

The Impact of Parental Attitudes and Anxieties on the Anxiety Levels of Hospitalized Children Aged 2-6: Descriptive and Cross-Sectional Research

Hastanede Yatan 2-6 Yaş Arası Çocukların Ebeveynlerinin Tutumları ve Anksiyetelerinin Çocukların Anksiyete Düzeyine Etkisi: Tanımlayıcı-Kesitsel Araştırma

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ABSTRACT Objective: This study aimed to examine the effect of the attitudes and concerns of parents of hospitalized children aged 2-6 on their children's anxiety levels. **Material and Methods:** Data were collected through face-to-face interviews with the parents of 150 children hospitalized in a district hospital using an introductory information form, the Preschool Anxiety Scale (PAS-R) Parent Version, the Parenting Attitude Scale, and the Beck Anxiety Scale. The data were analyzed using t-tests, analysis of variance, and Pearson correlation analysis. **Results:** The average age of participants was 32.71±4.62 years, and the average age of the children was 4.05±1.21 years. The average total score of the PAS-R Parent Version was 84.06±17.84, with the highest subscale scores being specific phobias (26.08±5.55) and generalized anxiety (25.80±6.33). In the Parenting Attitude Scale, the highest average was found in the authoritarian subscale (38.97±6.47), with 23.3% of parents exhibiting severe levels of anxiety. **Conclusion:** It is recommended that all parents of hospitalized children receive education about the relationship between their children's anxiety and parental anxiety, as well as the importance of parenting attitudes, to increase awareness. When children are taken to play areas in the hospital, a dedicated adult room equipped with games and activities can be created, allowing parents to spend time outside the patient room.

Keywords: Anxiety; parents; attitude; child; hospitals

ÖZET Amaç: Bu araştırma, hastanede yatan 2-6 yaş arası çocuğu olan ebeveynlerin tutumları ve anksiyetelerinin çocukların anksiyete düzeyine etkisini incelemek amacıyla yapılmıştır. **Gereç ve Yöntemler:** Veriler, bir ilçe hastanesinde yatan 150 çocuğun ebeveynleri ile yüz yüze görüşme ile tanıtıcı bilgi formu, Okul Öncesi Kaygı Ölçeği (PAS-R) Anne Baba Versiyonu, Ebeveyn Tutum Ölçeği (ETÖ) ve Beck Anksiyete Ölçeği kullanılarak toplanmıştır. Verilerin değerlendirilmesinde t-test, varyans analizi ve Pearson korelasyon analizi kullanılmıştır. **Bulgular:** Çalışmaya katılan bireylerin yaş ortalaması 32,71±4,62, çocukların yaş ortalaması 4,05±1,21'dir. PAS-R Anne Baba Versiyonu PAS-R toplam puan ortalamasının 84,06±17,84, alt boyut puan ortalamalarında ise en yüksek özgül fobi alt boyutu (26,08±5,55) ve yaygın anksiyete alt boyutu (25,80±6,33) olduğu, ETÖ alt boyutlarında en yüksek ortalamanın otoriter alt boyut (38,97±6,47) ve ebeveynlerin %23,3'ünün anksiyetelerinin şiddetli düzeyde olduğu belirlendi. **Sonuç:** Çocuğu hastanede yatan bütün ebeveynlere; çocuğun anksiyetesinin ebeveyn anksiyetesiyle ilişkili olduğu ve ebeveyn tutumlarının önemi hakkında eğitim verilmesi, farkındalığın artırılması önerilir. Çocuklar hastanedeki oyun alanlarına götürüldüğünde, oyunlar ve aktivitelerle donatılmış özel bir yetişkin odası oluşturulabilir ve ebeveynlerin hasta odasının dışında zaman geçirmeleri sağlanabilir.

Anahtar Kelimeler: Anksiyete; ebeveynler; tutum; çocuk; hastaneler

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Hospitalization involves procedures such as examinations and injections, which can leave lasting impressions on children.¹ These experiences may lead to anxiety and long-term psychological effects. Anxiety in children can manifest as poor academic performance, social difficulties, and family conflicts, sometimes persisting into adolescence.²

Reactions to hospitalization vary depending on cognitive development, illness severity, past experiences, family responses, and hospital conditions.³ Children with chronic illnesses, especially those facing prolonged hospital stays, are more vulnerable to behavioral issues due to inappropriate parental attitudes, including overprotection and excessive anxiety.

Parental anxiety, often driven by fear of losing the child or witnessing painful treatments, can intensify the child's distress and foster dependency. Common responses in hospitalized children include crying, irritability, fatigue, sleep/eating disturbances, and regression.⁴⁻⁷

Hospital-related stress increases cortisol levels, which may negatively impact the nervous system and impair memory and learning. Furthermore, serious illnesses and uncertain prognoses heighten parental anxiety, potentially compromising child care.⁸⁻¹⁰

To reduce the risk of psychological trauma, empowering parents is crucial. Studies show that parental support programs can decrease maternal anxiety and improve child outcomes.^{11,12}

Understanding the link between parental anxiety and attitudes, and the child's emotional response to hospitalization, can help enhance short-term adaptation and prevent long-term psychological problems. This study aims to examine the effects of hospitalized children's parents' anxiety levels and attitudes on the children's anxiety.¹³

MATERIAL AND METHODS

STUDY DESIGN

This study is descriptive and cross-sectional in nature. The research was conducted in the pediatrics department of a state hospital located in a district of Yozgat Province from January to December 2023.

POPULATION OF STUDY

The population of the study was calculated using the Üretici firma G-Power 3.1 (Heinrich Heine University, Düsseldorf, Germany) program, based on a study by Günay et al. that assessed the level of state anxiety among mothers of hospitalized children, with a mean score of 50 and a standard deviation of 10.^{14,15} With a 95% confidence interval, 95% analysis power, and an effect size of 0.30, the required sample size was determined to be 122. The inclusion criteria for the study were that the parents could read and write Turkish, had no illness that would hinder communication, the child had been hospitalized for at least 24 hours, and the child did not have a psychiatric illness. A total of 157 parents were contacted, but 7 did not meet the inclusion criteria for the study. Thus, the research was completed with 150 parents.

DATA TOOLS

The study utilized the Parent and Child Introductory Information Form, the Preschool Anxiety Scale (PAS-R) Parent Version, the Parenting Attitude Scale, and the Beck Anxiety Scale.

QUESTIONNAIRE FORM

This form consists of a total of 23 questions, including 17 questions that identify the parents' characteristics and 6 questions that specify the child's characteristics.

THE PRESCHOOL ANXIETY SCALE (PAS)

PAS was adapted from the original Spence Children's Anxiety Scale by Spence et al. in 1999 and was later revised by the same authors in 2001.^{16,17} In our study, the Turkish adaptation was performed by Uğraş in 2016.¹⁸ The "PAS-R Parent Version" consists of 30 items. This 5-point Likert scale is answered as follows: 0=not at all true, 1=rarely true, 2=sometimes true, 3=fairly true, and 4=very often true.

The scale demonstrates a 4-factor structure, with sub-factors being "Social Anxiety", "Generalized Anxiety", "Separation Anxiety" and "Specific Phobia".⁸

A higher score on both the sub-scales and the total scale indicates higher levels of child anxiety.¹⁹ The maximum possible score on the scale is 120, and

the minimum score is 0.²⁰ There are no reverse-scored items on the scale.

THE PARENTING ATTITUDE SCALE

The Parenting Attitude Scale was developed by Baumrind and Maccoby and Martin to measure parents' behaviors towards their children aged 2-6.^{21,22}

The Turkish adaptation of the scale was conducted by Karabulut Demir in 2008, and the version used in our study comprises 46 items.²³ The scale employs a 5-point Likert format. The items are presented as behavioral statements, and respondents select one of five options: "Always true", "Mostly true", "Sometimes true", "Rarely true" and "Never true". The scoring is as follows: "Always true" receives 5 points; "Mostly true" gets 4 points; "Sometimes true" is assigned 3 points; "Rarely true" earns 2 points; and "Never true" scores 1 point.

THE BECK ANXIETY SCALE

The Beck Anxiety Scale, developed by Beck et al., consists of 21 items designed to assess individuals' levels of anxiety.²⁴ This scale was adapted into Turkish by Ulusoy et al.²⁵

Respondents are asked to choose and mark one of the following options for each item: "not at all", "mildly", "moderately" and "severely." Responses are scored on a scale from 0 to 3, resulting in a minimum score of 0 and a maximum score of 63. A higher total score indicates a greater severity of anxiety experienced by the individual.

STATISTICAL ANALYSIS

Statistical analysis of the data were conducted using SPSS (Version 27, IBM, USA). Descriptive statistics, including mean, standard deviation, median, and frequency distributions, were used to summarize the data. The normality of the data was assessed using the Kolmogorov-Smirnov test. For normally distributed data, independent samples t-tests and one-way analysis of variance (ANOVA) were employed.

The arithmetic mean, standard deviation, and percentage distribution were calculated for the comparison of total and subscale scores. Independent samples t-tests and ANOVA were used to compare descriptive characteristics with scale scores. Additionally, Pear-

son correlation analysis was conducted to compare the total scores of the Beck Anxiety Scale with the subscale and total scores of the Parent Anxiety Scale (PAS-R Parent Version) and the Parenting Attitude Scale. The significance level was set at $p < 0.05$.

ETHICAL APPROVAL

The necessary institutional permission and local ethics committee approval for the study were obtained (December 21, 2022, no: 40/32). Before the study commenced, parents were informed about the purpose of the research, and verbal consent was obtained prior to their inclusion in the study. The participants included parents (either the mother or father) who could read and write in Turkish, had no communication problems, and whose child had been hospitalized for at least 24 hours. The research was conducted according to the principles of the Declaration of Helsinki.

RESULTS

The average age of participants was 32.71 ± 4.62 , with 38.0% being primary school graduates and 65.3% identifying as homemakers. Additionally, 56.7% reported that their income was equal to their expenses, while 82.0% indicated that they had no health problems. Among the participants, 31.5% had been married for 10 years or more, and 36.7% had 1 child.

The average age of hospitalized children was 4.05 ± 1.21 , with 50% being female. The duration of hospitalization ranged from a minimum of 1 day to a maximum of 9 days. Regarding admission diagnoses, 30.6% were related to fever/viral illnesses, while 5.0% were due to conditions such as trauma, falls, conjunctivitis, sinusitis, and urinary tract infections (Table 1).

Table 2 presents the distribution of average subscale and total scores for parents on the PAS-R Parent Version, along with the average scores for the subscales of the Parenting Attitude Scale.

The average total score for the PAS-R Parent Version was found to be 84.06 ± 17.84 , with the subscale averages as follows: Social Anxiety subscale 18.83 ± 5.27 , Generalized Anxiety subscale 25.80 ± 6.33 , Separation Anxiety subscale 13.34 ± 3.58 , and Specific Phobia subscale 26.08 ± 5.55 (Table 2).

TABLE 1: Descriptive characteristics of parents and children

Characteristics of parents	n	%
Education status		
Primary school	57	38.0
High school	39	26.0
Associate degree	22	14.7
Undergraduate	32	21.3
Job		
Civil servant	28	18.7
Worker	16	10.7
Self-employed	8	5.3
Housewife	98	65.3
Income Status		
Income is less than expenses	49	32.7
Income is equal to expenses	85	56.7
Income is more than expenses	16	10.7
Duration of marriage		
0-5 years	36	24.0
6-9 years	73	42.7
10 years and above	50	31.5
Disease		
None	123	82.0
Yes	23	18.0
Number of children		
1	55	36.7
2-3	87	58.0
4+	8	5.3
Characteristics of children		
Gender		
Female	75	50.0
Male	75	50.0
Disease diagnosis		
GI/S diseases	29	19.3
URTI-LRTI	52	34.6
Dermatological diseases	10	6.6
Fewer/viral infection	46	30.6
Other	13	5.0

GI/S: Gastrointestinal System; URTI: Upper respiratory tract infections; LRTI: Lower respiratory tract infections

The analysis revealed a positive, moderate, and significant correlation ($r=0.475$) between the Social Anxiety subscale score and the Democratic subscale score. A negative, weak, and significant correlation ($r=-0.297$) was found between the Social Anxiety subscale score and the Authoritarian subscale score. Additionally, there was a negative, weak, and non-significant correlation ($r=-0.008$) between the Social Anxiety subscale score and the Overprotective subscale score, and a positive, weak, and non-significant correlation ($r=0.048$) between the Social Anxiety subscale score and the Permissive subscale score (Table 4).

A significant positive correlation ($r=0.389$) was found between the Generalized Anxiety subscale score and the Democratic subscale score, indicating a moderate relationship. A negative, weak, and significant correlation ($r=-0.279$) was observed between the Generalized Anxiety subscale score and the Authoritarian subscale score. Additionally, there

TABLE 2: Distribution of subscale and total score averages of the PAS-R parent version

PAS-R Parent Version	n	$\bar{X} \pm SD$	Minimum	Maximum
Social anxiety	150	18.83 \pm 5.27	8	31
Generalized anxiety	150	25.80 \pm 6.33	11	37
Separation anxiety	150	13.34 \pm 3.58	5	22
Specific phobia	150	26.08 \pm 5.55	11	38
PAS-R total score	150	84.06 \pm 17.84	44	120
Subdimensions of the				
Parent Attitude Scale	n	$\bar{X} \pm SD$	Minimum	Maximum
Democratic	150	34.78 \pm 8.06	17	48
Authoritarian	150	38.97 \pm 6.47	22	54
Overprotective	150	20.33 \pm 4.84	9	32
Permissive	150	28.58 \pm 5.00	17	41

SD: Standard deviation

The average scores for the PAS subscales were as follows: Democratic subscale 34.78 \pm 8.06, Authoritarian subscale 38.97 \pm 6.47, Overprotective subscale 20.33 \pm 4.84, and Permissive subscale 28.58 \pm 5.00 (Table 2).

Among the participating parents, it was found that 27.4% had mild anxiety, 17.3% had moderate anxiety, and 23.3% had severe anxiety levels (Table 3).

TABLE 3: Frequency distribution of anxiety levels based on the total score of the BECK Anxiety Scale

BECK Anxiety Levels	n	%
None	48	32.0
Mild level	41	27.4
Moderate level	26	17.3
Severe level	35	23.3
Total	150	100.0

was a negative, weak, and non-significant correlation ($r=-0.119$) between the Generalized Anxiety subscale score and the Overprotective subscale score, and a positive, weak, and significant correlation ($r=0.224$) between the Generalized Anxiety subscale score and the Permissive subscale score (Table 4).

A strong positive correlation ($r=0.523$) was found between the Separation Anxiety subscale score and the Democratic subscale score, indicating a significant relationship. There was a negative, weak, and significant correlation ($r=-0.247$) between the Separation Anxiety subscale score and the Authoritarian subscale score. Additionally, a positive, weak, and non-significant correlation ($r=0.014$) was observed between the Separation Anxiety subscale score and the Overprotective subscale score, as well as a positive, weak, and non-significant correlation ($r=0.037$) between the Separation Anxiety subscale score and the Permissive subscale score (Table 4).

A moderate positive correlation ($r=0.314$) was found between the Specific Phobia subscale score and the Democratic subscale score, indicating a significant relationship. There was a negative, weak, and non-significant correlation ($r=-0.148$) between the Specific Phobia subscale score and the Authoritarian subscale score. Additionally, a negative, weak, and non-significant correlation ($r=-0.081$) was observed between the Specific Phobia subscale score and the Overprotective subscale score, as well as a positive, weak, and non-significant correlation ($r=0.044$) between the Specific Phobia subscale score and the Permissive subscale score (Table 4).

A moderate positive correlation ($r=0.481$) was found between the total score of the PAS-R and the Democratic subscale score, indicating a significant relationship. There was a negative, weak, and significant correlation ($r=-0.283$) between the total score of the PAS-R and the Authoritarian subscale score. Additionally, a negative, weak, and non-significant correlation ($r=-0.067$) was observed between the total score of the PAS-R and the Overprotective subscale score, as well as a positive, weak, and non-significant correlation ($r=0.115$) between the total score of the PAS-R and the Permissive subscale score (Table 4).

A positive correlation was found between the total score of the Beck Anxiety Scale and the Social Anxiety subscale score of the PAS-R Parent Version ($r=0.267$), indicating a weak but significant relationship.

A positive, moderate correlation ($r=0.325$) was observed between the total score of the Beck Anxiety Scale and the Generalized Anxiety score, which was also significant. Additionally, a positive correlation ($r=0.143$) was found between the total score of the Beck Anxiety Scale and the Separation Anxiety score, but this was weak and not significant. A positive correlation ($r=0.269$) was noted between the total score of the Beck Anxiety Scale and the Specific Phobia score, indicating a weak but significant relationship. Finally, a positive, moderate correlation ($r=0.307$) was identified between the total score of the Beck Anxiety Scale and the total score of the PAS-R Parent Version (Table 5).

TABLE 4: Correlation analysis between the PAS-R Parent Version and the Parenting Attitude Scale

Pearson Correlation		PAS-R Parent Version				
		Social Anxiety	Generalized Anxiety	Separation Anxiety	Specific Phobia	PAS-R Total Score
Subdimensions of the Parent Attitude Scale	Democratic	r value	0.475	0.389	0.523	0.314
		p value	<0.001*	<0.001*	<0.001*	<0.001*
	Authoritarian	r value	-0.297	-0.279	-0.247	-0.148
		p value	<0.001*	<0.001*	0.002*	0.070
	Overprotective	r value	-0.008	-0.119	0.014	-0.081
		p value	0.925	0.147	0.866	0.323
	Permissive	r value	0.048	0.224	0.037	0.044
		p value	0.560	0.006*	0.652	0.589
						0.162

r: Pearson Correlation Coefficient

TABLE 5: Correlation analysis between the BECK Anxiety Scale and the PAS-R Parent Version

PAS-R Parent Version	Pearson Correlation		BECK Anxiety Scale total score	
			r value	p value
	Social anxiety	r value	0.267	
		p value	0.001*	
	Generalized anxiety	r value	0.325	
		p value	<0.001*	
	Separation anxiety	r value	0.143	
		p value	0.081	
	Specific phobia	r value	0.269	
		p value	0.001*	
	PAS-R total score	r value	0.307	
		p value	<0.001*	

*: A statistically significant result at the $p < 0.05$ level.

DISCUSSION

In our study, 50% of the children included were female. This aligns with a study on the anxiety levels of mothers with children aged 3-6, which also reported that 50% of the children were girls.²⁶ Thus, our findings are consistent with existing literature.

Regarding hospital admission diagnoses, gastrointestinal disorders accounted for 19.3%, upper respiratory infections for 34.6%, skin diseases for 6.6%, fever/viral diseases for 30.6%, and other conditions (such as trauma, falls, conjunctivitis, sinusitis, and urinary tract infections) for 5.0%. In contrast, a study aimed at determining the depression and anxiety levels of mothers of hospitalized children found that the diagnoses differed significantly: gastrointestinal disorders accounted for 4.5%, lower respiratory infections for 65%, fever/viral diseases for 0.5%, and urinary tract infections for 0.6%.

The remaining 29.4% included conditions such as epilepsy, bipolar disorder, undescended testes, and adenoid hypertrophy, which were not part of our study.²⁷ This suggests that our research does not align with some findings in the literature regarding the specific health issues of hospitalized children.

According to the parents' assessments, the children's scores for the social anxiety subscale were 18.83 ± 5.27 , for the generalized anxiety subscale were 25.80 ± 6.33 , for the separation anxiety subscale were 13.34 ± 3.58 , for the specific phobia subscale were

26.08 ± 5.55 , and the total PAS-R score was 84.06 ± 17.84 (Table 2). The high scores obtained from both the subscales and the total scale indicate a high level of anxiety in children. In the literature, the scores are reported as follows: social anxiety subscale 10.47 ± 5.84 , generalized anxiety subscale 17.84 ± 9.82 , separation anxiety subscale 9.36 ± 6.43 , specific phobia subscale 7.97 ± 6.43 , and the total PAS-R score 55.49 ± 26.46 .²⁸

Our research findings did not align with the literature. No statistically significant difference was found between the age groups of children and the subscales of the PAS-R Parent Version. In a study investigating the anxiety levels of preschool children, it was reported that parents of children under 3 years of age perceived higher levels of anxiety in their children compared to parents of 5-6-year-olds in the social anxiety and separation anxiety subscales. Additionally, in the specific phobia subscale, parents of 3-4-year-olds had higher perceptions of anxiety in their children compared to parents of 5-6-year-olds.²⁹ Our research findings did not show similarities with the literature.

The average scores for the subscales of the Parent Attitude Scale are presented in Table 2. The average score for the democratic subscale was 34.78 ± 8.06 , for the authoritarian subscale was 38.97 ± 6.47 , for the overprotective subscale was 20.33 ± 4.84 , and for the permissive attitude subscale was 28.58 ± 5.00 . In the literature, the average score for the democratic subscale is reported as 40.78 ± 2.89 , for the authoritarian subscale as 25.09 ± 4.68 , for the overprotective subscale as 29.31 ± 4.48 , and for the permissive attitude subscale as 21.51 ± 3.78 .³⁰ It has been determined that our research findings do not align with the literature.

In the parents participating in the study, 32.0% were found to have no anxiety, 27.3% had mild anxiety, 17.3% had moderate anxiety, and 23.3% had severe anxiety (Table 3). The child's hospitalization contributes to an increase in parental anxiety. Factors such as the diagnosis of the illness, procedures performed for diagnosis and treatment, and uncertainties are among the causes of anxiety. The effect of parental anxiety on child anxiety is significant.³¹

In our study, a positive, moderate relationship was found between children's social anxiety levels and the democratic attitudes of their parents. It was observed that as children's social anxiety levels increased, parents' democratic approaches also increased. A statistically significant relationship was found between social anxiety and democratic attitudes (Table 4) ($p < 0.05$). While the literature indicates no significant relationship between social anxiety levels and democratic attitudes, it does note a significant relationship with authoritarian attitudes.³² Our research findings do not align with the existing literature.

A negative, weak relationship was identified between social anxiety and authoritarian attitudes. As children's levels of social anxiety increased, parents' authoritarian attitudes decreased. A statistically significant relationship was found between social anxiety and authoritarian attitudes ($p < 0.05$). Parents of children with high social anxiety, who tend to avoid social situations and feel ashamed, may avoid adopting authoritarian attitudes to foster their children's self-esteem and avoid raising them under pressure.

A positive, moderate relationship was found between specific phobia and democratic attitudes. As the level of specific phobia in children increased, parents' levels of democratic attitudes also increased. A statistically significant relationship was identified between specific phobia and democratic attitudes ($p < 0.05$).

A strong positive relationship was identified between separation anxiety and democratic attitudes. As the level of separation anxiety among participants increased, their levels of democratic attitudes also rose. A statistically significant relationship was found between separation anxiety and democratic attitudes ($p < 0.05$). In the literature, it has been noted that parents of children diagnosed with separation anxiety aged 48-66 months tend to have more democratic attitudes.³⁰ Our findings are consistent with the literature.

A moderate positive relationship was found between generalized anxiety and democratic attitudes. As the level of generalized anxiety in children increased, the level of democratic attitudes also rose. Democratic attitudes are considered the healthiest ap-

proach to parenting. However, our findings indicate that children of parents who adopt democratic attitudes exhibit higher levels of separation anxiety, generalized anxiety, and specific phobias. This situation is thought to stem from the limitations of our study.

A weak positive relationship was found between generalized anxiety and permissive attitudes. As the level of generalized anxiety in children increased, parents were observed to adopt more permissive attitudes. There was a statistically significant relationship between generalized anxiety and permissive attitudes ($p < 0.05$).

A weak negative relationship was found between generalized anxiety and authoritarian attitudes. As the level of generalized anxiety in children increased, the level of authoritarian attitudes among parents decreased. A statistically significant relationship was identified between these variables ($p < 0.05$). Children with high generalized anxiety tend to be easily angered, obsessive, and generally restless. It is natural to observe a negative relationship, as authoritarian parenting may further increase their anxiety. Consequently, parents appear to prefer democratic and permissive attitudes more.

A weak negative relationship was found between separation anxiety and authoritarian attitudes. As the level of separation anxiety increased, authoritarian attitudes decreased, and a statistically significant relationship was identified between these variables ($p < 0.05$).

A weak positive relationship was found between the Beck Anxiety Scale and the social anxiety subscale of the PAS-R Parent Version (Table 5). It is suggested that as parental anxiety levels increase, children's social anxiety also rises. In the literature, a study conducted with preschool children aged 3-5 indicated that children's anxiety levels are associated with their mothers' childhood and adult separation anxiety levels.³³

A moderate positive and significant relationship was found between the Beck Anxiety Scale and the generalized anxiety subscale of the PAS-R Parent Version. The literature indicates that the parent's anxiety level correlates with an increase in the child's anxiety, which aligns with our findings.^{34,35}

Additionally, a weak positive and significant relationship was observed between the Beck Anxiety Scale and the specific phobia subscale of the PAS-R Parent Version. Just as high levels of parental anxiety affect children, high levels of children's anxiety can also impact parents.³⁶

LIMITATIONS

The research is limited to the 2-6 age group in the pediatric ward of a state hospital in a district of a province. Therefore, the results obtained cannot be generalized to the entire society. Again, the evaluation of children's anxiety is limited only to the information provided by the parents.

CONCLUSION

Families with 3 or more children were found to adopt a more democratic parenting style. Children who have frequently been hospitalized since birth exhibit higher levels of social anxiety. It was determined that as parental anxiety levels increase, children's anxiety levels also rise. Among parents who adopt a democratic style, there is an increase in their children's social, generalized, and separation anxiety, as well as specific phobias.

Parents of hospitalized children should receive education about the relationship between their anxiety and their child's anxiety, as well as the impor-

tance of parenting styles. When children are taken to play areas in the hospital, a dedicated adult room equipped with games and activities can be created, allowing parents to spend time outside the patient room.

Source of Finance

During this study, no financial or spiritual support was received neither from any pharmaceutical company that has a direct connection with the research subject, nor from a company that provides or produces medical instruments and materials which may negatively affect the evaluation process of this study.

Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

Idea/Concept: Sümeyya Olcay, Şemsinnur Göçer; **Design:** Sümeyya Olcay, Şemsinnur Göçer; **Control/Supervision:** Şemsinnur Göçer; **Data Collection and/or Processing:** Sümeyya Olcay; **Analysis and/or Interpretation:** Sümeyya Olcay, Şemsinnur Göçer; **Literature Review:** Sümeyya Olcay; **Writing the Article:** Sümeyya Olcay, Şemsinnur Göçer; **Critical Review:** Şemsinnur Göçer; **References and Fundings:** Sümeyya Olcay, Şemsinnur Göçer.

REFERENCES

1. Livesley J, Long T. Children's experiences as hospital in-patients: voice, competence and work. Messages for nursing from a critical ethnographic study. *Int J Nurs Stud.* 2013;50(10):1292-303. [Crossref] [PubMed]
2. Muroff J, Ross A. Social disability and impairment in childhood anxiety. In: McKay D, Storch EA, eds. *Handbook of Child and Adolescent Anxiety Disorders.* 1st ed. New York: Springer; 2011. p. 457-78. [Crossref] [PubMed]
3. Gültekin A, Cantekin D. Annelerin çocuk yetiştirme tutumları ile çocuklarının duygularını yönetme becerileri arasındaki ilişkinin incelenmesi [The relationship between mothers' attitudes towards child rearing and their children's emotion management skills]. *Anadolu Psikiyatri Dergisi.* 2020;21(1):87-92. [Link]
4. Korkmaz A, Arslan F, Uzun Ş. Hastanede sağlığı geliştirme uygulamaları: hasta çocukların beslenme durumlarının incelenmesi [Health promotion practices in hospital: examination of nutrition conditions of the ill children]. *TSK Korumaya Hekimlik Bülteni.* 2008;7(4):323-32. [Link]
5. Kostak M, Kocaaslan E, Bilsel A, Mutlu A. Hastanede yatarak tedavi gören 3-6 yaş çocukların uyku alışkanlıklarının belirlenmesi [Determination of sleep habits in children aged 3-6 years]. *HSP.* 2016;3:123-32. [Crossref]
6. Reiter RJ, Gultekin F, Manchester LC, Tan DX. Light pollution, melatonin suppression and cancer growth. *J Pineal Res.* 2006;40(4):357-8. [Crossref] [PubMed]
7. Üstün G, Akan B, Küçük L. Hastanede yatan çocuklarda psikososyal semptomlar ile annelerinin endişe düzeyleri arasındaki ilişkinin incelenmesi [Examining the relationship between psychosocial symptoms in hospitalized children and the anxiety levels of their mothers]. *Dokuz Eylül Üniversitesi Hemşirelik Fakültesi Elektronik Dergisi.* 2021;14(3):207-16. [Crossref]
8. Mueller SC, Maheu FS, Dozier M, Peloso E, Mandell D, Leibenluft E, et al. Early-life stress is associated with impairment in cognitive control in adolescence: an fMRI study. *Neuropsychologia.* 2010;48(10):3037-44. [PubMed] [PMC]

9. Conk Z, Başbakkal Z, Yılmaz HB, Bolışık B. *Pediatric Hemşireliği*. 3. Baskı. Ankara: Akademisyen Yayınevi; 2021. p.134-5. [\[Crossref\]](#)
10. Tükel R. *Anksiyete Bozuklukları*. 2. Baskı. Konya: Çizgi Tıp Yayınevi; 2000.
11. Sarman A, Sarman E. Çocuğun hastanede yatmasının aile üzerindeki olumsuz etkileri ve önleyici hemşirelik yaklaşımları [An overlooked issue: negative effects of child's hospital treatment on family and preventive nursing approaches]. *Sağlık Bilimleri Üniversitesi Hemşirelik Dergisi*. 2020;2(2):113-20. [\[Link\]](#)
12. Melnyk BM, Alpert-Gillis L, Feinstein NF, Crean HF, Johnson J, Fairbanks E, et al. Creating opportunities for parent empowerment: program effects on the mental health/coping outcomes of critically ill young children and their mothers. *Pediatrics*. 2004;113(6):e597-607. [\[Crossref\]](#) [\[PubMed\]](#)
13. Kim SJ, Kim HY, Park YA, Kim SH, Yoo SY, Lee JE, et al. Factors influencing fatigue among mothers with hospitalized children: a structural equation model. *J Spec Pediatr Nurs*. 2017;22(1). [\[PubMed\]](#)
14. Faul F, Erdfelder E, Buchner A, Lang AG. Statistical power analyses using G*Power 3.1: tests for correlation and regression analyses. *Behav Res Methods*. 2009;41(4):1149-60. [\[Crossref\]](#) [\[PubMed\]](#)
15. Günay O, Sevinç N, Aslantaş E. Hastanede yatan çocukların annelerinde durumluk ve sürekli anksiyete düzeyi ve ilişkili faktörler [State and trait anxiety levels among mothers of inpatient children and related factors]. *Türk J. Public Health*. 2017;15(3):176-86. [\[Link\]](#)
16. Spence SH. A measure of anxiety symptoms among children. *Behav Res Ther*. 1998;36(5):545-66. [\[Crossref\]](#) [\[PubMed\]](#)
17. Spence SH, Barrett PM, Turner CM. Psychometric properties of the Spence Children's Anxiety Scale with young adolescents. *J Anxiety Disord*. 2003;17(6):605-25. [\[Crossref\]](#) [\[PubMed\]](#)
18. Uğraş S. *Okul Öncesi Çocuklarda Anksiyete Ölçeği Türkçe Geçerlik Ve Güvenirlilik Çalışması [Yüksek Lisans Tezi]*. İstanbul: Arel Üniversitesi; 2016. [\[Link\]](#)
19. Hakan Ş. Study of Adaptation of the Preschool Anxiety's Scale in Children to Turkish. *International Education Studies*. 2020;13(9):82-95. [\[Link\]](#)
20. Edwards SL, Rapee RM, Kennedy SJ, Spence SH. The assessment of anxiety symptoms in preschool-aged children: the revised Preschool Anxiety Scale. *J Clin Child Adolesc Psychol*. 2010;39(3):400-9. [\[PubMed\]](#)
21. Baumrind D. Current patterns of parental authority. *Developmental Psychology*. 1971;4(1-2):1-103. [\[Crossref\]](#)
22. Maccoby E, Martin JA. Socialization in the context of family: Parent-child interaction. In: Mussen PH, Hetherington EM, eds. *Socialization, personality, and social development*. 4th ed. New York: Wiley;1983. p.1-101.
23. Karabulut Demir E, Şendil G. Ebeveyn tutum ölçeği (ETÖ). *Türk Psikoloji Yazıları*. 2008;11(21):15-25. [\[Link\]](#)
24. Beck AT, Epstein N, Brown G, Steer RA. An inventory for measuring clinical anxiety: psychometric properties. *J Consult Clin Psychol*. 1988;56(6):893-7. [\[Crossref\]](#) [\[PubMed\]](#)
25. Ulusoy M, Şahin NH, Erkmen H. Turkish Version of the Beck Anxiety Inventory: Psychometric Properties. *Journal of Cognitive Psychotherapy*. 1998;12(2):163-72. [\[Link\]](#)
26. Başbakkal Z, Sönmez S, Şen Celasin N, Esenay F. 3-6 yaş grubu çocuğun akut bir hastalık nedeniyle hastaneye yatışa karşı davranışsal tepkilerinin belirlenmesi [Determination of behavioral reactions of a child of 3-6 ages group to be hospitalized due to an acute illness]. *Uluslararası İnsan Bilimleri Dergisi*. 2010;7(1):456-68. [\[Link\]](#)
27. Çakırlı M, Karacaoğlu S, Ulukoş A, Açıkgöz A, Ergül B. 7-12 yaş grubu akut veya kronik hastalık nedeniyle hastanede yatan çocukların annelerinin depresyon ve anksiyete düzeylerinin belirlenmesi. *Osmangazi Üniversitesi Sağlık Bilimleri Fakültesi*. 2015. [\[Link\]](#)
28. Wang M, Zhao J. Anxiety disorder symptoms in Chinese preschool children. *Child Psychiatry Human Development*. 2015;46(1):158-66. [\[Crossref\]](#)
29. Yıldırım E. Veli algılarına göre okul öncesi dönem çocuklarında anksiyete [Anxiety in preschool children according to parent perceptions]. *Social Sciences Studies Journal*. 2023;9(114):8209-23. [\[Crossref\]](#)
30. Canabakan Koç N. *Okul Öncesi Dönem Adaptasyon Sürecinde Ayrılk Anksiyetesi Bozukluğu Geliştirmiş 48-66 Aylık Çocuklarda Ebeveyn Tutumlarının Etkisi [Yüksek lisans tezi]*. İstanbul: Beykent Üniversitesi; 2015. [\[Link\]](#)
31. Krızova K. *A Longitudinal Examination of Family Factors in Childhood Anxiety: The Role of Parental Anxiety and Child Emotion Dysregulation [Doctoral thesis]*. Virginia: Virginia Polytechnic Institute and State University; 2002. [\[Link\]](#)
32. Teke E, Yılmaz E, Sürücü A. İlkokul öğrencilerinin algıladıkları anne baba tutumları ile sosyal kaygı düzeyleri arasındaki ilişkinin incelenmesi [Examination of the relationship between perceived parental attitudes and social anxiety levels of primary school students]. *The Journal of International Lingual Social and Educational Sciences*. 2020;6(1):24-38. [\[Crossref\]](#)
33. Dağlar K. *Okul Öncesi Çocuklarda Anksiyete Belirtileri İle Annelerinin Bağlanma Biçimleri Ve Ayrılk Anksiyeteleri Arasındaki İlişki [Yüksek lisans tezi]*. İstanbul: Arel Üniversitesi; 2016. [\[Link\]](#)
34. Gönener D, Görak G. Okul çağındaki çocukların hastane ve hastalıklarıyla ilgili bilgilendirme durumları ile kaygı nedenleri arasındaki etkileşim [The interaction between the informing situation of the school age group children about the hospital and their illness, and their anxiety reasons]. *Gaziantep Tıp Derg*. 2009;15(1):41-8. [\[Link\]](#)
35. Kaynak H, Çevener Özçelik Ç. Hastanede yatan çocukların hastane kaygı düzeylerine ebeveynlerin etkisi [The effect of parents on the hospital anxiety level of hospitalized children]. *Hemşirelikte Eğitim Ve Araştırma Dergisi*. 2020;17(4):312-6. [\[Crossref\]](#)
36. Ginsburg GS, Schlossberg MC. Family-based treatment of childhood anxiety disorders. *International Review of Psychiatry*. 2002;14(2):143-54. [\[Crossref\]](#)