



RESEARCH ARTICLE / ARAŞTIRMA YAZISI

# Investigation of the State-Trait Anger Expression, Depression and Anxiety Level of Mothers of Adolescents Who Have Delinquent Behaviours

## Kuraldışı Davranışlar Gösteren Ergenlerin Annelerinin Sürekli Öfke ve Öfke İfade Tarzı, Depresyon ve Anksiyete Düzeylerinin İncelenmesi

Şener Yazıcı<sup>1</sup>, Ebru Tansel<sup>2</sup>

### Abstract:

Adolescent delinquent behaviors that become apparent during adolescence are influenced by the adolescent's family relationships and the mother's psychological well-being. The purpose of this research is to examine the relationships between adolescent mothers' trait anger and anger expression styles, depression and anxiety levels, and adolescents' delinquent behaviors and demographic variables. The study group consisted of 50 adolescents (11 females, 39 males) aged 15–18 who were attending the Education and Development Center affiliated with Kocaeli Metropolitan Municipality, along with their mothers. Data were collected using "Personal Information Form 1," the "Trait Anger and Anger Expression Scale," the "Beck Depression Scale," and the "Beck Anxiety Scale" for mothers; and "Personal Information Form 2" and the "Delinquent Behavior Scale" for adolescents. The findings revealed that mothers who were single, had daughters, and negatively evaluated the mother-child relationship had higher levels of trait anger. Additionally, a significant positive relationship was found between mothers' outward anger expression and adolescents' delinquent behavior levels. The results of the study emphasize the importance of providing social and psychological support not only to adolescents exhibiting delinquent behaviors but also to their families, in order to protect them from engaging in criminal behaviors.

**Keywords:** Adolescent, Delinquent Behavior, Anger, Depression, Anxiety.

<sup>1</sup>Private Healthcare Services Unit, Gebze, Kocaeli, Türkiye

<sup>2</sup>Cyprus Health and Social Sciences University, Faculty of Social and Human Sciences, Department of Psychology, Güzelyurt, TRN Cyprus.

**Address of Correspondence/Yazışma Adresi:** Şener Yazıcı, Private Healthcare Services Unit, Hacihalil Neighbourhood, Atatürk Street, No:37, Gebze, Kocaeli E-mail: seneryazici@hotmail.com

**Date of Received/Geliş Tarihi:** 31.01.2026, **Date of Revision/Düzelme Tarihi:** 04.02.2026, **Date of Acceptance/Kabul Tarihi:** 09.03.2026, **Date of Online Publication/Çevrimiçi Yayın Tarihi:** 09.03.2026

**Citing/Referans Gösterimi:** Yazıcı, Ş. & Tansel, E. (2026). Investigation of the State-Trait Anger Expression, Depression and Anxiety Level of Mothers of Adolescents Who Have Delinquent Behaviours, *European Archives of Social Sciences*, 3(1), e262002, Doi: 10.35365/eass.26.1.02

© 2026 The Author(s). Published by Cyprus Mental Health Institute / European Archives of Social Sciences (www.eassjournal.com). This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution 4.0 license, which permits use, sharing, adaptation, distribution, and reproduction in any medium or format, provided the original work is properly cited and is not used for commercial purposes. <http://creativecommons.org/licenses/by/4.0/>

**Öz:**

Ergenlik döneminde görünür hale gelen kuraldışı davranışların ortaya çıkmasına ergenin aile ilişkileri ve annenin psikolojik iyi oluş hali etki etmektedir. Bu araştırmanın amacı, kuraldışı davranışlar sergileyen ergenlerin annelerinin sürekli öfke düzeyleri, öfke ifade tarzları, depresyon ve anksiyete düzeyleri ile ergenlerin kuraldışı davranışları ve bazı demografik değişkenler arasındaki ilişkileri incelemektir. Araştırmanın çalışma grubunu, Kocaeli Büyükşehir Belediyesi'ne bağlı Eğitim ve Gelişim Merkezi'ne devam eden 15–18 yaş aralığındaki 50 ergen (11 kız, 39 erkek) ve anneleri oluşturmaktadır. Veriler, anneler için “Kişisel Bilgi Formu 1”, “Sürekli Öfke ve Öfke İfade Tarzı Ölçeği”, “Beck Depresyon Ölçeği” ve “Beck Anksiyete Ölçeği”, ergenler için ise “Kişisel Bilgi Formu 2” ve “Kuraldışı Davranışlar Ölçeği” kullanılarak toplanmıştır. Elde edilen bulgular, bekar olan, kız çocuğu sahibi olan ve anne-çocuk ilişkisini olumsuz olarak değerlendiren annelerin sürekli öfke düzeylerinin daha yüksek olduğunu ortaya koymuştur. Ayrıca, annelerin dışı vurulan öfke düzeyi ile ergenlerin kuraldışı davranış düzeyleri arasında pozitif yönde anlamlı bir ilişki saptanmıştır. Araştırmanın sonuçları, kuraldışı davranış gösteren ergenlerin suç davranışlarından korunabilmeleri için hem kendilerine hem de ailelerine sosyal ve psikolojik destek sağlanmasının önemini vurgulamaktadır.

**Anahtar Kelimeler:** Ergen, Kuraldışı Davranış, Öfke, Depresyon, Anksiyete.

**Introduction**

The word adolescence is derived from the Latin verb *adolescere*, meaning "growing toward adulthood." This period is a complex developmental process characterized by simultaneous biological, psychological, and social changes (Can et al., 2010). In adolescent development, physical, cognitive, and social development should be considered as a whole. Social development encompasses the individual's process of adapting to society and is primarily grounded in relationships established within the family, particularly with parents. This process enables the individual to adopt social norms and be accepted by society (Kulaksızoğlu, 2001).

The increasing sexual and aggressive impulses during adolescence lead to the re-emergence of conflicts from earlier developmental stages. Resolving these conflicts plays a critical role in the formation of the individual's adult identity (Geçtan, 2005). The often observed delinquent behaviors in adolescence are described as behaviors that, although not yet reflected in official records, could be considered criminal if they occur (Kaner, 1991).

In the literature, adolescence is described as a critical period characterized by rapid physical and cognitive development, as well as the emergence of problematic behaviors and risky attitudes. During this period, various problematic behaviors such as aggression, violence, theft, substance use, gang activities, carrying weapons, running away from school or home, lying, and early sexual activity can be observed (Siyez, 2016).

Since abnormal and problematic behaviors in adolescents negatively affect mental health, social relationships, and the future, it is important to examine the causes of these behaviors in a multidimensional way.

Kaner (1992) suggests three main approaches to understanding delinquency and delinquent behavior in adolescents: biological, psychological, and sociological. These approaches offer a holistic perspective by considering both the individual's internal characteristics and environmental factors.

According to social learning theory, an individual's behavior is shaped through interaction with their social environment; during childhood, parents serve as models, in school, teachers serve as models, and during adolescence, peers become models (Yılmaz, 2001). Peer influence becomes more prominent during adolescence

(Kızmaz, 2025). According to the theory, criminal behavior is a learned phenomenon: individuals learn criminal behaviors through observation and interaction with their cultural environment, and when these behaviors are reinforced, they become permanent. An adolescent's interaction with a group engaged in criminal behavior increases the likelihood of turning toward crime (Cömert and Sevim, 2017).

According to social control theory, an individual's engagement in criminal or delinquent behavior is explained by a weakening of their attachment to social values and norms. The fundamental factor preventing crime is the individual's strong attachment to social structures such as family, school, friendships, and religion; as attachment increases, the likelihood of criminal behavior decreases (Kızmaz, 2005). Additionally, if the internal control mechanism does not develop healthily in childhood or loses its function in later years, it can lead to conflicts with social roles and the development of criminal behaviors (McShane et al., 1991).

In the social control model developed by Elliot, the weakness in social attachment is explained through three fundamental elements.

**Tension:** When adolescents encounter obstacles in achieving their academic or professional goals, they may distance themselves from institutions and associate with peers who are incompatible (Petraitis et al., 1995).

**Social Disorganization:** Adolescents with a negative or inadequate social environment are less adherent to social rules and more prone to risky behaviors (Petraitis et al., 1995).

**Weakness of Family Bonds:** When an adolescent in the family cannot socialize in a healthy manner, even if attachment occurs, it may develop negatively (Petraitis et al., 1995). The adolescent's inability to establish healthy social relationships and internalize social norms increases the likelihood of engaging in risky and delinquent behaviors (Yılmaz, 2001). Insufficient socialization and social disorganization can lead individuals to become members of risk groups.

According to Kaplan's self-derogation theory, adolescents develop a negative self-image when they fail to meet social expectations and receive negative feedback from

their environment; to compensate for this, they may engage in risky behaviors such as gang membership, substance use, or adopting negative role models (Siyez, 2016).

Anger is a universal emotion that arises from unmet expectations and desires; when expressed constructively, it can be beneficial, but if unmanaged, it can be harmful to the individual and their environment (Soykan, 2003).

Among the internal sources of anger are jealousy, sadness, resentment, guilt, and shame. (Dilekler et al., 2014). When these internal factors combine with the individual's perception of personal inadequacy, anger can manifest more intensely and uncontrollably.

The causes of anger vary by developmental stage: in childhood, it is typically associated with unmet desires or disciplinary issues, whereas in adolescence, the conflict between the desire for independence and the need for adult support can lead to anger (Baltaş and Baltaş, 1987).

Trait anger reflects an individual's overall anger level and tendency to become easily angered; these people respond quickly with anger even to minor frustrations and may have difficulty controlling their anger, often rejecting alternative solutions (Özer, 1994; Özmen, 2004; Soykan, 2003). Situational anger is a temporary emotional response to a specific event or situation; feelings of frustration, tension, and anger caused by perceived obstruction or injustice fall into this category (Özer, 1994). Anger can be expressed in various ways, and Starner and Peters (2004) identify three forms: anger-out, anger-in, and anger control. Expressed anger is the individual's way of expressing their anger verbally, such as shouting or insulting, or physically, such as hitting or breaking. This attitude negatively affects social relationships by harming both the individual and their environment (Navaro, 2003). Anger-in refers to an individual's tendency to suppress their angry feelings and thoughts; this suppression can increase feelings of helplessness and lead to depressive emotions (Bridewell & Chang, 1997). Anger control refers to an individual's ability to recognize their anger and express it in a healthy way without harming themselves or others (Mertoğlu, 2021). Interventions used to manage anger include developing awareness, evaluating the situation, weighing options, employing distancing or avoidance strategies, using relaxation techniques, restructuring thought patterns, improving communication skills, and practicing self-care (Bulut and Yüksel, 2023). Individuals who suppress their anger in unhealthy ways (e.g., overeating, smoking/alcohol use, excessive sleeping) may face more serious problems in the long term.

Adolescence is a critical period during which identity and personality develop. In this process, the family, particularly the relationship with the mother, plays an important role in shaping adolescents' behavior and social adaptation. The mother's mental stability and positive attitudes support the adolescent's development of healthy relationships with family, school, and social environments. The foundations of the mother-child relationship are based on mental images that begin before pregnancy and are decisive in the development of the child's basic sense of security. Unhealthy parental attitudes not only negatively affect the mother-child relationship but also impact other social areas of the adolescent.

This research aims to examine the relationship between delinquent behaviors in adolescents and mothers' trait anger levels, anger expression styles, depression, and anxiety levels. Additionally, it will investigate whether these psychological characteristics of mothers vary by demographic factors (e.g., age, marital status, child's gender). It is expected that the study will guide prevention and intervention programs targeting delinquent adolescents and their mothers.

## Method

### Study Sample

The study population comprises adolescents aged 15–18 and their mothers who attend the Kocaeli Metropolitan Municipality Education and Development Center. At the center, students who cannot continue formal education receive training on a voluntary basis. Initially, 60 adolescents and their mothers were invited, and all agreed to participate. In the preliminary assessment, 10 outlier data points were excluded, yielding a total of 50 adolescents and their mothers (11 girls and 39 boys). During data collection, participants were informed about the study and provided voluntary informed consent.

### Data Collection Tools

Personal Information Form 1 has been prepared to collect demographic information of mothers.

Personal Information Form 2 has been prepared to collect demographic information of adolescents.

The State-Trait Anger Expression Inventory (STAXI), developed by Spielberger (1983), is a 34-item scale designed to assess individuals' anger levels and anger expression styles, using a four-point Likert-type response format. The Turkish adaptation of the scale was conducted by Özer (1994). The Cronbach's alpha reliability coefficients were reported as follows: Trait Anger (.79), Anger-Out (.78), Anger-In (.62), and Anger Control (.84). *The Beck Depression Inventory (BDI)*, developed by Beck (1961), is a 21-item scale that measures depressive symptoms. The Turkish adaptation was carried out by Hisli (1989), and the Cronbach's alpha reliability coefficient was reported as .80.

The Beck Anxiety Inventory (BAI) was developed by Beck, Epstein, Brown, and Steer (1988) and consists of 21 Likert-type items assessing the frequency of anxiety symptoms. The Turkish adaptation of the scale was conducted by Ulusoy, Şahin, and Erkmén (1996). The Cronbach's alpha reliability coefficient of the scale was .93, and item-total correlation coefficients ranged between .45 and .72.

Delinquent Behavior Scale (DBS), developed by Kaner (2001), is designed to identify behaviors that may constitute criminal activity but are not reflected in official records among adolescents aged 15–18. The scale comprises 38 items and covers nine sub-dimensions: status offenses and violations of school rules, theft, uncontrolled anger and fighting, petty theft, destructive behaviors, deception of others, drug- and violence-related offenses, vandalism, and cheating. The scoring ranges from 'Never' (1) to "5 or more times" (4), with higher scores indicating an increased frequency of delinquent behaviors. The scale's Cronbach's alpha reliability coefficient is 0.93.

**Statistical Analyses**

The data were analyzed using SPSS 21.0.

Descriptive statistics (number, percentage, mean, standard deviation) were used in data analysis; due to the limited sample size, nonparametric tests were employed. Spearman Correlation Analysis, Kruskal-Wallis H Test, and Mann-Whitney U Test analyses were conducted.

When applied to adolescents, the Delinquent Behavior Scale (DBS) yields a total score with a general reliability of  $\alpha = 0.931$ . The Cronbach's alpha values for its subscales are as follows: status crime and violating school rules ( $\alpha=0.493$ ); theft ( $\alpha=0.904$ ); inability to control anger and fighting ( $\alpha=0.750$ ); petty theft ( $\alpha=0.769$ ); noticeable vandalism ( $\alpha=0.844$ ); status crime and deceiving others ( $\alpha=0.664$ ); drug and violence crimes ( $\alpha=0.515$ ); and damaging buildings ( $\alpha=0.859$ ).

The overall reliability coefficients (Cronbach's alpha) of the scales administered to mothers were as follows: Depression Scale (total score)  $\alpha = .918$ , Anxiety Scale (total score)  $\alpha = .920$ , Trait Anger Scale (total score)  $\alpha = .847$ , Anger Control Scale (total score)  $\alpha = .901$ , Anger-In-

Scale (total score)  $\alpha = .598$ , and Anger-Out Scale (total score)  $\alpha = .875$ .

**Data Collection Process**

The research received approval from the university ethics committee on March 29, 2018 (project number YDÜ/SB/2018/138), and from the Kocaeli Metropolitan Municipality Department of Health and Social Services on April 20, 2018 (14614153-044). The study was conducted over five weeks at the Education and Development Center. Face-to-face data collection was conducted with mothers using Personal Information Form I, the State-Trait Anger Expression Inventory (STAXI), and the Beck Depression Inventory and Beck Anxiety Inventory; adolescents aged 15–18 completed Personal Information Form II and the Delinquent Behavior Scale. Each assessment session lasted approximately 20 minutes, and all questionnaires were completed without missing data.

**Findings**

The sociodemographic characteristics of the research group are presented in Table 1. The average age of participating mothers was  $40.06 \pm 3.58$ , and that of adolescents was  $16.66 \pm 0.82$ .

**Table 1.** Socio-demographic Characteristics of Adolescents and Their Mothers Exhibiting Delinquent Behaviors

	n	%
<b>Mother's education level</b>		
Elementary school graduate, and before	35	70.0
Secondary school graduate and beyond	15	30.0
<b>Marital Status</b>		
Married	37	74.0
Single	13	26.0
<b>Work status</b>		
Working	17	34.0
Housewife	33	66.0
<b>Income level</b>		
Low	12	24.0
Average	38	76.0
<b>Relationship with the child</b>		
Poor	17	34.0
Moderate	22	44.0
Good	11	22.0
<b>Gender of the adolescent</b>		
Female	11	22.0
Male	39	78.0
<b>Age of adolescence</b>		
15 years old	6	12.0
16 years old	10	20.0
17 years old	29	58.0
18 years old	5	10.0
<b>The reason they do not continue formal education</b>		
Class repetition	34	68.0
Family reasons	1	2.0
Financial reasons	2	4.0
Environmental reasons	13	26.0

**Table 2.** Relationships Between Adolescents' Delinquent Behavior Scale Subscale Scores and Mothers' STAXI Subscale Scores, BDI, and BAI Scores

	Trait Anger	Anger Control	Anger-Out	Anger-In	Depression (BDI)	Anxiety (BAI)
<b>Status crime and violating school rules</b>	r:0.101 p:0.485	r: -0.140 p:0.332	r:0.100 p:0.490	r: -0.084 p:0.563	r:0.137 p:0.342	r: 0.041 p:0.776
<b>Theft</b>	r:0.284 p:0.045*	r: -0.252 p:0.078	r:0.345 p:0.014*	r:0.262 p:0.066	r:0.106 p:0.463	r:0.118 p:0.414
<b>Inability to control anger and fighting</b>	r: -0.035 p:0.808	r: -0.011 p:0.937	r:0.226 p:0.115	r:0.043 p:0.766	r:0.047 p:0.747	r: -0.044 p:0.762
<b>Petty Theft</b>	r:0.249 p:0.081	r: -0.288 p:0.042*	r:0.458 p:0.001**	r:0.272 p:0.056	r:0.288 p:0.043*	r:0.260 p:0.069
<b>Attention-Seeking</b>	r:0.127	r: -0.175	r:0.350	r:0.139	r:0.098	r: -0.021
<b>Vandalism</b>	p:0.378	p:0.223	p:0.013*	p:0.337	p:0.499	p:0.885
<b>Status Offenses and Deceiving Others</b>	r:0.101 p:0.485	r: -0.140 p:0.332	r:0.100 p:0.490	r: -0.084 p:0.563	r:0.137 p:0.342	r:0.041 p:0.776
<b>Drug-Related and Violent Offenses</b>	r:0.061 p:0.676	r:0.007 p:0.961	r:0.228 p:0.111	r:0.126 p:0.383	r:0.060 p:0.677	r:0.010 p:0.943
<b>Damaging Property (Vandalism)</b>	r:0.131	r: -0.186	r:0.284	r:0.189	r:0.105	r: -0.011
<b>Delinquent Behavior Scale, (Total Score)</b>	r:0.169 p:0.242	r: -0.198 p:0.167	r:0.361 p:0.010*	r:0.159 p:0.269	r:0.182 p:0.206	r:0.065 p:0.655

\*\*p&lt;0.001; \*p&lt;0.05

R= Correlation Analysis

The relationships between the sub-dimensions of the Delinquent Behavior Scale and mothers' scores on the State-Trait Anger Expression Inventory, Beck Depression Scale, and Beck Anxiety Scale were evaluated using Spearman's rank correlation. The findings indicated that mothers' anger-out levels were positively and significantly associated with adolescents' delinquent

behaviors; specifically, increases in anger-out were related to higher levels of theft, petty theft, and vandalism. In contrast, higher levels of mothers' anger control were associated with lower levels of adolescents' petty theft behaviors (Table 2).

**Table 3.** Comparison of Adolescents' Delinquent Behavior Scale Scores and Mothers' STAXI Subscale Scores, BDI, and BAI Scores According to Mothers' Marital Status

Variable	Group	N	Mean Rank	Sum of Ranks	U	Z	p
<b>Adolescents' Delinquent Behavior Scale</b>	Married	37	24.28	898.50	195.50	-0.996	0.319
	Single	13	28.96	376.50			
<b>Mothers' Trait Anger Scale</b>	Married	37	23.08	854.00	151.00	-1.982	0.047*
	Single	13	32.38	421.00			
<b>Mothers' Anger Control Scale</b>	Married	37	27.55	1019.50	164.50	-1.685	0.092
	Single	13	19.65	255.50			
<b>Mothers' Anger-Out Scale</b>	Married	37	24.07	890.50	187.50	-1.175	0.240
	Single	13	29.58	384.50			
<b>Mothers' Anger-In Scale</b>	Married	37	25.34	937.50	234.50	-0.133	0.894
	Single	13	25.96	337.50			
<b>Mothers' Depression Scale (BDI)</b>	Married	37	24.47	905.50	202.50	-0.841	0.400
	Single	13	28.42	369.50			
<b>Mothers' Anxiety Scale (BAI)</b>	Married	37	25.24	934.00	231.00	-0.210	0.833
	Single	13	26.23	341.00			

\*p&lt;0.05

U = Mann-Whitney U value

When Table 3 was examined, no statistically significant difference in adolescents' Delinquent Behavior Scale scores was found by mothers' marital status ( $U = 195.50$ ,  $p > .05$ ).

Similarly, no statistically significant differences were observed in mothers' scores on the Anger Control, Anger-Out, Anger-In, Depression, and Anxiety scales based on marital status (respectively,  $U = 164.50$ ,  $U = 187.50$ ,  $U = 234.50$ ,  $U = 202.50$ , and  $U = 231.00$ ;  $p > .05$ ).

However, mothers' Trait Anger scores were found to be significantly higher among single mothers compared to married mothers ( $U = 151.00$ ,  $p < .05$ ).

No statistically significant difference in adolescents' Delinquent Behavior Scale scores was found in mothers' employment status.

Similarly, adolescents' Delinquent Behavior Scale scores did not differ significantly according to mothers' income levels ( $U = 192.50$ ,  $p > .05$ ). In addition, no statistically significant differences were found in mothers' Trait Anger, Anger Control, Anger-Out, Anger-In, Depression, and Anxiety scores based on income level (respectively,  $U = 212.00$ ,  $U = 218.00$ ,  $U = 172.00$ ,  $U = 206.50$ ,  $U = 168.00$ , and  $U = 204.50$ ;  $p > .05$ ).

**Table 4.** Comparison of Adolescents' Delinquent Behavior Scale Scores and Mothers' STAXI Subscale Scores, BDI, and BAI Scores According to Adolescents' Gender Using the Mann-Whitney U Test

Variable	Group	N	Mean Rank	Sum of Ranks	U	Z	p																																																																				
<b>Adolescents' Delinquent Behavior Scale</b>	Female	11	21.59	237.50	171.50		0.314																																																																				
	Male	39	26.60	1037.50				<b>Mothers' Trait Anger Scale</b>	Female	11	34.95	384.50	110.50		0.015*	Male	39	22.83	890.50	<b>Mothers' Anger Control Scale</b>	Female	11	22.00	242.00	176.00		0.366	Male	39	26.49	1033.00	<b>Mothers' Anger-Out Scale</b>	Female	11	34.64	381.00	114.00		0.018*	Male	39	22.92	894.00	<b>Mothers' Anger-In Scale</b>	Female	11	37.09	408.00	87.00		0.003**	Male	39	22.23	867.00	<b>Mothers' Depression Scale (BDI)</b>	Female	11	33.64	370.00	125.00		0.036*	Male	39	23.31	905.00	<b>Mothers' Anxiety Scale (BAI)</b>	Female	11	30.00	330.00	165.00		0.246
<b>Mothers' Trait Anger Scale</b>	Female	11	34.95	384.50	110.50		0.015*																																																																				
	Male	39	22.83	890.50				<b>Mothers' Anger Control Scale</b>	Female	11	22.00	242.00	176.00		0.366	Male	39	26.49	1033.00	<b>Mothers' Anger-Out Scale</b>	Female	11	34.64	381.00	114.00		0.018*	Male	39	22.92	894.00	<b>Mothers' Anger-In Scale</b>	Female	11	37.09	408.00	87.00		0.003**	Male	39	22.23	867.00	<b>Mothers' Depression Scale (BDI)</b>	Female	11	33.64	370.00	125.00		0.036*	Male	39	23.31	905.00	<b>Mothers' Anxiety Scale (BAI)</b>	Female	11	30.00	330.00	165.00		0.246	Male	39	24.23	945.00								
<b>Mothers' Anger Control Scale</b>	Female	11	22.00	242.00	176.00		0.366																																																																				
	Male	39	26.49	1033.00				<b>Mothers' Anger-Out Scale</b>	Female	11	34.64	381.00	114.00		0.018*	Male	39	22.92	894.00	<b>Mothers' Anger-In Scale</b>	Female	11	37.09	408.00	87.00		0.003**	Male	39	22.23	867.00	<b>Mothers' Depression Scale (BDI)</b>	Female	11	33.64	370.00	125.00		0.036*	Male	39	23.31	905.00	<b>Mothers' Anxiety Scale (BAI)</b>	Female	11	30.00	330.00	165.00		0.246	Male	39	24.23	945.00																				
<b>Mothers' Anger-Out Scale</b>	Female	11	34.64	381.00	114.00		0.018*																																																																				
	Male	39	22.92	894.00				<b>Mothers' Anger-In Scale</b>	Female	11	37.09	408.00	87.00		0.003**	Male	39	22.23	867.00	<b>Mothers' Depression Scale (BDI)</b>	Female	11	33.64	370.00	125.00		0.036*	Male	39	23.31	905.00	<b>Mothers' Anxiety Scale (BAI)</b>	Female	11	30.00	330.00	165.00		0.246	Male	39	24.23	945.00																																
<b>Mothers' Anger-In Scale</b>	Female	11	37.09	408.00	87.00		0.003**																																																																				
	Male	39	22.23	867.00				<b>Mothers' Depression Scale (BDI)</b>	Female	11	33.64	370.00	125.00		0.036*	Male	39	23.31	905.00	<b>Mothers' Anxiety Scale (BAI)</b>	Female	11	30.00	330.00	165.00		0.246	Male	39	24.23	945.00																																												
<b>Mothers' Depression Scale (BDI)</b>	Female	11	33.64	370.00	125.00		0.036*																																																																				
	Male	39	23.31	905.00				<b>Mothers' Anxiety Scale (BAI)</b>	Female	11	30.00	330.00	165.00		0.246	Male	39	24.23	945.00																																																								
<b>Mothers' Anxiety Scale (BAI)</b>	Female	11	30.00	330.00	165.00		0.246																																																																				
	Male	39	24.23	945.00																																																																							

\*\*p&lt;0.01; \*p&lt;0.05

U = Mann-Whitney U value

When Table 4 was examined, no statistically significant difference was found in adolescents' Delinquent Behavior Scale scores according to gender ( $U = 171.50$ ,  $p > .05$ ). Similarly, no statistically significant differences were observed in mothers' Anger Control and Anxiety scores based on adolescents' gender (respectively,  $U = 176.00$  and  $U = 165.00$ ;  $p > .05$ ).

Nevertheless, mothers of female adolescents had significantly higher scores on the Trait Anger, Anger-Out, Anger-In, and Depression scales compared to mothers of male adolescents (respectively,  $U = 110.50$ ,  $U = 114.00$ ,  $U = 87.00$ , and  $U = 125.00$ ;  $p < .05$ ).

**Table 5.** Comparison of Adolescents' Delinquent Behavior Scale Scores and Mothers' STAXI Subscale Scores, BDI, and BAI Scores According to Mother-Adolescent Relationship Levels (as Evaluated by Mothers) Using the Kruskal-Wallis H Test

Variable	Group	N	Mean Rank	df	$\chi^2$	p
<b>Adolescents' DBS</b>	Poor	17	31.56	2	5.688	0.058
	Moderate	22	20.39			
	Good	11	26.36			
<b>Mothers' Trait Anger Scale</b>	Poor	17	35.88	2	13.240	0.001**
	Moderate	22	19.48			
	Good	11	21.50			
<b>Mothers' Anger Control Scale</b>	Poor	17	19.71	2	4.849	0.089
	Moderate	22	30.05			
	Good	11	25.36			
<b>Mothers' Anger-Out Scale</b>	Poor	17	32.74	2	7.080	0.029*
	Moderate	22	20.27			
	Good	11	24.77			
<b>Mothers' Anger-In Scale</b>	Poor	17	32.12	2	5.407	0.067
	Moderate	22	21.64			
	Good	11	23.00			
<b>Mothers' Depression Scale (BDI)</b>	Poor	17	31.71	2	6.393	0.041*
	Moderate	22	19.95			
	Good	11	27.00			
<b>Mothers' Anxiety Scale (BAI)</b>	Poor	17	30.85	2	3.513	0.173
	Moderate	22	22.41			
	Good	11	23.41			

\*\* p < .01 \* p < .05

$\chi^2$  = Kruskal-Wallis H value

As shown in Table 5, there was no statistically significant difference in delinquency scale scores among adolescents exhibiting delinquent behavior, based on their relationships with their mothers [ $\chi^2=5.688$ ;  $p>0.05$ ].

It was found that mothers' scores on the Trait Anger, Anger-Out, and Depression scales differed significantly according to the quality of their relationship with adolescents who exhibited delinquent behaviors (respectively:  $\chi^2 = 13.240$ ,  $\chi^2 = 7.080$ , and  $\chi^2 = 6.393$ ;  $p < .05$ ).

Mothers who described their relationship with their child as poor had significantly higher trait anger levels compared to mothers who reported a moderate or good relationship ( $p = .001$ ).

In addition, mothers with a poor relationship with their child had significantly higher anger-out levels than mothers who reported a moderate relationship ( $p = .029$ ). Furthermore, mothers who defined their relationship with their child as poor exhibited significantly higher depression levels compared to those whose relationship with their child was at a moderate level ( $p = .041$ ).

**Table 6.** Predictive Effect of Mothers' Anger-Out Scores on Adolescents' Delinquent Behavior Scores

Dependent Variable	Independent Variable	B	t	P	F	Model (p)	R2
Delinquent Behavior Scale	Constant	74.993	8.023	0.001	6.604	0.013	0.348
	Anger-Out Scale	1.266	2.570	0.013			

\*p<0.005

The results presented in Table 6 indicate that mothers' anger-out levels significantly predicted adolescents' delinquent behavior scores [ $F = 6.604$ ;  $p = .013$ ;  $p < .05$ ]. According to the regression analysis, increases in mothers' anger-out scores were associated with significant increases in adolescents' delinquent behavior scores ( $\beta = 1.266$ ).

### Discussion

In this study, adolescents' delinquent behaviors were examined in relation to their mothers' trait anger, anger expression styles, depression and anxiety levels, as well as mothers' age, educational level, marital status, occupational status, income level, the child's gender, and the mother-child relationship.

The study found no significant differences in adolescents' delinquent behaviors or in mothers' levels of anger, depression, and anxiety according to mothers' educational level. This finding suggests that educational level does not have a determining effect on these variables. However, the literature indicates that problem behaviors are more frequently observed in children of parents with lower educational levels (Ayhan & Özkan, 2016; Basut, 2004; Özen et al., 2005). In contrast, some studies have reported that increases in mothers' educational level may be associated with higher levels of delinquent behaviors among adolescents (Balkaya & Ceyhan, 2007).

The research found no significant difference in adolescents' delinquent behaviors based on the mothers' marital status. This finding differs from studies in the literature that indicate problem behaviors are more common among adolescents in broken families (Hoffman, 2006; Öngider, 2013). However, it was found that single mothers have consistently higher levels of anger compared to married mothers. This situation, which may be influenced by sole responsibility for child-rearing, lack of social support, economic difficulties, and the intensity of parenting stress, can increase chronic stress levels and trigger anger responses.

No significant difference was found between adolescents' delinquent behaviors and mothers' levels of anger, depression, and anxiety based on the mothers' employment status. However, the literature indicates that a mother's employment may increase adolescents' risk-taking behaviors (Yılmaz, 2000).

There was no significant difference found in the delinquent behaviors of adolescents or in the levels of anger, depression, and anxiety of mothers based on their income levels. In the literature, it has been reported that low socioeconomic status is a risk factor for adolescent delinquency (Korkmaz, 2014; Kunt, 2003), while some

studies have also found a relationship between high socioeconomic status and delinquent behavior (Aras et al., 2007; Bulut, 2010; Yılmaz, 2000). However, it has been noted that economic hardships do not only lead to financial consequences but also reduce life satisfaction, leading to depression, trauma, and impairments in social functioning (Özsat, Çakıcı & Hüdaverdi, 2024).

The results of the study indicate that there were no significant differences in adolescents' delinquent behaviors or in mothers' levels of controlled anger and anxiety according to adolescents' gender. This finding is noteworthy, as the literature generally reports that male adolescents exhibit higher levels of delinquent behaviors (Aras et al., 2007; Balkaya & Ceyhan, 2007; Bulut, 2010; Delikara, 2000; Korkmaz, 2014; Yılmaz, 2000; Yılmaz, 2011). However, mothers of girls reported significantly higher levels of trait anger, anger-out, anger-in, and depression compared to mothers of boys. Research examining whether mothers' emotional states differ according to the child's gender is limited, suggesting that this issue warrants further investigation.

In the study, no significant differences were found in adolescents' delinquent behaviors based on mothers' evaluations of their relationship with their children. However, mothers who reported a poor relationship with their children exhibited significantly higher levels of trait anger, anger-out, and depression compared to mothers who reported a moderate or good relationship. This finding is consistent with the literature indicating that higher parental anger levels are associated with inadequate parent-child interactions (Reid et al., 2002). Additionally, previous studies have emphasized that depressive symptoms in parents weaken the mother-child relationship and negatively affect children's behavioral adjustment (Marchand et al., 2004).

It has been shown that as mothers' self-esteem declines, their parenting attitudes are adversely affected (Barbaroğlu, 2025). Similarly, findings indicating that intrafamilial communication problems are associated with increased delinquent behavior among adolescents (Çavuş et al., 2017) support the present results.

The results of the regression analysis demonstrate that mothers' anger-out levels significantly increase adolescents' delinquent behaviors. This finding suggests that the external expression of anger by mothers may be modeled and learned by adolescents, thereby creating a basis for violent or delinquent behaviors. Likewise, studies in the literature support a strong relationship between parents' expressions of anger and children's problem behaviors (Avcı, 2006; Ayan, 2007; Bulut, 2010; Kaymak & Özmen, 2004; Kolko, 1996).

The findings of this study should be evaluated within the limitations of this study. The research was conducted during the 2017–2018 academic year and was limited to the province of Kocaeli, involving only 50 adolescents attending the Education and Development Center affiliated with the Kocaeli Metropolitan Municipality Social Services Directorate and their mothers. The study group consisted of adolescents aged 15–18 years and their mothers; fathers were excluded.

### Conclusion and Recommendations

The findings of the study revealed significant relationships between mothers' emotional states and anger levels and adolescents' delinquent behaviors. As mothers' trait anger levels increased, adolescents' theft scores also increased; conversely, higher levels of mothers' controlled anger were associated with decreases in adolescents' petty theft behaviors. Similarly, increases in mothers' anger-out levels were accompanied by increases in adolescents' scores for theft, petty theft, attention-seeking vandalism, and overall delinquent behaviors. In addition, as mothers' depression levels increased, adolescents' petty theft scores were found to increase significantly.

The analysis further indicated that single mothers had significantly higher trait anger scores than married mothers. With regard to the gender variable, mothers of girls obtained higher scores on trait anger, anger-out, anger-in, and depression compared to mothers of boys. In terms of the mother–child relationship, mothers who reported a poor relationship with their children exhibited significantly higher levels of trait anger, anger-out, and depression than those who reported a moderate or good relationship.

Finally, the regression analysis demonstrated that mothers' anger-out levels significantly predicted adolescents' overall delinquent behavior scores.

When working with adolescents who exhibit delinquent behaviors, the family—particularly maternal attitudes—should be taken into consideration. Further research and support centers should be established for adolescents who do not attend school or who are in high-risk groups. Early identification and preventive interventions should be implemented within schools, and interdisciplinary teams should develop support programs. In addition, families' psychological well-being should be assessed, and individual psychological support should be provided to mothers.

### Declarations

#### Ethics Approval and Participation Approval

The research received approval from the university ethics committee on March 29, 2018 (project number YDÜ/SB/2018/138), and from the Kocaeli Metropolitan Municipality Department of Health and Social Services on April 20, 2018 (14614153-044).

#### Publication Permission

Not applicable.

#### Availability of Data and Materials

Not applicable.

#### Conflict of Interest

The authors declare that there is no conflict of interest.

#### Authors' Contributions

Ş.Y. contributed to the study design, data collection, analysis, and writing of the manuscript. E.T. contributed to the supervision of the study, interpretation of the findings, and critical revision of the manuscript.

### References

- Aras, Ş., Günay, T., Özcan, S. ve Orçın, E. (2007). İzmir ilinde lise öğrencilerinin riskli davranışları. *Anadolu Psikiyatri Dergisi*, 8(3), 186–196.
- Ayhan, F. ve Özkan, B. (2016). Aile içi şiddetin ergenler üzerindeki etkisi. *Journal Of Human Sciences*, 13 (3), 3753-3767. <https://doi.org/10.14687/jhs.v13i3.3923>
- Avcı, R. (2006). *Şiddet davranışı gösteren ve göstermeyen ergenlerin ailelerinin aile işlevleri, öfke ve öfke ifade tarzları açısından incelenmesi* (Yayımlanmamış yüksek lisans tezi). Çukurova Üniversitesi, Sosyal Bilimler Enstitüsü, Adana.
- Ayan, S. (2007). Aile içinde şiddete uğrayan çocukların saldırganlık eğilimleri. *Anadolu Psikiyatri Dergisi*, 8(3), 206–214.
- Babaroğlu, A. (2025). Mothers self esteem and maternal attitudes. *Cyprus Turkish Journal of Psychiatry & Psychology* 7(1), 32-38. <https://doi.org/10.35365/ctjpp.25.1.04>.
- Balkaya, A. ve Ceyhan, E. (2007). Lise öğrencilerinin suç davranış düzeylerinin bazı kişisel ve ailesel nitelikler bakımından incelenmesi. *Aile ve Toplum Dergisi*. 3(11), 13–27. <https://doi.org/10.21560/spcd.49711>
- Baltaş, A. ve Baltaş, Z. (1987). *Stres ve başa çıkma yolları* (2. baskı). İstanbul: Remzi Kitabevi. ISBN 978 9751401786
- Basut, E. (2004). *Suçla yönelen ve yönelmeyen ergenlerin stresle başa çıkma ve kişilik örüntüleri yönünden incelenmesi* (Yayımlanmamış yüksek lisans tezi). Ankara Üniversitesi, Sağlık Bilimleri Enstitüsü, Ankara.
- Bridewell, W. B., ve Chang, E. C. (1997). Distinguishing between anxiety, depression, and hostility: *Relations to anger-in, anger-out, and anger control. Personality and Individual Differences*, 22 (4), 587–590. [https://doi.org/10.1016/S0191-8869\(96\)00224-3](https://doi.org/10.1016/S0191-8869(96)00224-3)
- Bulut, F. (2010). *Ergenlerde görülen kural dışı davranışların aile işlevselliği, aile risk faktörü ve yaşam kalitesi açısından incelenmesi* (Yayımlanmamış yüksek lisans tezi). Çukurova Üniversitesi, Sosyal Bilimler Enstitüsü, Adana.
- Bulut, M., ve Yüksel, Ç. (2023). Bilişsel davranışçı müdahaleler ile öfke yönetiminde kendi kendine yardım teknikleri: Öfkeyi anlamak ve yönetmek. *Humanistic Perspective*, 5(2), 844-856. <https://doi.org/10.47793/hp.1222353>
- Can, R., Türkyılmaz, M. ve Karadeniz, A. (2010). Ergenlik dönemi öğrencilerinin okuma alışkanlıkları. *Ahi Evran Üniversitesi Eğitim Fakültesi Dergisi*, 11(3), 1-21.
- Cömert, Ö. ve Sevim, Y. (2017). Çocuk ve suç ilişkisinin sosyolojik suç kuramları ile incelenmesi. *Bülent Eren Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 6(1), 29-40.
- Çavuş, F. Ö., Çavuş, U. Y. Ve Görpelioğlu, S. (2017). Ankara ilindeki ergenlerde riskli davranışların sıklığı, dağılımı. *Aile Hekimliği Dergisi*, 21(1), 2-16. <https://doi.org/10.15511/tahd.17.00102>
- Dilekler, İ., Törenli, Z. ve Selvi, K. (2014). Öfkeye farklı açılardan bakış: Öfkenin mekanizması, farklı psikopatolojilerde öfke ve terapistin öfkesi. *Ayna Klinik Psikoloji Dergisi*, 1(3), 44-59. <https://doi.org/10.31682/ayna.470591>

- Delikara, İ. E. (2000). *Ergenlerin akrân ilişkileri ile suç kabul edilen davranışlar arasındaki ilişkinin incelenmesi* (Yayımlanmamış yüksek lisans tezi). Ankara Üniversitesi, Sosyal Bilimler Enstitüsü.
- Geçtan, E. (2005). *Psikanaliz ve sonrası* (11. baskı). İstanbul: Metis Yayınları. ISBN 978-9753424639
- Hisli, N. (1989). Beck Depresyon Envanterinin üniversite öğrencileri için geçerliği, güvenilirliği. *Psikoloji Dergisi*, 7(23), 3-13.
- Hoffman, J.P. (2006). Family structure, community context, and adolescent problem behaviors, *Journal of Youth Adolescence*. 35(6), 867-880. <https://doi.org/10.1007/s10964-006-9078-x>
- Kaner, S. (1991). Suçlu çocuklarda gençlere ve sorunlarına genel bir bakış. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 24(1), 169-186. [https://doi.org/10.1501/Egifak\\_0000000733](https://doi.org/10.1501/Egifak_0000000733)
- Kaner, S. (1992). Suçluluğu açıklayan yaklaşımlar. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 25(2), 473-496. [https://doi.org/10.1501/Egifak\\_0000000593](https://doi.org/10.1501/Egifak_0000000593)
- Kaner, S. (2001). "Suç Davranışı Ölçeği Geliştirme Çalışması".1. Ulusal Çocuk ve Suç: Nedenler ve Önleme Çalışmaları Sempozyumu. Ankara: Türkiye Çocuklara Yeniden Özgürlük Vakfı, 79-90.
- Kaymak-Özmen, S. (2004). Aile içinde öfke ve saldırganlığın yansımaları. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 37(2), 27-39. [https://doi.org/10.1501/Egifak\\_0000000093](https://doi.org/10.1501/Egifak_0000000093)
- Kızmaz, Z. (2005). Din ve suçluluk: suç teorileri açısından kuramsal bir yaklaşım. *Fırat Üniversitesi Sosyal Bilimler Dergisi*, 15(1), 189-215.
- Kolko, D. J. (1996). Clinical monitoring of treatment course in child physical abuse: Psychometric characteristics and treatment comparisons. *Child Abuse & Neglect*, 20(1), 23-43. [https://doi.org/10.1016/0145-2134\(95\)00113-1](https://doi.org/10.1016/0145-2134(95)00113-1)
- Korkmaz, Ş. (2014). *Lise öğrencilerinin algıladıkları anne baba tutumları ile kuraldışı davranışlar arasındaki ilişkinin incelenmesi* (Yayımlanmamış yüksek lisans tezi). Gaziantep Üniversitesi, Eğitim Bilimleri Enstitüsü, Eğitim Bilimleri Anabilim Dalı, Gaziantep.
- Kulaksızoğlu, A. (2001). *Ergenlik psikolojisi* (4. baskı). İstanbul: Remzi Kitabevi.
- Kunt, V. (2003). *Çocuk ve suç* (Yayımlanmamış yüksek lisans tezi). Ankara Üniversitesi, Sosyal Bilimler Enstitüsü, Ankara.
- Kuzeyli, Y. ve Fadilloğlu, Ç. (2005). Diyaliz hastalarında progresif gevşeme yöntemlerinin kaygı düzeyi ve yaşam kalitesine olan etkisinin incelenmesi. *Ege Üniversitesi Hemşirelik Yüksekokulu Dergisi*, 21(1), 33-45.
- Marchand, J. F., Schedler, S., & Wagstaff, D. A. (2004). The role of parents' attachment orientations, depressive symptoms, and conflict behaviors in children's externalizing and internalizing behavior problems. *Early Childhood Research Quarterly*, 19(3), 449-462. <https://doi.org/10.1016/j.ecresq.2004.07.003>
- Mcshane, D., Frank, P. ve Williams, M. (1991). *Criminological theory*. USA: Prentice Hall. ISBN-13: 978-0134753479
- Mertoğlu, M. (2021). *Aile, okul, iş yeri, spor, cezaevleri ve yaşamın diğer alanlarında öfke kontrolü* (5. baskı). Ankara: Pegem Akademi. ISBN 978 6052412329
- Navaro, L. (2003). *Gerçekten beni duyuyor musun?* İstanbul: Remzi Kitabevi. ISBN 978 9751408068
- Öngider, N. (2013). Boşanmanın çocuk üzerindeki etkileri. *Psikiyatride Güncel Yaklaşımlar / Current Approaches in Psychiatry*, 5(2),140-161. <https://doi.org/10.5455/cap.20130510>
- Özen, Ş., Ece, A., Oto, R., Tıraşçı, Y., & Gören, S. (2005). Juvenile delinquency in a developing country: A provincial example in Turkey. *International Journal of Law and Psychiatry*, 28(4), 430-441. <https://doi.org/10.1016/j.ijlp.2004.05.001>
- Özer, K. (1994). Öfke, kaygı ve depresyon eğilimlerinin bilişsel alt yapısı ile ilgili bir çalışma. *Türk Psikoloji Dergisi*, 9(31), 12-25. <https://doi.org/10.31828/tpd1300443319940000m000309>
- Özmen, A. (2004). *Seçim kuramına ve geçerlilik terapisine dayalı öfkeyle başa çıkma eğitim programının ve etkileşim grubu uygulamasının üniversite öğrencilerinin öfkeyle başa çıkma becerileri üzerindeki etkisi* (Yayımlanmamış doktora tezi). Ankara Üniversitesi, Eğitim Bilimleri Enstitüsü.
- Özsat, K., Çakıcı, M. & Hüdaverdi, H. (2024). Analysing the levels of trauma and depression in individuals who are suffering from economic crisis (KKTC'de ekonomik krizden etkilenip iflas eden bireylerde örselenme ve depresyon düzeylerinin incelenmesi). *European Archives of Social Sciences*, 1(2). <https://doi.org/10.35365/eass.24.2.02>
- Petraitis, J., Flay, B.R. ve Miller, T.Q. (1995). Reviewing theories of adolescent substance use: organizing pieces in the puzzle. *Psychological Bulletin*, 117(1), 67-86. <http://dx.doi.org/10.1037/0033-2909.117.1.67>
- Reid, J. B., Patterson, G. R. & Snyder, J. (2002). *Antisocial behavior in children and adolescents*. Washington, DC: American Psychological Association. Erişim tarihi: 10 Ekim 2025. <https://doi.org/10.1037/10468-000>
- Siyez, D. M. (2016). *Ergenlerde problem davranışlar: Okul temelli önleme çalışmaları ile ilgili uygulama örnekleri* (5. baskı). Ankara: Pegem Akademi. ISBN 978-6055885816
- Soykan, Ç. (2003). Öfke ve öfke yönetimi. *Kriz Dergisi*, 11(2), 19-27. [https://doi.org/10.1501/Kriz\\_00000000192](https://doi.org/10.1501/Kriz_00000000192)
- Starner, T.M. ve Peters, R.M. (2004). Anger expression and blood pressure in adolescents. *The Journal of School Nursing*, 20(6), 42-335. <https://doi.org/10.1177/10598405040200060801>
- Ulusoy, M., Şahin, N. H., ve Erkmen, H. (1998). Turkish version of the Beck Anxiety Inventory: Psychometric properties. *Journal of Cognitive Psychotherapy: An International Quarterly*, 12 (2), 163-172.
- Yılmaz, T. (2000). *Ergenlerde risk alma davranışlarının incelenmesi* (Yayımlanmamış yüksek lisans tezi). Ege Üniversitesi, Sosyal Bilimler Enstitüsü, İzmir.
- Yılmaz, T. (2001). Ergenlerde risk alma davranışının incelenmesi. *1.Ulusal Çocuk ve Suç: Nedenler ve Önleme Çalışmaları Sempozyumu Bildiriler Kitabı* (s. 119-146). Ankara, Türkiye Çocuklara Yeniden Özgürlük Vakfı.
- Yılmaz, Y. (2011). *Ortaöğretim öğrencilerinde görülen kuraldışı davranışların yordayıcılarının incelenmesi* (Yayımlanmamış yüksek lisans tezi). Çukurova Üniversitesi Sosyal Bilimler Enstitüsü, Eğitim Bilimleri Anabilim Dalı, Adana.