2025, Vol 4, No 2, 480-498
https://doi.org/10.29329/pedper.2025.147

Pedagogical Perspective

RESEARCH ARTICLE Open Access

Behavioural problems in 48-72 month old children and the role of familial factors[1]

Didem Semerci Arıkan*[2], Ozana Ural[3] and Nazife Hülya Bilgin köse[3]

[2] Early Childhood Education, Faculty of Education, Ordu University, Ordu, Türkiye.
[3] Early Childhood Education, Faculty of Education, Marmara University, Istanbul, Türkiye.

Abstract

This research aimed to identify 48-to 72-month-old children with behavioural problems and to examine familial factors such as family characteristics, family involvement, and alexithymia that are thought to be associated with these problems. In line with this primary objective, behavioural problems in children, family involvement, and families' alexithymia (difficulty in recognizing, expressing, and distinguishing emotions) levels were determined, and the variation in the presence of behavioural problems in children according to family characteristics, family involvement, and families' alexithymia levels was examined. A relational survey model, a quantitative research method, was used to identify children with behavioural problems and to examine the familial factors affecting their behaviours across various variables. Convenience sampling was used in the study, and the sample consisted of 389 children aged 48-72 months, along with their families, attending preschool education institutions affiliated with the Ministry of National Education in Ordu province. The “Preschool Behavioural Problems Screening Scale”, “Family Information Form”, “Family Involvement Scale”, and “Toronto Alexithymia Scale” were used to collect research data. According to the research results, it was determined that the presence of behavioural problems in 48-72 month old children differed significantly according to some characteristics such as the age of parents, mother's educational status, number of children in the family, birth order of the child, and the family's observation of a problem in the child. In contrast, it did not cause a significant change according to some others (parents' closeness to the child, employment status, etc.), that the family involvement levels of parents of children without behavioural problems were higher than those of parents of children with behavioural problems, and that the presence of b behavioural problems in children was not affected by their families' alexithymic status.

Keywords: Preschool, behavioural problems, family involvement, alexithymia

Introduction

Until they begin preschool education, a child's first educator is the family, and each family provides education to their child in line with their own internal dynamics. The education a child receives becomes differentiated when they start school, as they begin learning within the framework of the implemented curriculum (Çelik, 2003). The greater the harmony between the education provided by the family and the school, the easier the child's adaptation to school becomes. A significant disparity between these two educational approaches results in children exhibiting maladaptive behaviours.

[1] This study was produced from the first author's unpublished doctoral dissertation, carried out under the supervision of the second and third authors.

*Corresponding Author: didemsemerciarikan@gmail.com
Received 14.10.2025 Revised 19.10.2025 Accepted 19.10.2025

Before describing what maladaptive behaviours in children are, it is necessary to define the concepts of behaviour and adaptation. Behaviour refers to all actions of an individual that other people can directly observe. Adaptation, on the other hand, is the person's ability to establish and maintain a balanced relationship between their own characteristics and self with their environment (Sipahioğlu, 2014). Imposing excessive rules and boundaries on a child or leaving them excessively free leads to deterioration in the child's relationships with their environment and, consequently, to exhibiting maladaptive behaviours.

Adaptation and behavioural problems are disorders observed as a result of the child's emotional response when the negativities of the immediate environment are added to the usual difficulties brought by developmental periods (Yavuzer, 2005). These problems may emerge as a result of children reflecting the internal conflicts they experience in their behaviours due to various physical and psychological reasons (Kanlıkılıçer, 2005). Developmental psychologists state that a child's behaviour is considered a problem if it meets certain criteria. These criteria can be listed as: continuity, intensity, age-appropriateness, and gender role expectations (Weikart, cited in Kanlıkılıçer, 2005).

Research in the literature has shown that behavioural problems in children are associated with various factors. Among these factors, parents' descriptive characteristics (personal characteristics of mothers and fathers, the family's socioeconomic level, having siblings, etc.) and maternal and/or paternal involvement in education are important topics. In these studies, it has been determined that: parents' personality traits are related to behavioural problems seen in children (Potharst et al., 2015); mothers' personal characteristics predict children's internalizing, externalizing, and dysregulated behavioural problems (Kim, Choi & Oh, 2021); children from low socioeconomic status have higher behavioural problems compared to the general population (Huaqing Qi and Kaiser, 2003); children with more siblings show significantly more aggressive behaviours and have more behavioural problems (Ani and Grantham-McGregor, 1998; Seven, 2007); family involvement is important in supporting children's positive behaviours (Dunlap et al., 2001); children in families with high father involvement show less internalizing behaviour (Mezulis, Hyde, and Clark, 2004); as family involvement increases, behavioural problems seen in children decrease (McCormick et al., 2013); maternal and paternal involvement is an important factor in reducing problems encountered in children (Atzaba-Poria et al., 2010); quarrelsome/aggressive behavioural problems are observed in children of families displaying excessive control behaviour (Dursun, 2010); conduct disorders, anxiety/withdrawal-attention problems, and socialized aggression behaviours are more frequently seen in children rejected by their peers (Demir Şad, 2007).

One of the factors leading to behavioural problems in children is the level of alexithymia. Alexithymia is a broad term describing problems related to emotions. In its simplest definition, it is defined as inadequacy in expressing, identifying, and distinguishing one's emotions (American Psychological Association, 2020; Burhanoğlu, 2016; Cherney, 2021). Research conducted shows that alexithymia seen in parents is related to behavioural problems in children. In these studies, it was found that more problem behaviours were encountered in children of fathers with high alexithymia scores (Szatmari et al., 2008); alexithymic characteristics of mothers and fathers are linked to high risk of psychological disorders in children (Gatta et al., 2017); mothers of children with anxiety disorders have higher alexithymia scores (Paniccia et al., 2018).

In summary, these studies reveal that behavioural problems in children are influenced by familial factors such as parents' personal characteristics, families' socioeconomic levels, and the number of siblings. Additionally, parents' family involvement and alexithymia levels are related to these behavioural problems in children. The existence of numerous factors affecting children's behavioural problems highlights the importance of studies aimed at identifying these behavioural problems and revealing their causes. The preschool period is also an early, critical, and important time for conducting these studies. From this point of view, the primary purpose of the study is to identify 48-to 72-month-old children with behavioural problems and to examine familial factors such as family characteristics, family involvement, and alexithymia that are thought to be associated with these problems. In line with this primary objective, answers to the following questions were sought;

1. What is the status of behavioural problems in 48-72-month-old children attending preschool education institutions according to the “Preschool Behavioural Problems Screening Scale”?
2. Does the presence or absence of behavioural problems in 48-72-month-old children attending preschool education institutions vary according to parental characteristics?
3. Are the family involvement levels of families with children displaying behavioural problems different from the family involvement levels of families with children not displaying behavioural problems?
4. What is the level of alexithymia status of families of 48-72-month-old children attending preschool education institutions?
5. Are the alexithymia levels of families with children displaying behavioural problems different from the alexithymia levels of families with children not displaying behavioural problems?

Method

This study was conducted to identify children aged 48-72 months with behavioural problems and to examine familial factors such as family characteristics, family involvement, and alexithymia that are thought to be associated with these problems. The relational survey model, part of the survey model within quantitative research methods, was used in the research. The survey model is a research approach conducted with large groups in which the opinions of people in the group regarding an event or phenomenon are obtained, their attitudes are determined, and events and phenomena are described (Karakaya, 2009). The relational survey model, on the other hand, is a research model that aims to determine the presence or degree of covariation between two or more variables (Karasar, 2014). Since the research aimed to identify children with behavioural problems and examine the familial factors influencing children's behaviours across various variables, the relational survey model was used.

Participants and procedure

The research population consists of 12,312 children aged 48-72 months (MEB, 2019) and their families attending preschool education institutions affiliated with the Ministry of National Education in Ordu province during the 2018-2019 academic year. When determining the sample, convenience sampling, a non-random sampling method, was used. This type of sampling involves selecting individuals who are easily accessible due to time, labour, or economic constraints until the sample size is reached (Büyüköztürk et al., 2008; Ural & Kılıç, 2011). Based

on this, the research sample consists of 389 children aged 48-72 months and their families, who attend preschool education institutions affiliated with the Ministry of National Education, identified in the Altınordu district of Ordu province during the 2018-2019 academic year. Demographic information about the participants is provided in Table 1.

Table 1 Demographic characteristics of participant children and parents

			n	%
Child	Age	4 years old	104	26,7
		5 years old	219	56,3
		6 years old	66	17,0
	Gender	Girl	186	47,8
		Boy	203	52,2
Family	Mother's Age	21-25 years	14	3,6
		26-30 years	74	19,0
		31-35 years	167	42,9
		36-40 years	88	22,6
		41 years and above	46	11,8
	Mother's Educational Status	Primary school	50	12,9
		Middle school	52	13,4
		High school	140	36,1
		University	141	36,3
		Other	5	1,3
	Mother's Employment Status	Employed	155	39,8
		Unemployed	234	60,2
	Father's Age	20 years and below	1	,3
		26-30 years	24	6,2
		31-35 years	138	35,6
		36-40 years	134	34,6
		41 years and above	91	23,5
	Father's Educational Status	Primary school	45	11,6
		Middle school	65	16,7
		High school	141	36,2
		University	129	33,2
		Other	9	2,3
	Father's Employment Status	Employed	364	93,6
		Unemployed	25	6,4
	Family Status	Mother, father, and child living together in the same home.	365	93,8
		Mother and father are living in separate homes.	13	3,3
		Father is living in another city or abroad.	7	1,8
		Other	4	1,0
	Number of Children	1 child	97	24,9
		2 children	203	52,2
		3 children	82	21,1
		4 children	7	1,8
	Gender of Children	Girl	99	25,4
		Boy	112	28,8
		Girl and Boy	178	45,8
	Child's Birth Order	First	179	47,7
		Second	144	38,4
		Third	49	13,1
		Fourth	3	,8
	Income Status	Low income	56	14,4
		Middle income	323	83,0
		High income	7	1,8
		Other	3	,8
	Support Person in Child Care	Yes	138	35,5
		No	251	64,5
	Individual with Special Needs Living in the Family	Yes	18	4,6
		No	370	95,4
	Presence of an Observed Problem in	Yes	69	17,7

the Child	No	320	82,3

Measures

Preschool behaviour problems screening scale

The scale was developed in 1976 by Behar under the name Preschool Behaviour Questionnaire (PBQ) to identify behavioural problems in preschool children (Kanlıkılıçer, 2005). The Turkish adaptation of the scale was carried out by Kanlıkılıçer in 2005, and the scale was named "Preschool Behaviour Problems Screening Scale."

The maximum and minimum internal consistencies of the scale were calculated. As a result of the analyses conducted, the Cronbach's alpha value for maximum internal consistency of the scale was found to be .92, while in calculating the Guttman and Spearman values for minimum internal consistency, the alpha value of the first of the two halves created was .86, and the alpha value of the second was .83 (Kanlıkılıçer, 2005; Ural & Kanlıkılıçer, 2010). Based on this, it can be stated that the preschool behaviour problems screening scale has high reliability. The scale, which is a three-point Likert-type scale, consists of 30 items. It comprises the subdimensions of being quarrelsome-aggressive, being anxious-tearful, and being hyperactive-inattentive (Kanlıkılıçer, 2005).

Family information form

In the study, the "Family Information Form" prepared by the researcher was used to reveal the characteristics of families. In addition to questions such as the age, education, occupation of the mother and father, the number of children they have, their gender and birth order, and income status, the form includes questions about the family's togetherness status, the presence of a person supporting the child's care, whether an individual with special needs is living within the family, and the presence of any problem behaviours that families observe in their children.

Family involvement scale

The original form of the scale was developed in 2000 by Fantuzzo, Tighe, and Childs under the name "Family Involvement Questionnaire." Gürşimşek carried out the Turkish translation. The reliability coefficient of the scale was determined as .79 for the SBI subdimension, .69 for the HBI subdimension, .84 for the SFI subdimension, and .87 for the entire scale. The scale, which consists of 21 items, is a five-point Likert-type scale and comprises three subdimensions: school-based involvement (SBI), home-based involvement (HBI), and school-family collaboration-based involvement (SFI) (Gürşimşek, 2013).

Toronto Alexithymia Scale (TAS-20)

The original scale was developed by Taylor, Ryan, and Bagby in 1985 to measure the alexithymic characteristics of individuals. Later, Bagby, Parker and Taylor (1994) made modifications to the scale, and the scale, consisting of 3 factors and 20 items, was named TAS-20. The Turkish adaptation of the scale was carried out by Güleç and colleagues in 2009. The study shows that the Turkish translation of the scale supports the three-factor structure as in the original research. The internal consistency of the Turkish adaptation was also determined to be adequate, and the TAS-20 Turkish adaptation was found to be valid and reliable for the Turkish sample. The scale, which is a five-point Likert-type, consists of three subdimensions: difficulty identifying feelings, difficulty describing feelings, and externally-oriented thinking (Güleç et al., 2009; Güleç & Yenel,

2010).

Data analysis

All data obtained from the “Preschool Behaviour Problems Screening Scale,” “Family Involvement Scale,” “Toronto Alexithymia Scale (TAS-20),” and “Preschool Social Skills Assessment Scale-Teacher Form” used in the study were entered into the SPSS for Windows 22.00 statistical software package, and all analyses were conducted using this program. Chi-square Test was used to compare the occurrence of behavioural problems in children participating in the study according to their families' descriptive characteristics (in cases where the number of cells with frequencies below 5 exceeded 20% of all cells in the chi-square analysis, Fisher's Exact value was examined). The Mann-Whitney U test was used to measure whether the occurrence of behavioural problems in children differed in terms of family involvement and the family's alexithymic status.

Findings

In this section, the behavioural problem levels of 48-72-month-old children attending preschool education institutions, and the relationship between the presence of children's behavioural problems and parental characteristics, family involvement, and alexithymia levels are presented in order, in relation to the sub-problems of the study. The behavioural problem status of the children in the study group, according to the total score of the Behaviour Problems Screening Test, is given in Table 2

Table 2 Behavioural problem status of 48-72-month-old children attending preschool education institutions according to the preschool behaviour problems screening scale

Behavioural Problems	n	%
Behaviours within normal limits	353	90,7
Behaviours deviated from normal	36	9,3

According to Table 2, it was found that 90.7% of the 48-72-month-old children attending preschool education institutions had behaviours within normal limits, while 9.3% had behaviours that deviated from normal.

Findings regarding whether the occurrence of behavioural problems in children differs according to the age of the children's mother and father, educational status, employment status, family togetherness status, number of children in the family, gender of children in the family, birth order of the child, family income status, presence of someone supporting the child's care, presence of an individual with special needs living in the family, and whether the family has observed a problem in the child are presented in Tables 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, and 16, respectively.

Table 3 Differentiation of the occurrence of behavioural problems in 48-72-month-old children according to the mother's age variable

	No Behavioural Problem		Behavioural Problem Present		Test	p
Age	n	%	n	%		
21-25	12	3,4	2	5,6		
26-30	62	17,6	12	33,3		
31-35	151	42,8	16	44,4	χ^2=10,027	,039
36-40	82	23,2	6	16,7		
41 and above	46	13,0	0	0,0		

According to Table 3, the difference between the occurrence of behavioural problems in 48-72-month-old children and their mothers' age was found to be significant at the p<0.05 significance level. It was determined that 3.4% of the mothers of children without behavioural problems were 21-25 years old, 17.6% were 26-30 years old, 42.8% were 31-35 years old, 23.2% were 36-40 years old, and 13% were 41 years old or older, while 5.6% of the mothers of children with behavioural problems were 21-25 years old, 33.3% were 26-30 years old, 44.4% were 31-35 years old, and 16.7% were 36-40 years old. In conclusion, it can be said that the mothers of children with behavioural problems are younger.

Table 4 Differentiation of the occurrence of behavioural problems in 48-72 month old children according to the mother's educational status variable

	No Behavioural Problem		Problem Present		Test *	p
Education	n	%	n	%		
Primary School	41	11,6	9	25,0	χ^2=10,845	,022
Middle School	48	13,6	4	11,1		
High School	127	36,1	13	36,1		
University	133	37,8	8	22,2		
Other	3	0,9	2	5,6		

(*) Fisher's Exact value was used because the number of cells with expected count less than 5 exceeded 20%.

According to Table 4, the difference between the occurrence of behavioural problems in 48-72-month-old children and their mothers' educational level was found to be significant at the p<0.05 significance level. It was determined that 11.6% of the mothers of children without behavioural problems were primary school graduates, 13.6% were middle school graduates, 36.1% were high school graduates, and 37.8% were university graduates. In comparison, 25% of the mothers of children with behavioural problems were primary school graduates, 11.1% were middle school graduates, 36.1% were high school graduates, and 22.2% were university graduates. In conclusion, it can be said that the mothers of children with behavioural problems have lower educational levels.

Table 5 Differentiation of the occurrence of behavioural problems in 48-72-month-old children according to the mother's employment status variable

	No Behavioural Problem		Problem Present		Test	p
Employment	n	%	n	%		
Employed	143	40,5	12	33,3	,702	,402
Not Employed	210	59,5	24	66,7		

According to Table 5, the difference between the occurrence of behavioural problems in 48-72-month-old children and their mothers' employment status was found to be non-significant at the p>0.05 significance level. In conclusion, it can be said that the occurrence of behavioural problems does not differ according to the employment status of the children's mothers.

Table 6 Differentiation of the occurrence of behavioural problems in 48-72-month-old children according to the father's age variable

	No Behavioural Problem		Problem Present		Test *	p
Age	n	%	n	%		
20 years and under	1	0,3	0	0,0		
26-30	21	6,0	3	8,3		
31-35	121	34,4	17	47,2	χ^2=13,178	,008
36-40	119	33,8	15	41,7		
41 and above	90	25,6	1	2,8		

(*) Fisher's Exact value was used because the number of cells with expected count less than 5 exceeded 20%.

According to Table 6, the difference between the occurrence of behavioural problems in 48-72-month-old children and their fathers' age was found to be significant at the p<0.05 significance level. It was determined that 0.3% of the fathers of children without behavioural problems were 20 years old and under, 6% were 26-30 years old, 34.4% were 31-35 years old, 33.3% were 36-40 years old, and 25.6% were 41 years old and older, while 8.3% of the fathers of children with behavioural problems were 26-30 years old, 47.2% were 31-35 years old, 41.7% were 36-40 years old, and 2.8% were 41 years old and older. In conclusion, it can be said that the fathers of children with behavioural problems are younger.

Table 7 Differentiation of the occurrence of behavioural problems in 48-72-month-old children according to the father's educational level variable

	No Behavioural Problem		Problem Present		Test	p
Education	n	%	n	%		
Primary School	40	11,3	5	13,9		
Middle School	59	16,7	6	16,7	χ^2=5,547	,236
High School	123	34,8	18	50,0		
University	123	34,8	6	16,7		
Other	8	2,3	1	2,8		

According to Table 7, the difference between the occurrence of behavioural problems in 48-72-month-old children and their fathers' educational level was found to be insignificant at the p>0.05 significance level. In conclusion, it can be said that the occurrence of behavioural problems does not differ according to the fathers' educational level.

Table 8 Differentiation of the occurrence of behavioural problems in 48-72-month-old children according to the father's employment status variable

	No Behavioural Problem		Problem Present		Test *	p
Employment	n	%	n	%		
Employed	332	94,1	32	88,9	1,448	,229
Not Employed	21	5,9	4	11,1		

(*) Fisher's Exact value was used because the number of cells with expected count less than 5 exceeded 20%.

According to Table 8, the difference between the occurrence of behavioural problems in 48-72-month-old children and their fathers' employment status was found to be insignificant at the p>0.05 significance level. In conclusion, it can be said that the occurrence of behavioural problems does not differ according to the fathers' employment status.

Table 9 Differentiation of the Occurrence of Behavioural Problems in 48-72 Month Old Children According to the Family Unity Status Variable

	No Behavioural Problem		Problem Present		Test *	p
	n	%	n	%		
Mother, Father, and Child living together in the same house.	332	94,1	33	91,7		
Mother and Father are living in separate houses	10	2,8	3	8,3	χ^2=3,067	,314
Father is living in another city or abroad.	7	2,0	0	0,0		
Other	4	1,1	0	0,0		

(*) Fisher's Exact value was used because the number of cells with expected count less than 5 exceeded 20%.

According to Table 9, the difference between the occurrence of behavioural problems in 48-72-month-old children and the family unity status was found to be insignificant at the p>0.05 significance level. In conclusion, it can be said that the occurrence of behavioural problems does

not differ according to the family unity status.

Table 10 Differentiation of the occurrence of behavioural problems in 48-72 month old children according to the number of children in the family variable

	No Behavioural Problem		Problem Present		Test	p
	n	%	n	%		
1 child	82	23,2	15	41,7		
2 children	188	53,3	15	41,7	χ^2=17,764	,000
3 children	79	22,4	3	8,3		
4 children	4	1,1	3	8,3		

According to Table 10, the difference between the occurrence of behavioural problems in 48-72-month-old children and the number of children in the family was found to be significant at the p<0.05 significance level. It was determined that 23.2% of families of children without behavioural problems had one child, 53.3% had two children, 22.4% had three children, and 1.1% had four children. In comparison, 41.7% of families of children with behavioural problems had one child, 41.7% had two children, 8.3% had three children, and 8.3% had four children. In conclusion, when compared to those without behavioural problems, the occurrence of behavioural problems was found to be approximately twice as high in families with one child and approximately eight times higher in families with four children.

Table 11 Differentiation of the occurrence of behavioural problems in 48-72-month-old children according to the gender of children in the family variable

	No Behavioural Problem		Problem Present		Test	p
	n	%	n	%		
Girl	93	26,3	6	16,7		
Boy	97	27,5	15	41,7	χ^2=3,632	,163
Girl and Boy	163	46,2	15	41,7		

According to Table 11, the difference between the occurrence of behavioural problems in 48-72-month-old children and the gender of children in the family was found to be insignificant at the p>0.05 significance level. In conclusion, it can be said that the occurrence of behavioural problems does not differ according to the gender of children.

Table 12 Differentiation of the occurrence of behavioural problems in 48-72-month-old children according to the child's birth order variable

	No Behavioural Problem		Problem Present		Test *	p
	n	%	n	%		
1st child	155	45,7	24	66,7		
2nd child	135	39,8	9	25,0	χ^2=8,550	,032
3rd child	47	13,9	2	5,6		
4th child	2	0,6	1	2,8		

(*) Fisher's Exact value was used because the number of cells with expected count less than 5 exceeded 20%.

According to Table 12, the difference between the occurrence of behavioural problems in 48-72-month-old children and the child's birth order was found to be significant at the p<0.05 significance level. It was determined that 45.7% of children without behavioural problems were the family's 1st child, 39.8% were the second child, 13.9% were the third child, and 0.6% were the fourth child. In comparison, 66.7% of children with behavioural problems were the family's 1st child, 25% were the second child, 5.6% were the third child, and 2.8% were the fourth child. In conclusion, it was found that children with behavioural problems were approximately one and a half times more likely to be the family's 1st child and approximately four times more likely to be the fourth child compared to those without behavioural problems.

Table 13 Differentiation of the occurrence of behavioural problems in 48-72-month-old children according

to the family's income status variable

	No Behavioural Problem		Problem Present		Test *	p
	n	%	n	%		
Low income	47	13,3	9	25,0		
Middle income	296	83,9	27	75,0		
High income	7	2,0	0	0,0	χ^2=3,491	,275
Other	3	0,8	0	0,0		

(*) Fisher's Exact value was used because the number of cells with expected count less than 5 exceeded 20%.

According to Table 13, the difference between the occurrence of behavioural problems in 48-72-month-old children and the family's income was found to be insignificant at the p>0.05 significance level. In conclusion, it can be said that the occurrence of behavioural problems does not differ according to the family's income status.

Table 14 Differentiation of the occurrence of behavioural problems in 48-72-month-old children according to the presence of someone providing support in the child's care

	No Behavioural Problem		Problem Present		Test	p
	n	%	n	%		
Yes	124	35,1	14	38,9	χ^2=,202	,653
No	229	64,9	22	61,1		

According to Table 14, the difference between the occurrence of behavioural problems in 48-72-month-old children and the presence of someone providing support in the child's care was found to be insignificant at the p>0.05 significance level. In conclusion, it can be said that the occurrence of behavioural problems does not differ according to the presence of someone providing support in the child's care.

Table 15 Differentiation of the occurrence of behavioural problems in 48-72-month-old children according to the presence of a person with special needs living in the family

	No Behavioural Problem		Problem Present		Test *	p
	n	%	n	%		
Yes	16	4,5	2	5,6	χ^2=,075	,678
No	336	95,5	34	94,4		

(*) Fisher's Exact value was used because the number of cells with expected count less than 5 exceeded 20%.

According to Table 15, the difference between the occurrence of behavioural problems in 48-72-month-old children and the presence of a person with special needs living in the family was found to be insignificant at the p>0.05 significance level. In conclusion, it can be said that the occurrence of behavioural problems does not differ according to the presence of a person with special needs living in the family.

Table 16 Differentiation of the occurrence of behavioural problems in 48-72 month old children according to the presence of a problem observed by the family in the child

	No Behavioural Problem		Problem Present		Test	p
	n	%	n	%		
Yes	53	15,0	6	44,4	χ^2=19,392	,000
No	300	85,0	20	55,6		

According to Table 16, the difference between the occurrence of behavioural problems in 48-72-month-old children and the presence of a problem observed by the family in the child was found to be significant at the p<0.05 significance level. Of the families of children without behavioural problems, 15% stated that there was a problem they observed in their child, while 85% indicated that there was no problem they observed in their child. Families of children with behavioural problems, on the other hand, stated at a rate of 44.4% that there was a problem they observed in

their child, while 55.6% indicated that there was no problem they observed in their child. In conclusion, it was found that while a high proportion (85%) of families with children who did not show behavioural problems made an assessment parallel to the researcher's determination, less than half (44.4%) of families with children who showed behavioural problems made an assessment parallel to the researcher's determination. Findings related to the comparison of the occurrence of behavioural problems in 48-72-month-old children in terms of the scores parents obtained from the Family Involvement Scale are presented in Table 17.

Table 17 Differentiation of the occurrence of behavioural problems in 48-72-month-old children in terms of parents' family involvement

Behavioural Problem		N	X̄	SD	Test ve p
School-Based Involvement	No	349	22,97	5,419	U=3438,500
	Yes	35	19,14	4,285	p=,000
Home-Based Involvement	No	353	19,69	3,250	U=3697,500
	Yes	36	17,28	3,419	p=,000
School-Family Collaboration	No	350	32,46	7,341	U=4727,000
	Yes	36	29,28	7,053	p=,014
Total Family Involvement	No	346	75,10	13,170	U=3498,500
	Yes	35	65,51	12,550	p=,000

According to Table 17, the mean score of families of children without behavioural problems on the “School-Based Involvement” dimension was 22.97±5.419 and the mean score of families of children with behavioural problems on the “School-Based Involvement” dimension was 19.14±4.285, and the difference between them was found to be significant at the p<0.05 significance level (U=3438.500 p=.000). The mean score of families of children without behavioural problems on the “Home-Based Involvement” dimension was 19.69±3.250 and the mean score of families of children with behavioural problems on the “Home-Based Involvement” dimension was 17.28±3.419, and the difference between them was found to be significant at the p<0.05 significance level (U=3697.500 p=.000). The mean score of families of children without behavioural problems on the “School-Family Collaboration” dimension was 32.46±7.341 and the mean score of families of children with behavioural problems on the “School-Family Collaboration” dimension was 29.28±7.053, and the difference between them was found to be significant at the p<0.05 significance level (U=4727.000 p=.014). The mean “Total Family Involvement” score of families of children without behavioural problems was 75.10±13.170, and the mean “Total Family Involvement” score of families of children with behavioural problems was 65.51±12.550. The difference between them was found to be significant at the p<0.05 significance level (U=3498.500 p=.000). In conclusion, a difference was found between families of children without behavioural problems and families of children with behavioural problems in the “School-Based Involvement”, “Home-Based Involvement”, “School-Family Collaboration” subscales and in terms of the total Family Involvement Scale score, in favor of families of children without behavioural problems. The alexithymic status of participating parents according to their total score on the Toronto Alexithymia Scale is presented in Table 18.

Table 18. Alexithymia status of families of 48-72-month-old children attending preschool education institutions according to their total Toronto Alexithymia Scale score

Alexithymia status	N	%
No alexithymia	256	65,8
Alexithymia present	133	34,2

According to Table 18, while 65.8% of families of 48-72-month-old children attending preschool education institutions showed no alexithymia, 34.2% were found to have alexithymia. In

conclusion, it can be said that 34.2% of families experience difficulty in identifying, distinguishing, and expressing emotions. Findings related to the comparison of the presence of behavioural problems in 48-72-month-old children in terms of parents' scores on the Toronto Alexithymia Scale are presented in Table 19.

Table 19 Differentiation of the presence of behavioural problems in 48-72-month-old children in terms of parents' alexithymic status

TEST Behavioural problem		n	X̄	SD	Test ve p
Difficulty Identifying Feelings	No	353	11,69	4,563	U=6226,000
	Yes	36	11,75	4,513	p=,841
Difficulty Describing Feelings	No	353	10,09	3,465	U=6285,500
	Yes	36	10,33	4,182	p=,915
Externally Oriented Thinking	No	353	21,64	3,775	U=6276,000
	Yes	36	21,83	4,137	p=,903
Toronto Total	No	353	50,18	8,459	U=5306,000
	Yes	36	48,08	8,968	p=,103

According to Table 19, the mean “Difficulty Identifying Feelings” dimension score of families of children without behavioural problems was 11.69±4.563. The mean “Difficulty Identifying Feelings” dimension score of families of children with behavioural problems was 11.75±4.513. The difference between them was found to be non-significant at the p>0.05 significance level (U=6226.000, p=.841). The mean “Difficulty Describing Feelings” dimension score of families of children without behavioural problems was 10.09±3.465. The mean “Difficulty Describing Feelings” dimension score of families of children with behavioural problems was 10.33±4.182. The difference between them was found to be non-significant at the p>0.05 significance level (U=6285.500, p=.915). The mean “Externally Oriented Thinking” dimension score of families of children without behavioural problems was 21.64±3.775. The mean “Externally Oriented Thinking” dimension score of families of children with behavioural problems was 21.83±4.137. The difference between them was found to be non-significant at the p>0.05 significance level (U=6276.000, p=.903). The mean total “Toronto Alexithymia Scale” score of families of children without behavioural problems was 50.18±8.459. The mean total “Toronto Alexithymia Scale” score of families of children with behavioural problems was 48.08±8.968. The difference between them was found to be non-significant at the p>0.05 significance level (U=5306.000 p=.103). In conclusion, the results indicate that there was no difference between families of children without behavioural problems and families of children with behavioural problems in the “Difficulty Identifying Feelings”, “Difficulty Describing Feelings”, “Externally Oriented Thinking” subscales and in terms of the total Toronto Alexithymia Scale score.

Discussion and Conclusion

In the study, the behavioural problem status of 48-72-month-old children (n=389) attending preschool education institutions was examined according to the Preschool Behavioural Problems Screening Scale, and it was determined that 90.7% exhibited behaviours within normal limits (n=353). In comparison, 9.3% exhibited behaviours that deviated from normal (n=36). When the differentiation of the occurrence of behavioural problems in 48-72 month old children according to parental characteristics was examined, it was concluded that variables such as mother's employment status, father's educational status, father's employment status, family togetherness status, gender of children in the family, family income status, presence of someone providing support in the child's care, and presence of a person with special needs living in the family did not show a significant difference between children with and without behavioural

problems ($p>0.05$). However, in variables such as mother's educational status, number of children in the family, child's birth order, and the presence of a problem observed by the family in the child, the difference between the two groups was found to be significant at the $p<0.05$ significance level. The findings obtained from this research show considerable parallelism with the results of numerous studies in the literature. Indeed, research conducted by Hayati Rezvan et al. (2020), Joyner and Beaver (2020), Zulkifli and Rahman (2021), Işıkol (2019), and Teke (2021) also determined that behavioural problems observed in children did not show a significant difference according to demographic variables such as mother's age, parental income level, employment status, or family structure. Similarly, Seven (2007) and Yaşar Ekici (2013) also emphasized that the effect of families' socioeconomic and demographic characteristics on children's internalized and externalized problem behaviours was limited. However, in some studies, differentiations related to the parental education level variable were observed; it was found that children of parents with lower educational levels had higher levels of problem behaviours (Teke, 2021; Yaşar Ekici, 2013). As seen above, the research results revealed, similar to some studies in the literature, that variables such as family income status, togetherness status, mother's employment status, and father's employment status were not effective factors on children's behavioural problems. These results show that behavioural problems seen in children are a situation faced by all parents of every income level, whether employed or unemployed, living together, apart, or separated. Based on this, it can be interpreted that different characteristics of parents are more effective in behavioural problems encountered in children, rather than factors such as parents' employment status, income status, or togetherness status. When literature studies are examined, in addition to the above, many results similar to and different from the study results were encountered in variables such as mother's and father's age, mother's educational status, child's birth order, and number of children in the family. In the study, it was determined that the ages of mothers and fathers of children exhibiting behavioural problems were younger than the ages of mothers and fathers of children not exhibiting behavioural problems. Similarly, McGrath et al. (2014) also found in their study that children of younger mothers and fathers had more problems compared to others. The study found that the rate of encountering behavioural and emotional problems, neurotic and stress-related disorders in children of younger mothers and fathers was higher. Zondervan-Zwijnenburg et al. (2020) also found in their study that there was a strong negative linear relationship between parental age and externalizing problems seen in children. According to the research, while children of older parents had fewer externalized behavioural problems, the rate of externalized behavioural problems was higher in children of younger parents. In contrast to these results, Zulkifli and Rahman (2021) and Yaşar Ekici (2013) found in their studies that mothers' and fathers' age variables did not cause a significant difference in children's behavioural problems. As seen in these studies, there are studies in the literature that reach different results regarding the differentiation of children's behavioural problems according to the age of the mother and father. The reason for seeing more behavioural problems in children of younger mothers and fathers in this study may be that these mothers and fathers are more inexperienced in raising children due to their younger age.

In the study, it was determined that the educational level of mothers of children exhibiting behavioural problems was lower than that of mothers of children not exhibiting problems. It was found that compared to mothers of children without behavioural problems, the rate of being a primary school graduate increased among mothers of children with behavioural problems, while

the rate of being a university graduate decreased. Indeed, Teke (2021) also stated in their study with 4-6 year old children that children of mothers who were primary school graduates had more externalized problems, and these problem situations were seen less in children of mothers with associate and bachelor's degrees. Similarly, Yaşar Ekici (2013) also found that children whose mothers graduated from primary school, middle school, and high school exhibited more internalizing problem behaviours compared to children whose mothers were associate and bachelor's degree graduates. On the other hand, Joyner and Beaver (2020) concluded that mothers' educational status did not cause any difference in children's behaviours. It is seen that there are studies in the literature that reach different results regarding the differentiation of children's behavioural problems according to the mother's educational status. The reason for children's behavioural problems being seen more frequently in families with lower educational levels in this study may be that these families have less knowledge and competence about child-rearing. As is known, child-rearing, like every competence, is a process that requires a person to read, research, and practice more to reach the truth about the subject. As Öztabak (2021) also stated, parents have many responsibilities in child-rearing, such as being a role model for their child, spending quality time with them, paying attention to parenting attitudes, and being consistent. Based on this, it can be concluded that mothers with higher educational levels read and research more to fulfil this responsibility and reach the necessary competence.

Another result obtained in the study is that according to the number of children variable, the occurrence of behavioural problems was encountered approximately twice as much in single-child families and approximately eight times more in families with four children compared to those without behavioural problems. Based on this, it can be said that the rate of behavioural problem presence in single-child and 4-child families is higher compared to those without behavioural problems. Seven (2007), similar to the study, states that more behavioural problems were observed in families with five or more children in terms of externalized behavioural problems and total social behavioural problem scores. Yucel (2014) also found in their study that children with at least four siblings had higher internalized problem behaviours compared to only children. In contrast, Zulkifli and Rahman (2021) did not detect any difference in children's behavioural problems according to the number of siblings variable in their study. As can be seen, studies in the literature reach different results regarding the differentiation of children's behavioural problems according to the number of siblings. While one study found no difference, two studies, similar to the conducted research, detected more behavioural problems in situations with a large number of siblings (4 or more). The reason children's behavioural problems are more frequently observed in families with four siblings in this study may be that these families struggle to develop correct behaviour and regulate incorrect behaviours in larger families. In addition, the finding that behavioural problems are frequently encountered in single-child families, as reported in the research results, differs from the literature. The reason for these differences may be the variations in behavioural problem situations addressed by the studies, as well as sample differences. The reason for children's behavioural problems being seen more frequently in single-child families in the study may be that the family is more overprotective of the child, and does everything they want. As a result, problem behaviours are seen more in the child. Indeed, Çetinkaya (2004) also states that problem situations such as being irritable, stubborn, rebellious, spoiled, and touchy are frequently encountered in only children. In the study, when the occurrence of behavioural problems according to the child's birth order variable was examined, it was determined that children with behavioural problems were approximately one and a half times more likely to be the

family's 1st child and approximately four times more likely to be the fourth child compared to those without problems. Topçu Bilir and Sop (2016) also determined in their study with preschool children and their families that behavioural problems seen in children differed according to the child's birth order. Accordingly, in the examination conducted among first children, middle children, or last children, it was determined that more externalizing and internalizing behavioural problems were seen in first children compared to those who were middle or one of the middle children. In the total scale used, behavioural problems seen in the first and last children were more than those who were middle or one of the middle children. The difference that emerged regarding the 1st and fourth children in the research (since no one indicated more than four children, the fourth child can be considered the last child) perfectly overlaps with this situation. The reason for this result may be the inexperience and incorrect rearing attitudes encountered when raising first children, which emerge as behavioural problems. Problem situations seen in the 4th, that is, the last children, can also be interpreted as the family generally adopting a more permissive attitude while raising their last children, and this emerges as a problem situation. When the occurrence of behavioural problems in 48-72 month old children was examined in terms of parents' family involvement, a difference was found at the $p<0.05$ significance level in favor of families of children without behavioural problems in the “School-Based Involvement”, “Home-Based Involvement”, “School-Family Collaboration” subscales and in terms of the total Family Involvement Scale score. In other words, it can be said that the family involvement levels of parents of children without behavioural problems are higher than those of parents of children with behavioural problems. Fantuzzo et al. (2004) also found in their study examining the relationships between multiple dimensions of family involvement in early childhood education and classroom outcomes that families' home-based involvement, school-based involvement, and home-school conferences were significantly associated with the reduction of behavioural problems in the classroom. Similarly, Yaşar Ekici (2017) found in their research with 5-6-year-old children and their families that the egocentric problem behaviours of children of families who participated in the family involvement study decreased, while these problem behaviours of children of families who did not participate continued. Semke et al. (2010) also emphasized in their study that parents of children with disruptive behaviours may have negative beliefs about their roles in supporting their children's education, and therefore the importance of supporting all aspects of family involvement (home-based involvement, school-based involvement, and home-school communication) in treating children's disruptive behaviours. Jacqueline and Margo (2005) determined that after a family-involved cognitive behavioural therapy (CBT) study for children with obsessive-compulsive disorder (OCD), OCD symptoms and parent ratings regarding behavioural problems on the child behaviour checklist improved significantly, and at the same time, including parents in treatment increased the effectiveness of CBT intervention. The result of the conducted research and similar study results show that the family involvement factor is very important in behavioural problems. In conclusion, it can be said that involving families in matters related to their children and evaluating them as an effective tool for solving children's problem behaviours is a factor that should be taken into account by all stakeholders working on this subject. Another result of the research concerns the Alexithymia status of families of 48-72-month-old children attending preschool education institutions. According to the findings obtained, it was determined that 34.2% of families had an Alexithymic status. It is possible to say that these families experience difficulty in identifying and expressing emotions. In addition to this finding, the differentiation of the occurrence of behavioural problems in terms of parents'

alexithymic status was also examined, and it was found that there was no difference between families in the “Difficulty Identifying Feelings”, “Difficulty Describing Feelings”, “Externally Oriented Thinking” subscales and in terms of the total Toronto Alexithymia Scale

Limitations and future directions

The research is limited to 389 children aged 48-72 months attending preschool education institutions in the central district of Ordu province during the 2018-2019 academic year and their families. To expand the scope of the research, studies can be conducted covering different provinces and districts. A more comprehensive study can be planned by conducting a general screening and including not only children attending preschool education institutions but also those not attending, or studies can be carried out to reveal the causes of behavioural problems encountered not only in preschool education but also at other educational levels in the literature by expanding the age range addressed.

In the research, the “Preschool Behavioural Problems Screening Scale” was used to identify behavioural problems of 48-72-month-old children attending preschool education institutions, and the behaviours to be identified were limited to the subdimensions of “Being Quarrelsome-Aggressive”, “Being Anxious-Tearful”, and “Being Hyperactive and Inattentive”. Different behavioural problems and related factors can be addressed using different scales.

The “Preschool Behavioural Problems Screening Scale” used in the study was utilized to address problems that preschool teachers may frequently encounter, generally, and to provide solutions to them. Therefore, it was desired that the children included in the study not have diagnoses, but only be identified as having behavioural problems according to the scale. However, with different studies to be conducted, diagnosed conditions (attention deficit hyperactivity disorder, autism, etc.) can be selected to work on the problems brought about by these conditions, or in-depth examinations can be conducted on a single problem situation.

In the conducted research, a comparison was made of familial factors such as family involvement levels and alexithymia levels of children who exhibit and do not exhibit behavioural problems. In future research, different factors thought to be related to behavioural problems, such as parental attitudes, mother-child, father-child relationships, and theory of mind, can also be included.

To determine the family involvement and alexithymia levels measured in the research, the “Family Involvement Scale”, including the subdimensions of home-based involvement, school-based involvement, school-family collaboration-based involvement and the “Toronto Alexithymia Scale”, including the subdimensions of difficulty identifying feelings, difficulty describing feelings, and externally oriented thinking, were used. The subject can be addressed through different perspectives by including scales that evaluate the topic in different subdimensions in determining these.

The research results revealed that family involvement in children who do not exhibit behavioural problems is higher than in those who do. Therefore, family involvement activities conducted with families identified as having behavioural problems will enable them to become more involved in their children's lives. This involvement will also contribute to their awareness of situations such as behavioural problems in their children and their search for solutions to these issues.

Statement of researchers

Researchers' contribution rate statement

1. Author (60%): Responsible for the formulation of the research idea, conducting the research process, obtaining permissions for and using data collection tools, data analysis and interpretation, and reporting and writing processes.

2. Author (20%): Guided the design of the research and the scientific evaluation of all sections; strengthened the academic quality of the study by providing feedback during the content, method, and interpretation stages.

3. Author (20%): Guided the design of the research and the scientific evaluation of all sections; strengthened the academic quality of the study by providing feedback during the content, method, and interpretation stages.

Conflict statement

The authors declare that there is no conflict of interest related to this study.

References

American Psychological Association, (2020). APA Dictionary of Psychology- Alexithymia. https://dictionary.apa.org/alexithymia

Ani, C. C., & Grantham-McGregor, S. (1998). Family and personal characteristics of aggressive Nigerian boys: Differences from and similarities with Western findings. *Journal of Adolescent Health*, *23*(5), 311-317. https://doi.org/10.1016/S1054-139X(98)00031-7

Atzaba-Poria, N., Meiri, G., Millikovsky, M., Barkai, A., Dunaevsky-Idan, M., & Yerushalmi, B. (2010). Father–child and mother–child interaction in families with a child feeding disorder: The role of paternal involvement. *Infant Mental Health Journal*, *31*(6), 682-698. https://doi.org/10.1002/imhj.20278

Burhanoğlu, S. (2016). Aleksitimi Nedir?. https://www.sabriburhanoglu.com/aleksitimi-nedir

Büyüköztürk, Ş., Kılıç-Çakmak, E., Akgün, Ö. E., Karadeniz, Ş. & Demirel, F., (2008). *Bilimsel Araştırma Yöntemleri*. Ankara: Pegem A Publishing.

Cherney, K. (2021). *All About Alexithymia, or Difficulty Recognizing Feelings* (Medically reviewed by Timothy J. Legg). Healthline. https://www.healthline.com/health/autism/alexithymia

Çelik, Y. (2003). Ana-Baba Eğitimi. *Öğretmen Dünyası*, 277.

Çetinkaya, B. (2004). *Ruhsal açıdan sağlıklı aile sağlıklı çocuk*. Ankara: Empati Publishing.

Demir Şad, E. (2007). *Comparing self-esteem, social skills, behavior problems and school achievement of the rejected and the accepted children in elementary school*. Unpublished Master's Thesis. *Ankara Üniversitesi Eğitim Bilimleri Enstitüsü*, Ankara.

Dunlap, G., Newton, J. S., Fox, L., Benito, N. & Vaughn, B. (2001). Family involvement in functional assessment and positive behavior support. *Focus on Autism and Other Developmental Disabilities*, *16*(4), 215-221. http://dx.doi.org/10.1177/108835760101600403

Dursun, A. (2010). *Examinining of the relationship between the behavioral problems of the children in the preschool period and parents? attitudes*. Unpublished Master's Thesis. *Dokuz Eylül Üniversitesi Eğitim Bilimleri Enstitüsü*, İzmir.

Epözdemir, H. (2012). Aleksitimi: Psikolojik bir semptom mu, yoksa bir kişilik özelliği mi?. *Türk Psikoloji Yazıları*, 15(30), 25-33.

Fantuzzo, J., McWayne, C., Perry, M. A., & Childs, S. (2004). Multiple dimensions of family involvement and their relations to behavioral and learning competencies for urban, low-income children. *School psychology review*, *33*(4), 467-480. https://doi.org/10.1080/02796015.2004.12086262

Gatta, M., Balottin, L., Mannarini, S., Chesani, G., Del Col, L., Spoto, A., & Battistella, P. A. (2017). Familial factors relating to alexithymic traits in adolescents with psychiatric disorders. *Clinical Psychologist*, *21*(3), 252-262. https://doi.org/10.1111/cp.12098

Güleç, H., Köse, S., Güleç, M. Y., Çitak, S., Evren, C., Borckardt, J. vd. (2009). Reliability and factorial validity of the Turkish version ofthe 20-item Toronto Alexithymia Scale (TAS-20). *Bulletin of Clinical Psychopharmacology*, 19, 214-220.

Güleç, H. ve Yenel, A. (2010). 20 Maddelik Toronto Aleksitimi Ölçeği Türkçe Uyarlamasının Kesme Noktalarına Göre Psikometrik Özellikleri. *Klinik Psikiyatri Dergisi*, *13* (3): 108-112.

Güleş, Z., Aksu, H., & Gürbüz Özgür, B. (2018). DEHB'li çocukların anne-babalarının aleksitimi, depresyon ve çocukluk çağı DEHB belirti düzeylerinin incelenmesi. *Anadolu Psikiyatri Dergisi*, *19*(4), 411-418. http://dx.doi.org/10.5455/apd.285569

Gürşimşek, I. (2013). Okul öncesi eğitime aile katılımı ve psikososyal gelişim. *Kuram ve Uygulamada Eğitim Bilimleri*. *3*(1), 125-144.

Hayati Rezvan, P., Tomlinson, M., Christodoulou, J., Almirol, E., Stewart, J., Gordon, S., Belin, T. R. & Rotheram-Borus, M. J. (2020). Intimate partner violence and food insecurity predict early behavior problems among South African children over 5-years post-birth. *Child Psychiatry & Human Development*, 52, 409–419. https://doi.org/10.1007/s10578-020-01025-1

Huaqing Qi, C., & Kaiser, A. P. (2003). Behavior problems of preschool children from low-income families: Review of the literature. *Topics In Early Childhood Special Education*, *23*(4), 188-216. https://doi.org/10.1177/02711214030230040201

Işıkol, K. (2019). *The relationship between irrational beliefs and parental self-efficacy perceptions of parents who have preschool children and social skills and problem behaviors of their children* (Unpublished Master's Thesis). Maltepe Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul.

Jacqueline, M. L., & Margo, T. (2005). Group cognitive-behavior therapy with family involvement for middle-school-age children with obsessive-compulsive disorder: A pilot study. *Child Psychiatry And Human Development*, *36*(1), 113-127. https://doi.org/10.1007/s10578-005-3496-y

Joyner, B., & Beaver, K. M. (2020). Maternal depression and child and adolescent problem behaviors: a propensity score matching approach. *Psychiatric Quarterly*, *92*(2), 655-674. https://doi.org/10.1007/s11126-020-09842-2

Kanlıkılıçer, P. (2005). *Preschool behavior questionnaire: A validity and reliability study*. Unpublished Master's Thesis. *Marmara Üniversitesi Eğitim Bilimleri Enstitüsü*, İstanbul.

Karakaya, İ. (2009). Bilimsel araştırma yöntemleri. A. Tanrıöğen (Ed.), In Bilimsel Araştırma Yöntemleri (pp. 57-86). Ankara: Anı Publishing.

Karasar (2014). Bilimsel araştırma yöntemi "kavramlar ilkeler teknikler". Ankara: Nobel.

Kim, H., Choi, J., & Oh, Y. (2021). The impact of maternal personality traits on behavioral problems in preschool-aged children: a population-based panel study in South Korea. *Archives of Women's Mental Health*, *24*(2), 321-328. https://doi.org/10.1007/s00737-020-01069-1

Leonardi, E., Cerasa, A., Famà, F. I., Carrozza, C., Spadaro, L., Scifo, R., Baieli, S., Marino, F., Tartarisco, G., Vagni, D., Pioggia, G. & Ruta, L. (2020). Alexithymia profile in relation to negative affect in parents of autistic and typically developing young children. *Brain Sciences*, *10*(8), 496-508. http://dx.doi.org/10.3390/brainsci10080496

McCormick, M. P., Cappella, E., O'Connor, E. E., & McClowry, S. G. (2013). Parent involvement, emotional support, and behavior problems: An ecological approach. *The Elementary School Journal*, *114*(2), 277-300. https://doi.org/10.1086/673200

McGrath, J. J., Petersen, L., Agerbo, E., Mors, O., Mortensen, P. B., & Pedersen, C. B. (2014). A comprehensive assessment of parental age and psychiatric disorders. *JAMA psychiatry*, 71(3), 301-309.

MEB. (2019). 2018-2019 Millî Eğitim İstatistikleri- Örgün Eğitim. Ministry of National Education Strategy Development Presidency, Ankara.

Mezulis, A. H., Hyde, J. S., & Clark, R. (2004). Father Involvement Moderates the Effect of Maternal Depression During a Child's Infancy on Child Behavior Problems in Kindergarten. *Journal of Family Psychology*, *18*(4), 575–588. https://doi.org/10.1037/0893-3200.18.4.575

Öztabak, M. Ü. (2021). *Çocuk büyütürken dikkat edilecek 15 kural*. Çocuk Ebeveyn Akademisi. https://www.trtcocuk.net.tr/ebeveyn-akademisi/ebeveyn-olmak/cocuk-buyuturken-dikkat-edilecek-15-kural

Potharst, E. S., Houtzager, B. A., van Wassenaer-Leemhuis, A. G., Kok, J. H., Koot, H. M., & Last, B. F. (2015). Maternal and paternal perception of child vulnerability and behaviour problems in very preterm born children. *Infant and Child Development*, *24(*5), 489-505. https://doi.org/10.1002/icd.1898

Paniccia, M. F., Gaudio, S., Puddu, A., Di Trani, M., Dakanalis, A., Gentile, S., & Di Ciommo, V. (2018). Alexithymia in parents and adolescents with generalised anxiety disorder. *Clinical Psychologist, 22(*3), 336-343. https://doi.org/10.1111/cp.12134

Semke, C. A., Garbacz, S. A., Kwon, K., Sheridan, S. M., & Woods, K. E. (2010). Family involvement for children with disruptive behaviors: The role of parenting stress and motivational beliefs. *Journal of School Psychology*, *48*(4), 293-312. https://doi.org/10.1016/j.jsp.2010.04.001

Seven, S. (2007). Ailesel faktörlerin altı yaş çocuklarının sosyal davranış problemlerine etkisi. *Kuram ve Uygulamada Eğitim Yönetimi*, 51: 477-499. https://dergipark.org.tr/tr/pub/kuey/issue/10346/126731

Sipahioğlu, E. (2014). Çocuklarda uyum davranış bozuklukları ve öneriler. *İndigo Dergisi*, 102.

Szatmari, P., Georgiades, S., Duku, E., Zwaigenbaum, L., Goldberg, J., & Bennett, T. (2008). Alexithymia in parents of children with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, *38*(10), 1859-1865. https://doi.org/10.1007/s10803-008-0576-4

Ural, O. & Kanlıkılıçer, P. (2010). Behavioral Problems in Turkish Preschool-Age Children. *Gifted Education International*. Vol. 26 (pp. 51-60). ABA Academic Publishers.

Ural, A. ve Kılıç, İ. (2011). *Bilimsel Araştırma Süreci ve SPSS ile Veri Analizi*. Ankara: Detay Publishing.

Teke, Y. T. (2021). *Investigation of the relationship between mother-child communication and 4-6 year-old children's perceptions of problem behaviori* (Unpublished Master's Thesis). Karabük Üniversitesi Lisansüstü Eğitim Enstitüsü, Karabük.

Topçu Bilir, Z. ve Sop, A. (2016). Okul öncesi dönemindeki çocukların aile ilişkileri ile çocuklarda görülen davranış problemleri arasındaki ilişkinin incelenmesi. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, *40*(40), 20-43. https://doi.org/10.21764/efd.10006

Yaşar Ekici, F. (2013). *Comparison of the children that their families involve in the family involvement activities implemented in preschool institutions with the children that their families do not involve in these activities in terms of the social skills and problem bahaviours* (Unpublished Doctoral Thesis). Marmara Üniversitesi Eğitim Bilimleri Enstitüsü, İstanbul.

Yaşar Ekici, F. (2017). Okul öncesi eğitim kurumlarındaki aile katılım çalışmalarına katılan ve katılmayan ailelerin çocuklarının sosyal beceri ve problem davranışları arasındaki ilişki. *Hitit Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, *10*(1), 543-562. https://doi.org/10.17218/hititsosbil.299033

Yavuzer, H. (2005). *Çocuğunuzun İlk Altı Yılı*. İstanbul: Remzi Kitabevi.

Yucel, D. (2014). Number of siblings and personality: Evidence among eighth graders from the Early Childhood Longitudinal Study-Kindergarten Cohort (ECLS-K). *The Social Science Journal*, *51*(1), 100-112. http://dx.doi.org/10.1016/j.soscij.2013.07.008

Zondervan-Zwijnenburg, M. A., Veldkamp, S. A., Neumann, A., Barzeva, S. A., Nelemans, S. A., van Beijsterveldt, C. E., ... & Boomsma, D. I. (2020). Parental age and offspring childhood mental health: A multi-cohort, population-based investigation. *Child development*, 91(3), 964-982.

Zulkifli, F. N. A., & Rahman, P. A. (2021) Relationships between sensory processing disorders with feeding behavior problems among children with autism spectrum disorder. *Malaysian Journal of Medicine and Health Sciences*, 17, 229-235. https://doi.org/10.1007/s10803-014-2095-9