

Yüksek Güvenlikli Adli Psikiyatri Hastanesinde Değerlendirilen Suça Sürüklenmiş Çocuklarda Suç Türleriyle İlişkili Faktörlerin İncelenmesi

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ÖZET

Giriş ve Amaç: Bu çalışmanın amacı, yüksek güvenlikli adli psikiyatri ortamında değerlendirilen suça sürüklenen çocuklarda suç tiplerini ve bunlarla ilişkili psikososyal ve klinik faktörleri incelemektir.

Gereç ve Yöntemler: 2022 Eylül ile 2024 Mart arasında Elazığ Fethi Sekin Şehir Hastanesi Yüksek Güvenlikli Ergen Adli Psikiyatri Birimi'ne başvuran (yatan ya da ayaktan tedavi gören) 56 çocuk ve ergenin tıbbi kayıtları retrospektif olarak incelenmiştir.

Bulgular: Çalışmaya dahil edilen 56 suça sürüklenen çocuğun %89,3'ü (n = 50) erkek, %10,7'si (n = 6) kadındır. Bu çocuklardan %25'i (n = 14) yatarak tedavi edilmiştir, %75'i (n = 42) ise ayaktan tedavi edilmiştir. En yaygın başvuru şikayetleri öfke (%42,9) ve davranışsal sorunlar (%28,6) olmuştur. En sık görülen tanılar dikkat eksikliği/hyperaktivite bozukluğu (DEHB) ve davranış bozukluğu (%16) olmuştur. En yaygın suç türleri ise saldırı (%26,8) ve cinsel suçlar (%19,6) olarak kaydedilmiştir. Suç türü ile cinsiyet, sosyoekonomik durum, aile yapısı, önceki psikiyatri başvuruları, zeka seviyesi, psikiyatrik şikayetler veya tanılar gibi faktörler arasında anlamlı bir ilişki bulunmamıştır. Ancak, yatan hasta ve ayaktan hasta grupları arasında cinsiyet, yaş, psikiyatrik belirtiler, tanılar ve psikiyatrik komorbiditeler açısından anlamlı farklılıklar gözlemlenmiştir (p < 0,05). İki grup arasında suç türü veya önceki suç geçmişi açısından anlamlı bir fark bulunmamıştır.

Sonuç: Suça sürüklenen çocuklar için, belirgin psikiyatrik şikayetler olmasa dahi rutin psikiyatrik değerlendirme önemlidir. Farklı suç davranışlarıyla ilişkili altta yatan faktörleri incelemek amacıyla daha fazla prospektif çalışmaya ihtiyaç vardır.

Anahtar Kelimeler: Adli psikiyatri, suça sürüklenen çocuk, çocuk suçluluğu, yüksek güvenlikli adli psikiyatri, ergen ruh sağlığı

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An Investigation of Factors Associated with Types of Criminal Offenses in Juvenile Delinquents Evaluated at a High-Security Forensic Psychiatric Hospital

ABSTRACT

Aim: The aim of this study is to examine the types of criminal offenses and their associated psychosocial and clinical factors among juvenile delinquents assessed in a high-security forensic psychiatric setting.

Material and Methods: A retrospective analysis was performed on the medical records of 56 children and adolescents admitted (inpatient or outpatient) to the High-Security Adolescent Forensic Psychiatry Unit at Elazığ Fethi Sekin City Hospital between September 2022 and March 2024.

Results: Of the 56 juvenile delinquents included, 89.3% (n = 50) were male, and 10.7% (n = 6) were female. Among them, 25% (n = 14) were admitted as inpatients, while 75% (n = 42) were treated as outpatients. The most common presenting complaints were anger (42.9%) and behavioral problems (28.6%). The most frequent diagnoses were attention-deficit/hyperactivity disorder (ADHD) and conduct disorder (16%). The most common types of offenses were assault (26.8%) and sexual offenses (19.6%). No significant associations were found between the type of offense and factors such as gender, socioeconomic status, family structure, prior psychiatric consultations, intelligence level, psychiatric complaints, or diagnoses. However, significant differences were observed between inpatient and outpatient groups in terms of gender, age, psychiatric symptoms, diagnoses, and psychiatric comorbidities ($p < 0.05$). No significant differences were found in the type of offense or history of prior offenses between the two groups.

Conclusion: Routine psychiatric evaluation is essential for juvenile delinquents, even in the absence of overt psychiatric complaints. Further prospective studies are necessary to explore the underlying factors associated with different types of criminal behavior.

Keywords: Forensic psychiatry, juvenile delinquents, criminal behavior, high-security forensic psychiatry, adolescent mental health.

1. INTRODUCTION

According to the Turkish Penal Code, crime is defined as “an act that is against the law” (Resmi Gazete, 2005), and for children involved in criminal activity, the law further defines this as “a child who is under investigation or prosecution for committing an act considered a crime by law, or a child for whom a security measure has been ordered due to such an act” (Çocuk Koruma Kanunu, 2005). The number of children involved in criminal activity is increasing worldwide (Patiz and Bayraktar, 2023), including in Türkiye (Ogel, Karadayı, Şenyuva and Ozdemir, 2011). According to data from the Turkish Statistical Institute (TURKSTAT), 178,834 children were involved in criminal offenses in 2023 (TUIK data, 2023). The most common types of crimes among these children were assault (39.8%), theft (20.8%), violation of passport law (7.7%), drug-related offenses (4.9%), and threats or intimidation (2%) (TUIK data, 2023). Understanding the factors that contribute to these offenses is crucial for designing effective interventions and rehabilitation.

strategies. A wide range of individual, psychological, environmental, familial, and cultural factors contribute to criminal behavior in children (Ogel et al, 2011; Enginyurt, 2016). Among these factors, environmental factors are considered one of the important influences in the development of criminal behavior (Gordeles et al, 2016; Çakaloz et al, 2016; Yavuz et al, 2020; Thompson et al, 2016; Vafors Fritz et al,2008). Elements such as low socioeconomic status, poor parenting, neglect, low academic achievement, and negative peer influence can significantly increase a child's risk of engaging in criminal activity (Gordeles et al, 2016; Çakaloz et al, 2016; Yavuz et al, 2020; Vafors Fritz et al, 2008; Sayar,2016; Moffitt,1993; Farrington,1990; Bielas et al ; 2016).

Children involved in criminal activities often exhibit psychiatric issues, which may contribute to the development or escalation of their criminal behavior (Resmi Gazete, 2005; Buyle-Bodin et al, 2019). These may include attention deficit hyperactivity disorder (ADHD), depressive disorders, sleep disturbances, anger issues, behavioral problems, self-harming behavior, intellectual disabilities, anxiety disorders, post-traumatic stress disorder (PTSD), and psychotic disorders (Resmi Gazete, 2005;Farrington,1990; Buyle-Bodin et al,2019; Açikel et al,2020; Ucuş et al,2020). A 25-year meta-analysis conducted by Fazel and colleagues found that juvenile delinquents exhibit significantly higher rates of psychiatric diagnoses, including ADHD (4.1%–27.7%), Conduct Disorder (32.4%–73.2%), Major Depressive Disorder (7.3%–36.5%), and Psychotic Disorders(2%–3.6%) (Fazel, Dool and Langstrom,2008). Consequently, psychiatric medication use is also more common in this population (Buyle-Bodin et al,2019; Açikel et al,2020). While some studies have explored the outpatient care of children involved in crime, follow-up can be challenging due to issues such as irregular attendance, release from custody, or the need for law enforcement accompaniment (Resmi Gazete, 2005; Gordeles et al,2016; Çakaloz et al, 2016; Açikel et al,2020; Sertdemir et al, 2020; Ozdemir et al,2011). In more severe cases, including those involving suicidal ideation or attempts, psychotic or manic episodes, or serious self-harm, hospitalization in a child and adolescent psychiatry ward may be necessary (Buyle-Bodin et al,2019; Huffman et al,2012). In Türkiye, High-Security Forensic Psychiatric Hospitals (HSFPHs) have been established within city hospitals to evaluate forensic cases. These facilities provide both inpatient and outpatient services for the assessment and treatment of children involved in legal proceedings. Two such centers for children exist in Türkiye, located in Elazığ and Adana. The Elazığ Fethi Sekin City Hospital HSFPH houses a high-security juvenile forensic psychiatry unit with 10 beds—5 for girls and 5 for boys. Children who pose a risk to themselves or others, have psychotic or major depressive disorders, exhibit suicidal thoughts or behaviors, or are referred for legal evaluation are admitted to this unit. According to Article 57/1 of the Turkish Penal Code, if a person is mentally ill at the time of committing the act, a security measure shall be imposed for the purposes of protection and treatment. Mentally ill individuals who are subject to such security measures shall be placed under protection and treatment in high-security healthcare institutions (Resmi Gazete,2005). Cases referred by prosecutors are evaluated under Articles 31/2 and 32 of the Turkish Penal Code. Article 31/2 requires an assessment of whether children aged 12–15 at the time of the act had the cognitive capacity

to understand the legal implications of their actions or the ability to control their behavior accordingly (Resmi Gazete,2005). Article 32 pertains to whether the individual's ability to comprehend the legal consequences of their act or to regulate their behavior was impaired due to mental illness (Resmi Gazete,2005). The role of HSFPHs extends beyond merely providing forensic psychiatric diagnoses; they also aim to rehabilitate individuals and reintegrate them into society. These hospitals offer a comprehensive rehabilitation process, going beyond clinical assessments of juvenile delinquents to provide multidisciplinary approaches aimed at psychological recovery and improving social reintegration. Such rehabilitation not only helps control the behaviors of juvenile delinquents but also assists in preventing future criminal activity and fostering their social adaptation.

To the best of our knowledge, no previous study has investigated the types of crimes and the associated factors among inpatient and outpatient children referred to an HSFPH for evaluation or treatment. Identifying these factors could help prevent initial or repeat offenses and support the reintegration of these children into society. This study aims to contribute to the literature by examining the types of crimes committed by children referred to an HSFPH and the factors associated with those crimes. Furthermore, it seeks to provide guidance for child psychiatrists working in forensic settings. In this study, minor crimes are defined as assault, robbery, threats, damage to public property, violation of residential privacy, and theft, while serious crimes include sexual abuse, terrorism, and premeditated murder. In this study, the distinction between minor and serious offenses was made based on the minimum penalty thresholds defined by the Turkish Penal Code (Resmi Gazete,2005). We hypothesize that children who commit serious crimes will present with higher rates of conduct disorder, self-harming behaviors, psychiatric issues such as suicidal ideation or attempts, hospitalizations, frequent psychiatric visits, higher use of psychiatric medication, fragmented family structures, and lower socioeconomic status. We believe that criminal behavior cannot be explained solely by psychopathology; rather, it emerges from the interaction of genetic predispositions, environmental factors, and psychiatric conditions. In this context, psychiatric disorders may be considered as a cause of criminal behavior, a consequence of it, or a comorbid condition that develops concurrently.

2. METHOD

The archival files of 56 children under the age of 18 who were either admitted or hospitalized as outpatients at the HSFPH of Elazığ Fethi Sekin City Hospital, Türkiye, between September 2022 and March 2024, and who had undergone a complete diagnostic evaluation, were retrospectively reviewed. The study included patients whose psychiatric diagnostic interviews were completed, whose files contained clearly documented information regarding crime type, clinical characteristics, and psychiatric diagnoses according to DSM-5, and who met all the inclusion criteria. Patients with incomplete data in their files were excluded. Of the 65 children admitted between September 2022 and March 2024, 9 were excluded due to missing information, leaving a final study sample of 56 patients. This research was conducted as a descriptive, cross-sectional, and retrospective study. Ethical approval was obtained from the Firat University Ethics Committee (decision

letter dated 21.03.2024, no. 2024/05-06) prior to the initiation of the research. Psychiatric diagnoses were made clinically based on DSM-5 criteria. The Porteus Maze Test, a non-verbal performance test developed by Porteus in 1959 (Porteus,1959)., was administered to assess intellectual functioning. Due to its non-reliance on verbal skills, the test was suitable for a wide range of children. Its validity and reliability for Turkish populations have been established (Toğrol, 1974). However, it is important to note the limitations of this test in measuring intelligence. Specifically, considering the current standards of psychological assessment, this test may not fully reflect intelligence on its own. In line with current standards of psychological evaluation, the test is not intended to be a comprehensive measure of intelligence on its own but should be interpreted alongside the patient's clinical presentation. The person's level of intelligence was assessed using the Porteus Maze Test, along with clinical evaluations of adaptive functioning, developmental history, and observed behaviors. Data collected from the patients' records included age, gender, perceived socioeconomic status, reason for admission or referral, presenting complaints, length of stay in the HSFPH, psychiatric and medical diagnoses, smoking status, alcohol or substance use, type of crime, prior criminal history, history of suicidal or self-harming behavior, reason for referral (treatment, observation, or protective treatment), assessment of criminal responsibility for those referred for observation, medication use, medication adherence, school attendance and academic level, family structure, and psychometric test results. These variables are routinely recorded as part of the clinical assessment and care protocol for all patients admitted to the HSFPH; no additional data were collected beyond routine clinical documentation. Socioeconomic status was grouped according to family income and how the family subjectively perceived this income.

In terms of criminal responsibility, psychiatric evaluations and psychometric assessments often reveal indicators such as intellectual disability, lack of understanding of crime, inability to foresee consequences, poor judgment, and traits like marked impulsivity. Conditions like psychotic disorders, ADHD, and impulse control disorders may contribute to diminished criminal responsibility. However, determinations of criminal responsibility were made on a case-by-case basis, following individual evaluations.

2.1. Statistical Analyses

Statistical analyses were performed using the Statistical Package for the Social Sciences (SPSS) version 21.0. The Shapiro-Wilk test was used to assess the normality of distribution for continuous variables. Categorical variables between independent groups were compared using the chi-square test. Continuous variables with a normal distribution were analyzed using the independent t-test, while those not following a normal distribution were analyzed using the Mann-Whitney U test. Binary logistic regression analysis was used to examine the relationship between types of crime and sociodemographic or clinical variables. In the regression model, crime type was treated as the dependent variable (binary coding: serious crime = 1, minor crime = 0), and gender, socioeconomic status, inpatient vs. outpatient status, family structure, intelligence level, psychiatric complaints, psychiatric

diagnoses, and history of previous child psychiatry visits were used as independent variables. A p-value of <0.05 was considered statistically significant for all analyses.

3. RESULTS

Of the 56 juvenile delinquents and evaluated at the HSFPH, 89.3% (n = 50) were male and 10.7% (n = 6) were female. The mean age at first admission was 15.16 ± 1.41 years. In terms of perceived socioeconomic status, 25% (n = 14) of the children were from low-income backgrounds and 75% (n = 42) from middle-to-high-income backgrounds. A total of 25% (n = 14) were hospitalized, while 75% (n = 42) were followed as outpatients. Among the hospitalized group, 43% (n = 6) were admitted for protective treatment and 57% (n = 8) for forensic observation. Due to extreme outliers, median length of stay (17.00 days, IQR 11.50-22.00) was also calculated. Of the outpatients, 76% (n = 32) were evaluated under Article 31/2 of the Turkish Penal Code, while 24% (n = 10) were assessed under Article 32. A total of 26.8% (n = 15) had a prior history of child psychiatry clinic visits, while 73.2% (n = 41) had no such history. Medical comorbidities were present in 3.6% (n = 2), both cases being epilepsy. Smoking history was reported by 5.4% (n = 3), and 1.8% (n = 1) had consumed alcohol. No participants had a history of substance use. Regarding family structure, 25% (n = 14) came from broken families, and 75% (n = 42) from nuclear families. Detailed demographic and clinical characteristics are presented in Table 1.

Table 1: Sociodemographic Data		Juvenile Delinquents Mean \pmSD
Age, years (n=56)		15.16 \pm 1.41
Gender	Female	6 (10.7%)
	Male	50 (89.3%)
Socioeconomic Level	Low	14(25%)
	Medium-high	42(75%)
Outpatient		42(75%)
Inpatient		14(25%)
Previous Child Psychiatry Presentation	Yes	15(26.8%)
	No	41(73.2%)
Family Structure	Broken Family	14(25%)

	Nuclear Family	42(75%)
Medical Disease	Yes	2(3.6%)
	No	54(96.4%)
Smoker	Yes	3(5.4%)
	No	53(94.6%)
Alcohol use	Yes	1(1.8%)
	No	55(98.2%)
Substance use	Yes	0(0%)
	No	56(100%)

n= number of cases, SD: standard deviation

The average educational attainment among the participants was 7.7 ± 2.7 years. Educational levels were as follows: 3.6% (n = 2) were illiterate, 7.1% (n = 4) had completed primary school, 44.6% (n = 25) were attending or had completed middle school, and 44.6% (n = 25) were attending or had completed high school. However, 64.3% (n = 36) were not attending school regularly. The distributions of educational and intellectual levels are summarized in Table 2.

Table 2: Education and intelligence levels of Children Dragged into Crime

n(%)	
Illiterate	2(3.6%)
Primary School Graduates	4(7.1%)
Secondary School Graduates or Continuing	25(44.6%)
High School Graduates or Continuing	25(44.6%)
Intelligence levels	n(%)
Normal	39(69.6%)
Borderline intellectual functioning	8(14.3%)
Mild intellectual disability	7(12.5%)
Moderate-severe intellectual disability	2(3.6%)

n: number of cases

Intellectual assessment revealed that 69.6% (n = 39) of participants had normal intelligence, 14.3% (n= 8) had borderline intellectual functioning, 12.5% (n=7) had mild

intellectual disability, and 3.6% (n=2) had moderate-to-severe intellectual disability. In terms of legal capacity, 53.6% (n = 30) were assessed to have diminished criminal responsibility, while 46.3% (n= 26) were considered to have full criminal responsibility. Prior criminal records were present in 10.7% (n = 6), while 12.5% (n = 7) had a history of self-harming behavior, and 7.1% (n = 4) had attempted suicide. Regarding psychiatric evaluation, 51.8% (n=29) had no specific psychiatric complaints, and 48.2% (n=27) had no diagnosed psychiatric condition. The most frequently reported complaints were anger and behavioral problems 42.9% (n= 24). The most common diagnoses were ADHD, oppositional defiant disorder (ODD), impulse control disorder, and conduct disorder, comprising 28.6% (n = 16) of all cases. Details of psychiatric complaints and diagnoses are shown in Table 3.

Table 3: Complaints and Psychiatric Diagnoses of Children Dragged into Crime at the Time of Admission **n(%)**

Psychiatric complaints	
Hearing voices	1(1.8%)
Anger, behavioral problems	24(42.9%)
Sleep problems	2(3.6%)
No complaints	29(51.8%)
Psychiatric diagnoses	
Intellectual disability	11(19.6%)
ADHD, ODD, Impulse Control Disorder, Conduct Disorder	16(28.6%)
Psychotic Disorder	2(3.6%)
No known psychiatric diagnosis	27(48.2%)

n: number of cases, ADHD: Attention Deficit Hyperactivity Disorder, ODD: Oppositional Defiant Disorder

Medication usage was reported in 23.2% (n=13) of the sample, with 38.4% (n = 5) using medication irregularly and 61.6% (n = 8) using it regularly. Specifically, 10.7% (n = 6) were taking antipsychotics, 12.5% (n=7) were taking both methylphenidate and antipsychotics, and 76.8% (n = 43) were not on any psychiatric medication. The most commonly committed crimes were wounding 26.8%(n=15), sexual abuse 19.6% (n=11), multiple crimes 17.9% (n=10), and theft 12.5% (n = 7). The distribution of crime types is provided in Table 4.

Table 4: Types of Crime **n(%)**

Wounding	15(26.8%)
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Sexual abuse	11(19.6%)
Theft	7(12.5%)
Threats and menaces	4(7.1%)
Membership of a terrorist organization	3(5.4%)
Damage to public property	2(3.6%)
Premeditated murder	1(1.8%)
More than one	10(17.9%)
Other crime	3(5.4%)

n: number of cases

No statistically significant associations were found between types of crimes and variables such as gender, socioeconomic level, family structure, prior child psychiatry visits, criminal history, intelligence level, presenting psychiatric complaints, or psychiatric diagnoses. These associations are detailed in Table 5.

Table 5: Relationships between crime types and sociodemographic and clinical data

		Minor Crimes (n:43)	Serious Crimes (n:32)	X ²	P
		n(%)	n(%)		
Gender	Female	5(12.8%)	1(5.9%)	0.253	0.615
	Male	34(87.2%)	16(94.1%)		
Socio economic Level	Low	9(23.1%)	5(29.4%)	0.253	0.615
	Medium- high	30(76.9%)	12(70.6%)		
Family Structur e	Broken Family	30(76.9%)	12(70.6%)	0.253	0.615
	Nuclear family	9(23.1%)	5(29.4%)		
Previous Pediatric Psychiatr y Clinic Admissio	Yes	10(25.6%)	5(29.4%)	0.086	0.770

Previous History of Crime	No	29(74.4%)	12(70.6%)	0.028	0.598*
	Yes	35(89.6%)	15(88.2%)		
Mental Level	No	4(10.3%)	2(11.8%)	0.010	0.919
	Normal	27(69.2%)	12(70.6%)		
	Intellectual disabled	12(30.8%)	5(29.4%)		
Presence of Psychiatric Complaint at Presentation	Yes	22(56.41%)	5(29.41%)	3.456	0.063
	No	17(43.59%)	12(70.59%)		
Presence of Psychiatric Diagnoses at Presentation	Yes	21(53.8%)	8(47%)	0.218	0.640
	No	18(46.2%)	9(53%)		

n= number of cases, p= Pearson Chi-Square Test p value, p*= Fisher's exact test p value Note: Statistically significant results are shown in bold.

Compared to outpatients, inpatients were significantly older ($p < 0.001$), more likely to be male ($p = 0.029$), and more likely to present with psychiatric complaints ($p = 0.009$), to have psychiatric diagnoses ($p < 0.001$), and to exhibit comorbidities ($p = 0.010$). However, no significant differences were observed between the two groups in terms of crime types ($p = 0.314$). These comparisons are summarized in Table 6.

Table 6: Sociodemographic and clinical characteristics of inpatients and outpatients admitted to the high-security forensic psychiatric hospital

Age		Outpatient(n:42)	Inpatient	Z	P
		Median (25%-75%)	(n:14) Median (25%-75%)		
		14.00-15.25	15.75-17.00	-3.581	< 0.001**
		n(%)	n(%)	X ²	p
Gender	Female	2(4.8%)	4(28.6%)		0.029*
	Male	40(95.2%)	10(71.4%)		
Presence of Psychiatric Complaints at the Time of Presentation	Yes	16(38.1%)	11(78.6%)	6.890	0.009
	No	26(61.9%)	3(21.4%)		
Presence of Psychiatric Disease at the Time of Presentation	Yes	16(38.1%)	1(7.1%)		
	No	26(61.9%)	13(92.9%)	12.611	<0.001
Presence of Comorbidity	Yes	8(19.0%)	8(57.1%)		0.010*
	No	34(81.0%)	6(42.9%)		
Previous Criminal History	Yes	3(92.9%)	3(21.4%)		0.158*
	No	39(7.1%)	11(78.6%)		
Type of crime	Minor	28(66.7%)	11(78.6%)		

Serious 14(33.3%) 3(21.4%) 0.314*

n= number of cases, p= Pearson Chi-Square Test p value, p*= Fisher's exact test p value p** = Mann-Whitney U test Note: Statistically significant results are shown in bold

Binary logistic regression analysis showed no significant associations between crime type and gender (p = 0.820), socioeconomic level (p = 0.582), outpatient vs. inpatient status (p = 0.917), family structure (p = 0.820), intelligence level (p = 0.480), psychiatric complaints (p = 0.059), or previous psychiatric admission (p = 0.256). The regression results are presented in Table 7.

Table-7: Logistic regression Relationships between crime types and sociodemographic and clinical data

Step 1^a: Crime types as a dependent variable

	B	SE	Wald	df	Sig	Exp(B)	95% C.I.for Exp(B)
Gender	0.303	1.329	0.052	1	0.820	1.354	0.100–18.334
Socioeconomic Level	-0.390	0.709	0.303	1	0.582	0.677	0.169–2.717
Outpatient- Inpatient	0.093	0.893	0.011	1	0.917	1.098	0.191–6.313
Family Structure	0.188	0.830	0.051	1	0.820	1.207	0.237–6.137
Intelligence levels	-0.334	0.472	0.500	1	0.480	0.716	0.284–1.807
Psychiatric complaints	-1.517	0.805	3.552	1	0.059	0.219	0.045–1.063
Previous pediatric psychiatry clinic admission	1.070	0.943	0.023	1	0.256	2.916	0.460–18.503

R² =0.101 (Cox ve Snell), 0.143(Nagelkerke), Modelχ²(7)=4.268, p=0.749 Step 1^a: Variable(s) entered on step 1^a: gender, socioeconomic level, outpatient-inpatient, family structure, intelligence levels, psychiatric complaints, previous pediatric psychiatry clinic admission

4. DISCUSSION

To the best of our knowledge, this is the first study to investigate the types of crimes and the associated factors among juvenile delinquents who were referred to or hospitalized in a HSFPH for evaluation or treatment. In our sample, 89.3% (n = 50) of the children were male, with a mean age of 15.16 ± 1.41 years. Previous studies have consistently reported that 85–90% of juveniles involved in crime are male and typically between the ages of 14 and 18 (Ogel et al, 2011; Gordeles et al,2016; Çakaloz et al,2016; Buyle-bodin et al,2019; Sertdemir et al,2020; Aksu et al, 2013; Kurtuluş et al, 2009; Gümüştaş et al,2014; Karataş et al, 2019; Bozduman-Çelebi et al, 2025). This gender disparity is often attributed to socially constructed roles and expectations placed upon males.

Contrary to our initial hypothesis, no statistically significant relationship was found between crime severity and psychiatric or sociodemographic factors. In this study, 25% of the participants came from low socioeconomic backgrounds, while 75% were from medium to high socioeconomic levels. Although low socioeconomic status has been

identified as a key risk factor for criminal behavior (Çakaloz et al, 2016; Yavuz et al,2020), it has also been shown that positive familial relationships can act as a protective factor, even in the context of economic hardship (Sayar, 2016). Likewise, 25% of the participants were from broken families. While living in a broken family is considered a significant risk factor for criminal behavior (Sayar, 2016), studies also show that nuclear family structures still predominate among juvenile delinquents (Enginyurt, 2016; Gordeles et al,2016). The average duration of education in our sample was 7.7 ± 2.7 years, which is consistent with previous findings (Çakaloz et al,2016). Another study reported that approximately 60% of juvenile delinquents were still attending school, with approximately 50% attending middle or high school (Sertdemir et al, 2020). Low academic achievement, school absenteeism, and poor school engagement are frequently linked to delinquent behavior (Gordeles et al, 2016; Moffitt,1993). These educational and familial factors—such as irregular school attendance, low academic success, and insufficient parental supervision—suggest that the children’s social environment outside the family and school plays a critical role in criminal involvement. Avcı et al. noted that how children spend their free time is a determining factor in whether they engage in criminal behavior (Avcı,2008). Adolescence is a developmental stage marked by increased independence, peer influence, and identity formation, often leading to risk-taking behaviors. A lack of parental monitoring, poor family problem-solving skills, the normalization of violence, and maladaptive peer associations all contribute to juvenile delinquency (Sarı et al,2019). Interventions promoting constructive leisure activities may thus help reduce youth crime (Avcı,2008). In this study, 10.7% of children had a history of prior criminal activity, aligning with earlier reports indicating recidivism rates ranging from 10% to 20% (Gordeles et al,2016; Çakaloz et al, 2016; Aksu et al,2013; Kurtuluş et al,2009). Early onset of criminal behavior is strongly associated with a higher likelihood of reoffending (Ogel et al,2011). A study demonstrated that a prior history of offending is among the significant predictors of conduct disorder (Olashore, Ogunwale and Adebawale,2016).These findings underscore the need for early intervention to prevent initial contact with criminal activity.

Intellectual evaluations showed that 69.6% of the participants had normal intelligence, while 30.4% exhibited some degree of intellectual disability. These results are consistent with previous studies (Çakaloz et al,2016; Bozduman-Çelebi et al,2025), which suggest that intellectual disability may increase susceptibility to criminal behavior due to impaired judgment and increased vulnerability to manipulation. Regarding criminal responsibility, 53.6% of the children were assessed as having diminished criminal responsibility, and 46.3% as having full criminal responsibility. Previous studies have reported a wide variation (10%–95%) in such assessments (Çakaloz et al,2016;Kurtuluş et al, 2009; Gümüştaş et al,2014; Tamer et al,2014), which may reflect the subjective nature of clinical evaluations and the complexity of each case.

Anger and behavioral issues were the most commonly reported complaints, and ADHD, ODD, impulse control disorder, and conduct disorder were the most frequent psychiatric diagnoses. These findings are consistent with prior research showing high rates

of externalizing disorders among juvenile delinquents (Gordeles et al, 2016; Fazel et al, 2008; Bozduman-Çelebi et al, 2025; Olashore et al, 2016; Aksu et al, 2022). Other studies involving detained youth have reported additional complaints such as insomnia, self-harming behavior, anger dysregulation, psychotic symptoms, depressive symptoms, and substance dependence; the most commonly prescribed medication is risperidone (Buyle-Bodin et al, 2019; Açıkel et al, 2020; Olashore et al, 2016). Similarly, in our study, the most frequently used medications were methylphenidate and antipsychotics, particularly risperidone.

Substance use was minimal in our sample: only 5.4% had a history of smoking, 1.8% had consumed alcohol, and none reported substance use. However, it should be noted that self-reporting may underestimate substance use, while biochemical tests may not detect substances used outside the detection window.

In our study, a noteworthy finding was that children receiving inpatient care were older and had more psychiatric diagnoses. This suggests that these children may have more complex psychiatric histories and, as a result, require more intensive clinic interventions. Particularly, when considering that children requiring inpatient care are often cases resistant to treatment, their having received more diagnoses may indicate that these cases exhibit more severe and prolonged psychiatric symptoms. However, it is important to emphasize that the age and diagnosis differences are not merely demographic characteristics but also reflections of the treatment processes and clinical histories of these children. Past treatment processes and evaluations may have contributed to the need for additional diagnoses and more intensive clinical interventions. These findings highlight the importance of developing a more detailed clinical approach for children requiring inpatient care. Specifically, special rehabilitation models and multidisciplinary approaches should be developed for the management of treatment-resistant cases. Such an approach could enhance the effectiveness of treatment and support the long-term recovery of these children.

Interestingly, 51.8% of the entire sample had no reported psychiatric complaints, and 48.2% had no documented psychiatric diagnoses. This raises the question of whether there are specific challenges or differences in the diagnostic process. Further research is needed regarding the factors influencing this diagnostic gap, and it is important to consider whether these children have undiagnosed or pre-clinical conditions. This issue warrants further attention in future studies, as it may highlight the complexities of diagnosing psychiatric disorders in juveniles involved in the judicial system. Externalizing disorders such as ADHD or ODD may explain this tendency, which can cause children to underestimate their difficulties and reject psychiatric help. Therefore, the absence of complaints should not be taken as an absence of pathology. For many, contact with forensic psychiatry may represent their first opportunity for mental health evaluation. This highlights the importance of routine psychiatric screening for all juvenile delinquents, regardless of symptom presentation. Previous studies have also advocated for universal screening due to the high prevalence of ADHD, ODD, and conduct disorder in this

population (Fazel et al, 2008; De Prato et al,2002). HSFPHs are specialized high-security units within city hospitals, designed to provide forensic psychiatric evaluation and treatment for youth. Before their establishment, forensic and non-forensic child psychiatry cases were managed in the same settings. Comprehensive evaluation—including legal understanding, family context, social environment, individual characteristics, and psychiatric status—is essential to determine criminal responsibility in juvenile forensic cases.

In terms of crime types, the most frequent offenses were wounding (26.8%), sexual abuse (19.6%), multiple offenses (17.9%), and theft (12.5%), consistent with national statistics and previous studies (TUIK data,2023;Enginyurt,2016; Gordeles et al, 2016; Sertdemir et al, 2020). No statistically significant associations were found between crime types and gender, socioeconomic status, family structure, previous psychiatric admissions, criminal history, intelligence level, or psychiatric symptoms. Additionally, no differences in crime types were found between inpatient and outpatient groups. Although no significant relationship was found between serious crimes and psychiatric factors in our study, there may be several reasons for this. The complexity of the factors influencing the relationship between psychiatric disorders and criminal behavior makes it difficult to establish a clear and consistent link in all cases. For instance, criminal behavior is not only influenced by psychiatric factors but also by environmental and social factors. Family structure, peer groups, socio-economic status, and other external variables may play significant roles in shaping an individual's propensity for criminal behavior. Additionally, the subjective nature of psychiatric diagnoses may contribute to the lack of a clear relationship between psychiatric conditions and crime, particularly when assessing such conditions in the context of criminal behavior. Developmental factors also need to be considered. Children and adolescents undergo continuous psychological changes during their developmental stages, and these changes could affect the manifestation of psychiatric disorders and criminal behavior. Consequently, the relationship between psychiatric conditions and crime may vary over time and can be influenced by developmental factors, making it more complex. This may also be due to some limitations of the study. Retrospective design and reliance on file data may have limited diagnostic accuracy. Small sample size reduced statistical power to detect associations. Lack of structured diagnostic interviews may have contributed to underdiagnosis. One study reported a relationship between drug-related offenses and disrupted family structure (Sertdemir et al, 2020). Another study identified a positive association between theft and depression, and a negative association with maternal positive attitude and school adjustment (Lee, Han, Park and Roh,2015). Although some studies have reported associations between specific crime types and clinical or family characteristics (Sertdemir et al, 2020; Lee et al,2015), these complexities suggest that further investigation is needed to better understand the relationship between psychiatric conditions and the type of crimes committed, particularly in the context of juvenile delinquency.

5.CONCLUSION

Juvenile delinquency is influenced by a complex interplay of genetic, psychological, and environmental factors. Our study suggests that children's social activities outside of school and family also play a significant role in their exposure to criminal behavior. No significant association was found between the types of crimes committed and sociodemographic or clinical characteristics in this sample.

Inpatients tend to be older and exhibit more severe psychiatric symptoms and comorbidities than outpatients. However, the type of crime committed did not differ significantly between the two groups. This finding reinforces the need for all juvenile delinquents to be systematically screened for psychiatric disorders, even in the absence of overt symptoms. Routine psychiatric screening in juvenile justice settings should prioritize individuals with prior school disengagement, family disruption, or externalizing symptoms, even in the absence of overt symptoms. The mental health assessment of every child in contact with the judicial system is not only an individual responsibility but also a societal one.

Future research with larger, prospectively followed cohorts and structured psychiatric assessments is needed to better understand the factors contributing to different types of criminal behavior among juveniles and to guide more effective preventive and rehabilitative strategies.

Research and Publication Ethics Statement

Throughout the entire process of this article, the research and publication ethics principles of the Manisa Celal Bayar University Institute of Health Sciences Journal have been followed.

Authors' Contribution to the Article

The entire article was written by Nur Seda Gülcü Üstün.

Disclosure of Interest

The author has no conflict of interest with any person or organization.

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