). Similarly, no significant difference was observed between the evaluation of the behavioral problems sub-dimension of the mothers (median = 2.00) and the evaluation of the fathers (median = 2.00) ($U = 2325.50$; $z = -, 771$; $p > 0.05$).

Table 5. One-way analysis of variance (ANOVA) results regarding the strengths and difficulties of the parents in terms of their age, social behaviors, emotional problems, and attention deficit and hyperactivity

SDQ Sub-dimensions	Parent's age	n	\bar{x}	ss	Variance Source	Sum of squares	sd	Mean of squares	F	p
Social Behavior	20-30	37	6,97	2,20	Between groups	9,631	2	4,816	1,164	,31
	30-40	207	7,49	2,00	Within groups	1258,121	304	4,139		
	40-50	63	7,57	2,01						
Emotional Problems	20-30	37	2,57	1,98	Between groups	4,466	2	2,233	,507	,60
	30-40	207	3,36	2,16	Within groups	1338,621	304	4,403		
	40-50	63	2,14	1,92						
Attention deficit and hyperactivity	20-30	37	4,95	2,29	Between groups	3,848	2	1,924	,390	,67
	30-40	207	4,69	2,22	Within groups	1500,132	304	4,935		
	40-50	63	4,54	2,16						

In Table 5, the results of the One-Way Variance Analysis performed to determine whether the scores of the Social Behaviors, Emotional Problems and Attention Deficit and Hyperactivity sub-dimensions of the Strengths and Difficulties Questionnaire differ according to the age of the parents. Accordingly, no significant difference was observed between the social behaviors, emotional problems, attention deficit and hyperactivity scores of the children according to the age of the parents ($p > 0.05$).

Table 6. *Kruskal Wallis H-Test results on Strengths and Difficulties Survey peer problems and behavioral problems in terms of parents' age*

SDQ Sub-dimensions	Parents' age	n	Median	χ^2	sd	p
Peer problems	20-30	37	3,00	3,322	2	,19
	30-40	207	2,00			
	40-50	63	2,00			
Behavioral problems	20-30	37	2,00	2,331	2	,31
	30-40	207	2,00			
	40-50	63	2,00			

Table 6 shows the result of the Kruskal Wallis H Test, which was conducted to determine whether the scores of the Peer Problems and Behavioral Problems sub-dimensions of the Strengths and Difficulties Questionnaire of the children differ according to the age of the parents. Accordingly, no significant difference was observed between the peer problems and behavioral problems scores of the children according to the age of the parents ($p > 0.05$).

Table 7. *One-Way Analysis of Variance (ANOVA) Results Regarding the Strengths and Difficulties Questionnaire According to the Education Level of the Parents, Attention Deficit and Hyperactivity and Peer Problems*

SDQ Sub-dimensions	Parent's Level of education	n	\bar{x}	ss	Source of Variance	Sum of Squares	sd	Mean of Squares	F	p
Attention Deficit and Hyperactivity	Elementary	7	4,00	1,29	Between groups	42,691	4	10,673	2,206	,06
	Lower Secondary	17	5,76	2,35	Within groups	1461,289	302	4,839		
	Upper Secondary	68	5,03	2,28						
	BA	176	4,59	2,14						
	MA/PhD	39	4,18	2,29						
Peer Problems	Elementary	7	4,00	1,29	Between groups	21,177	4	5,294	1,896	,11
	Lower Secondary	17	2,88	1,49	Within groups	843,110	302	2,792		
	Upper Secondary	68	2,68	1,52						
	BA	176	2,55	1,72						
	MA/PhD	39	2,33	1,78						

In Table 7, the results of the One-Way Variance Analysis performed to determine whether the scores of the Attention Deficit and Hyperactivity and Peer Problems sub-dimensions of the Strengths and Difficulties Questionnaire differ according to the education level of the parents. Accordingly, no significant difference was observed between the scores of attention deficit, hyperactivity and peer problems according to the education level of the parents ($p > 0.05$).

Table 8. *Kruskal Wallis H Test Results on Strengths and Difficulties Survey Social Behaviors Emotional Problems and Behavioral Problems Sub-Dimension Scores in terms of the Education Level of the Parents*

SDQ Sub-dimensions	Education level of parents	n	Median	x ²	sd	p
Social problems	Elementary	7	7,00	5,345	4	,25
	Lower Secondary	17	7,00			
	Upper Secondary	68	7,00			
	BA	176	8,00			
	MA/PhD	39	9,00			
Emotional problems	Elementary	7	1,00	10,82	4	,02
	Lower Secondary	17	3,00			
	Upper Secondary	68	2,00			
	BA	176	2,00			
	MA/PhD	39	2,00			
Behavioral problems	Elementary	7	1,00	8,389	4	,07
	Lower Secondary	17	3,00			
	Upper Secondary	68	2,00			
	BA	176	1,00			
	MA/PhD	39	2,00			

p<0,05

Table 8 shows the result of the Kruskal Wallis H Test conducted to determine whether the scores of the Social Problems, Emotional Problems and Behavioral Problems sub-dimensions of the Children's Strengths and Difficulties Questionnaire differ according to the education level of the parents. Accordingly, no significant difference was observed between the social problems and behavioral problems scores of the children according to the education level of the parents ($p > 0.05$). In the emotional problems subscale, a significant difference was observed according to the education level of the parents ($x^2 (df = 4, n = 307) = 10.82, p < 0.05$). Mann Whitney U Test was conducted in order to determine among which groups the difference obtained as a result of the analysis.

Table 9. Mann Whitney U Test Results Related to Paired Comparison of Total Scores Obtained from the Strengths and Difficulties Survey Emotional Problems in terms of the Education Level of the Parents

SDQ Sub-dimensions	Education level of parents	n	z	U	p
Emotional problems	Elementary- L.Secondary	24	-1,124	42,000	,26
	Elementary- U. Secondary	75	-,379	217,500	,70
	Elementary-BA	183	-,107	601,500	,91
	Elementary MA /PhD	46	-,156	131,500	,87
	L.Secondary- U.Secondary	85	-2,075	391,500	0,38
	L.Secondary-BA	193	-3,003	845,500	,003
	L.Secondary-MA/PhD	56	-3,076	161,500	,002
	U.Secondary-BA	244	-1,437	5285,00	,151
	U. Secondary-MA/PhD				
	BA-PhD	107	-1,128	1154,50	,25
	BA-MA				
	BA7PhD	215	-,025	3423,50	,98

p<0,005

In order to avoid the increase in error in the test, Bonferroni correction was conducted and the significance level was taken as 0.005 instead of 0.05.

The total scores of the children in the Emotional Problems sub-dimension differ significantly in the parent groups at the secondary-undergraduate and secondary-master / doctorate education levels. The emotional problems score (median = 3.00) of the children with parents at the secondary school level is higher than the emotional problems score (median = 2.00) of the children with parents at the undergraduate education level ($U = 845.500$; $z = -3.003$, $p < 0.005$). Similarly, emotional problems score (median = 3.00) of children with parents at secondary school education level is higher than emotional problems score (median = 2.00) of children with parents at master's / doctorate education level ($U = 161.500$; $z = -3.076$, $p < 0.005$).

Table 10. *One-Way Analysis of Variance (ANOVA) Results Regarding the Social Behaviors, Attention Deficit and Hyperactivity, and Peer Problems Sub-Dimension Scores of the Strengths and Difficulties Survey in terms of Perceived Income Level of the Parents*

SDQ Sub-dimensions	Perceived income level			Source of variance	Sum of squares	sd	Mean of squares	F	p	Significant Difference
	n	\bar{x}	ss							
Social Behaviors	Low	22	5,95	2,25	Between groups	2	26,446	6,618	0,002	Low<Medium Low<High
	Average	25	7,57	1,92						
	High	29	7,45	2,38						
Attention Deficit and Hyperactivity	Low	22	6,00	2,24	Between groups	2	20,592	4,279	,01	Low>Medium
	Average	25	4,57	2,10						
	High	29	4,69	2,80						
Peer problems	Low	22	3,41	1,22	Between groups	2	12,430	4,501	,012	Low>High
	Average	25	2,59	1,68						
	High	29	2,00	1,77						

p<0,05

In Table 10, the results of the One-Way Variance Analysis conducted to determine whether the sub-dimension scores of the Children's Strengths and Difficulties Questionnaire Social Behaviors, Attention Deficit and Hyperactivity and Peer Problems differ according to the income level perceived by the parents. Accordingly, it is seen that the social behavior scores of the children differ according to the perceived income level of the parents ($F(2-304) = 6.618$, $p < 0.05$). The effect size calculated as a result of the analysis ($\eta^2 = 0.04$) shows that this difference is at a medium level. Tukey test was conducted to determine in which group the difference obtained was significant. According to the Tukey test, it was observed that the significant difference was between the scores of children in the low income-average income and low income-high income groups. Accordingly, the average social behavior score ($\bar{x}_O = 7.57$) of the children in the average income group was found to be higher than the social behavior score average of the children in the low income group ($\bar{x}_D = 5.95$). Similarly, the social behavior score average ($\bar{x}_Y = 7.45$) of the high-income children was found to be higher than the social behavior score average ($\bar{x}_D = 5.95$) of the children at the low income level. Children's attention deficit and hyperactivity scores also differ according to the perceived income level of the parents ($F(2-304) = 4.276$, $p < 0.05$). The effect size calculated as a result of the analysis ($\eta^2 = 0.02$) indicates that this difference is at a low level. Tukey test was conducted to determine in which group the difference obtained was significant. According to the Tukey test, it was revealed that the significant difference was between children in the low-average income group. Accordingly, the average score (median = 6.00) of the children in the low income group is higher than the average score (median = 4.57) of the children in the average income group. Children's peer problems scores differ significantly according to the perceived income level of the parents ($F(2-304) = 4.501$, $p < 0.05$). The effect size calculated as a result of the analysis ($\eta^2 = 0.02$) indicates that this difference is at a low level. Tukey test was conducted to determine in which group the difference obtained was significant. According to the Tukey test, it was revealed that the significant difference was between children in the

low-high income group. Accordingly, the average score of peer problems (median = 3.41) of the children in the low income group is higher than the peer problems score average of the children in the high income group (median = 2.00).

Table 11. *Kruskal Wallis H Test Results on Strengths and Difficulties Survey Emotional Problems and Behavioral Problems Sub-Dimension Scores in terms of Perceived Income Level of Parents*

SDQ Sub-dimensions	Perceived income level	n	Median	x ²	sd	p
Emotional problems	Low	22	4,00	12,934	2	,00
	Medium	256	2,00			
	High	29	1,00			
Behavioral problems	Low	22	3,00	9,055	2	,01
	Medium	256	2,00			
	High	29	2,00			

p<0,05

Table 11 shows the Kruskal Wallis H result, which was conducted to determine whether the scores of the Emotional Problems and Behavioral Problems sub-dimensions of the Children's Strengths and Difficulties Questionnaire differ according to the perceived income level. According to the perceived income level, children's emotional problems (x^2 (df = 2, n = 307) = 12.934, p <0.05) and behavioral problems (x^2 (sd = 2, n = 307) = 9.055, p <0, 05), a significant difference was observed between the scores. Mann Whitney U Test was conducted in order to determine among which groups the difference obtained as a result of the analysis.

Table 12. *Mann Whitney U Test Results Related to Paired Comparison of Total Scores Obtained from Strengths and Difficulties Survey Emotional Problems and Behavioral Problems in terms of Perceived Income Level of Parents*

SDQ Sub-dimensions	Perceived income level	n	z	U	p
Emotional problems	Low-Average	278	-2,454	1940,50	,014
	Low-High	51	-3,399	142,50	,001
	Average-High	285	-2,445	2700,00	,014
Behavioral problems	Low-Average	278	-2,925	1782,00	,003
	Low-High	51	-2,330	199,00	,020
	Average-High	285	-,679	3433,00	,497

p<0,016

In the Mann Whitney U Test, which was carried out to determine the differences between the groups, Bonferroni correction was made in order to prevent an increase in error, and the significance level was taken as 0.016 instead of 0.05.

According to the perceived income level, the scores of children in emotional problems dimension differ significantly in low-medium, low-high and medium-high income groups. The emotional problems mean score (median = 4.00) of the children in the low income group is higher than the emotional problems average score (median = 2.00) of the children in the average income group (U = 1940.50; z = -2.454, p < 0.016). Similarly, the emotional problems mean score (median = 4.00) of the children in the low income group is higher than the mean

score (median = 1.00) of the children in the high income group ($U = 142.50$; $z = -3.399$, $p < 0.016$). The average score of emotional problems (median = 2.00) of children in the average income group is higher than the average score of children in the high income group (median = 1.00) ($U = 2700.00$; $z = -2.445$, $p < 0.016$). The lowest emotional problems score was found in children in the high income group (median = 1.00).

According to the perceived income level, children's scores in the dimension of behavioral problems differ significantly in low-average income groups. Accordingly, the average score of behavioral problems of children in the low income group (median = 3.00) is higher than the average score of children in the average income group (median = 2.00).

Table 13. *One-Way Analysis of Variance (ANOVA) Results of the Strengths and Difficulties Questionnaire According to the Number of Siblings of the Children, Attention Deficit and Hyperactivity Sub-Dimension Score*

SDQ Sub-dimensions	Number of siblings			Source of Variance	Sum of Squares	sd	Mean of Squares	F	p
	n	\bar{x}	ss						
Attention Deficit and Hyperactivity	1	137	4,53	2,32	5,993	2	26,446	,608	,545
	2	137	4,82	2,19					
	3+	39	4,77	1,91					

In Table 13, the results of One-Way Variance Analysis conducted to determine whether the scores of the Children's Strengths and Difficulties Questionnaire from the Attention Deficit and Hyperactivity sub-dimension differ according to the number of siblings. Accordingly, no significant difference was observed between the children's attention deficit and hyperactivity scores and the number of siblings ($p > 0.05$).

Table 14. *Kruskal Wallis H Test Results on Strengths and Difficulties Questionnaire Social Problems Emotional Problems Behavioral Problems and Peer Problems Sub-Dimension Scores According to the Number of Siblings of Children*

SDQ Sub-dimensions	Number of siblings	n	Median	χ^2	sd	p
Social Problems	1	137	8,00	,807	2	,66
	2	131	8,00			
	3+	39	7,00			
Emotional Problems	1	137	2,00	4,692	2	,096
	2	131	2,00			
	3+	39	2,00			
Behavioral Problems	1	137	2,00	2,985	2	,22
	2	131	2,00			
	3+	39	2,00			
Peer Problems	1	137	3,00	1,647	2	,43
	2	131	2,00			
	3+	39	3,00			

Table 14 shows the result of the Kruskal Wallis H Test conducted to determine whether the scores of the Social Problems Emotional Problems Behavioral Problems and Peer Problems sub-dimensions of the Children's Strengths and Difficulties Questionnaire differ according to

the number of siblings of children. Accordingly, no significant difference was observed between the scores of social problems, emotional problems, behavioral problems and peer problems and the number of siblings ($p > 0.05$).

Table 15. *One-Way Analysis of Variance (ANOVA) Results for the Social Problems Attention Deficit and Hyperactivity and Peer Problems Sub-Dimension Score of the Children's Strengths and Difficulties Questionnaire by Age*

SDQ Sub-dimensions	Age of Child				Source of Variance	Sum of Squares	sd	Mean of Squares	F	p	Significant Difference
	n	\bar{x}	ss								
Social Problems	10				Between						
	4	5	7,67	2,02	Groups	8,014	2	4,007	,967	,38	
	11				Within						
	5	7	7,32	2,05	Groups	1259,738	304	4,144			
	6	85	7,34	2,03							
Attention Deficit and Hyperactivity	10				Between						
	4	5	4,78	2,46	Groups	7,077	2	3,538	,719	,48	
	11				Within						
	5	7	4,50	2,00	Groups	1496,904	304	4,924			
	6	85	4,84	2,18							
Peer Problems	10				Between						4>5
	4	5	2,87	1,69	Groups	34,545	2	17,272	6,328	,00	
	11				Within						6>5
	5	7	2,16	1,42	Groups	829,745	304	2,729			
	6	85	2,84	1,87							

$p < 0,05$

In Table 15, the results of the One-Way Variance Analysis performed to determine whether the scores of the Social Problems Attention Deficit and Excessive Mobility and Peer Problems sub-dimensions of the Children's Strengths and Difficulties Questionnaire differ according to the child's age. Accordingly, no significant difference was observed between the social problems, attention deficit and hyperactivity scores of the children and their age ($p > 0.05$). A significant difference was observed between the scores of the peer problems sub-dimension and the age of the children ($F(2-304) = 6.328$, $p < 0.05$). The effect size calculated as a result of the analysis ($\eta^2 = 0.04$) shows that this difference is at a medium level. Tukey test was conducted to determine in which group the difference obtained was significant. According to the Tukey test, it was observed that there was a significant difference between the peer problems scores of the children in the 4-year-olds and 5-6-year-olds. The mean score of peer problems of 4-year-old children (median = 2.78) is higher than the peer problems score average of 5-year-old children (median = 2.16). Similarly, peer problems score average of 6-year-old children (median = 2.84) is lower than peer problems average score (median = 2.16) of 5-year-old children. The lowest average peer problems score occurred in 5-year-old children (median = 2.16).

Table 16. *Kruskal Wallis H Test Results Regarding Children's Strengths and Difficulties Survey Emotional Problems and Behavioral Problems Sub-Dimension Scores*

SDQ Sub-dimensions	Age of child	n	Median	x ²	sd	p
Emotional Problems	4	105	2,00	4,043	2	,13
	5	117	2,00			
	6	85	2,00			
Behavioral Problems	4	105	2,00	1,988	2	,37
	5	117	2,00			
	6	85	2,00			

Table 16 contains the result of the Kruskal Wallis H Test, which was conducted to determine whether the scores of the Emotional Problems and Behavioral Problems sub-dimensions of the Strengths and Difficulties Questionnaire of the children differ according to the age of the child. Accordingly, no significant difference was observed between the emotional problems and behavioral problems of the children and their ages ($p > 0.05$).

4. Results, Discussions and Suggestions

The scores obtained from the Strengths and Difficulties Questionnaire filled by the parents in order to evaluate the child problem behaviors are minimum 9 and maximum 39. The Strengths and Difficulties Questionnaire consists of five sub-dimensions: social behavior, emotional problems, attention deficit and excessive mobility, peer problems and behavioral problems. When looking at the relationship between the gender of the parents and child problem behaviors, there was no difference between emotional problems, attention deficit and hyperactivity, peer problems and behavioral problems and gender, while a significant difference was found between social behaviors and gender. It seems that the difference is in favor of mothers. The reason for this difference may be that in our culture, as in many cultures, mothers spend more time with children and take care of children more. There was no significant relationship between the age of the parents and the problem behaviors of the children in five dimensions. However, when the literature is examined, it is seen that different results are obtained on this subject. Eratay (2011), Sosu & Schmidt (2017), Işık (2020) did not find a relationship between parents' age and child problem behaviors. Dursun (2010), on the other hand, found in his study that children with parents over 50 years of age exhibit less aggressive behavior but more anxious / crying behavior. At this point, Dursun (2010) emphasizes that parents in the older age group may exhibit more protective behavior towards their children and as a result, the child's dependence on the parent may increase and the child may be more anxious when the parent is not. In the same study, it is seen that there is no difference in the age of the parents in the dimensions of attention deficit and hyperactivity. In another study conducted with parents with preschool children, it was observed that there was a significant difference in problem behaviors in the children of mothers between the ages of 21-30 and 31-40, and children of mothers aged 31-40 had less problem behaviors. According to Bilir and Dursun Sop (2016), as parents get older, their experience of being a mother increases and matures individually. In this direction, parents exhibit effective attitudes in raising children and solving children's problems. Parents' education level can be a factor in the emergence of problem behaviors (Özbey, 2010). When the relationship between parents' education level and child problem behaviors is evaluated, there is no significant difference in terms of attention deficit and excessive mobility, peer problems, social behaviors and behavioral problems. These

findings are supported by Aydener (2016), Ertürk Kara and Gürgen (2016), Liman (2019). However, a striking point is that there is a significant difference between the education level of the parents and emotional problems. As a result of the analysis, it is seen that the difference in emotional problems is caused by the parent groups at the secondary school-undergraduate and secondary school-master / doctorate education level. Children with parents at the secondary education level have higher emotional problems scores than the children of parents who are at the undergraduate and graduate / doctorate education level. At this point, Dursun (2010) emphasizes that parents in the older age group may exhibit more protective behavior towards their children and as a result, the child's dependence on the parent may increase and the child may be more anxious when the parent is not. In the same study, it is seen that there is no difference in the age of the parents in the dimensions of attention deficit and hyperactivity. In another study conducted with parents with preschool children, it was observed that there was a significant difference in problem behaviors in the children of mothers between the ages of 21-30 and 31-40, and children of mothers aged 31-40 had less problem behaviors. According to Bilir and Dursun Sop (2016), as parents get older, their experience of being a mother increases and matures individually. In this direction, parents exhibit effective attitudes in raising children and solving children's problems. Parents' education level can be a factor in the emergence of problem behaviors (Özbey, 2010). When the relationship between parents' education level and child problem behaviors is evaluated, there is no significant difference in terms of attention deficit and excessive mobility, peer problems, social behaviors and behavioral problems. These findings are supported by Aydener (2016), Ertürk Kara and Gürgen (2016), Liman (2019). However, a striking point is that there is a significant difference between the education level of the parents and emotional problems. As a result of the analysis, it is seen that the difference in emotional problems is caused by the parent groups at the secondary school-undergraduate and secondary school-master / doctorate education level. Children with parents at the secondary education level have higher emotional problems scores than the children of parents who are at the undergraduate and graduate / doctorate education level. Considering whether the problem behaviors of children differ according to the perceived income level, it is noteworthy that there are significant differences in all dimensions of problem behaviors. Significant difference in social behaviors dimension measuring positive behavior originates from low income-average income and low income-high income groups. Accordingly, children in the middle and high income group exhibit higher social behaviors, while children in the low income group exhibit less social behavior. It is seen that the significant difference in attention deficit and hyperactivity dimensions is at low-average income level. Accordingly, children in the low income group have higher scores in terms of attention deficit and excessive mobility than children in the average income group. According to the relationship between peer problems and perceived income level, a significant difference emerged between low-high income groups. It can be said that children in the low income group exhibit more peer problems than children in the high income group. When the effect of the perceived income level factor on emotional problems of children is examined, it is revealed that there are differences in low-medium, low-high and medium-high income groups. Accordingly, children in the low income group exhibit more emotional problems than children in the middle and high income groups. Similarly, children in the average income group present more emotional problems than children in the high income group. Accordingly, it can be said that as the income level increases, children's emotional problems decrease. When the behavioral problems of children were examined according to the perceived income level factor, it was found that there was a significant difference in the low-average income level. Accordingly, children in the low income group exhibit more behavioral problems than children in the average income group. Looking at these results, it can be said that children in the low income group exhibit more problematic behaviors than children in the middle and high income

group. Eratay (2011), Liu, et al. (2018) also revealed in their studies that children of low-income parents exhibit more problem behaviors. Similarly, Sosu and Schmidt (2017), in a longitudinal study with children aged 4-6, revealed that low income levels have both direct and indirect effects on children's problem behaviors. Low income causes stress in the parent, which causes the parents to display negative parental attitudes such as punishment towards their child. Likewise, low income is associated with malnutrition and less investment in a child's education and lower cognitive ability. Low cognitive ability has an effect on behavioral problems (Sosu & Schmidt, 2017). Parallel to the literature, low income is an important risk factor for child problem behaviors and children living in the low income group can be defined as "children at risk" (Korkut, 2018). However, in a study conducted by Işık (2020) with parents with children between the ages of 4-6, it was revealed that children in the income group of 5000 TL and above have more internalized problems. According to Işık (2020), many parents offer their children more than they need, which can cause children to experience problems such as unhappiness and dissatisfaction, and brings children closer to internalized problems. Seven (2007) concluded that social behavior problems of children are affected by the number of siblings, and that single children exhibit less social behavior problems. Similarly, Dursun (2010) suggests that children with siblings exhibit more problematic behaviors due to reasons such as the split of interest in the case of siblings and increased competition among children, when parents with one child give all the attention to their only child. However, as a result of this study, no significant relationship was observed between the problem behaviors of children and the number of siblings. This result is consistent with the research findings of Alisinanoğlu and Kesicioğlu (2010), Tarkoçin (2014), Ulu (2008), Liman (2019) and Işık (2020). When the literature is examined, it is seen that the ages of the children predict problem behaviors. Baydar and Akçınar (2018) revealed that in a longitudinal study in which children aged 3-7 were followed, externalizing behaviors decreased with age, but increased again at the age of 6. This situation can be explained by the fact that children have problems in adaptation when they start school and the negative parental attitude in this direction (Baydar & Akçınar, 2018). Ertürk Kara and Gürgen (2016) stated that children aged 60-72 months had more problematic behaviors related to being anxious / crying than children aged 48-60 months, and this may be related to the fact that children in the older age group feel more adult expectations and consequently more anxiety. . Alisinanoğlu and Kesicioğlu (2010) concluded that attention deficit and hyperactivity problems are more common in children aged 36-48 months compared to children aged 60-72 months, and more in children aged 60-72 months than in children aged 48-60 months. Gültekin et al. (2015) emphasize that problem behaviors are higher in the 4-5 age group compared to the 6-year-old and above group. In this study, as a result of the analyzes made to determine whether the problem behaviors of children differ according to their ages, it was revealed that there was no significant difference in the dimensions of social behaviors, attention deficit and excessive mobility, emotional problems and behavioral problems. The striking point is that there is a significant difference between 4-5 age and 5-6 age groups in peer problems. Accordingly, 4-year-olds exhibit more peer problems than 5-year-olds and 6-year-olds than 5-year-olds. The age group 5 has the lowest peer problems.

This research is limited to the province of Istanbul, so the study can be carried out with a larger sample group. In the study, the results regarding the problem behaviors of children were collected through parental assessment. Although this method is common, a similar study can be performed by collecting data directly from children. With a smaller study group, a qualitative study can be carried out on problem behaviors exhibited in different environments by observing the problem behaviors of children in home and school environments. A longitudinal study can be conducted to investigate the long-term consequences of problem behaviors that occur in the preschool period.

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