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# Evaluation of Juveniles Pushed to Crime: A Retrospective Study

## Suçta Sürüklenen Çocukların Değerlendirilmesi: Retrospektif Bir Çalışma

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### ABSTRACT

**Objective:** Evaluation of children and adolescents pushed to crime should be different from adult offenders. In this study, it is aimed to analyze the qualities of children and adolescents pushed to crime and to discuss them in the light of the literature.

**Methods:** Children who were evaluated in terms of criminal liability at Bolu Abant İzzet Baysal University Faculty of Medicine Department of Forensic Medicine and Bolu Forensic Medicine Branch Office between January 1, 2016 and December 31, 2018 were included in the study.

**Results:** A total of 237 children and adolescents were included in the study. Of the cases, 76.8% (n=182) were male and 23.2% (n=55) were female. The mean age was 13.38±0.83. Of the cases, 80.6% were living in the nuclear family. Twenty-two cases (9.3%) were working in any job and sixty-four (27%) of the cases had one or more substance use history. Of the cases, 47.7% committed deliberate wounding crimes whereas 20.3% of cases committed burglary crimes. One hundred and fifty two cases (64.1%) committed a crime for the first time. One hundred and ten (46.4%) cases committed the crime together with a group of friends. Forty-seven cases (19.8%) had a psychiatric disorder. In 60.8% of the cases (n=144), it was reported that they had criminal responsibility.

**Conclusion:** It is necessary to increase the number of child support centers and to develop effective intervention methods for juveniles pushed to crime in these centers, and more studies should be conducted on these issues.

**Keywords:** Juvenile pushed to crime, criminal liability, psychiatric disorder

### ÖZ

**Amaç:** Suçta sürüklenen çocuk ve ergenlerin değerlendirilmesi erişkin suçlulardan farklı olmalıdır. Bu çalışmada suçta sürüklenen çocukların niteliklerinin incelenmesi ve literatür ışığında tartışılması amaçlanmıştır.

**Yöntem:** Bolu Abant İzzet Baysal Üniversite Adli Tıp Anabilim Dalı ve Bolu Adli Tıp Şube Müdürlüğü'nde 01.01.2016-31.12.2018 tarihleri arasında muayene edilen suçta sürüklenen çocuk ve ergenlerin tıbbi kayıtları retrospektif olarak incelenmiştir.

**Bulgular:** Toplam 237 çocuk ve ergen çalışmaya dahil edilmiştir. Olguların %76,8'i (n=182) erkek, %23,2'si (n=55) kızdı. Olguların yaş ortalaması 13,38±0,83 idi. Olguların %80,6'sı çekirdek ailede yaşıyordu. Olguların 22'si (%9,3) herhangi bir işte çalışıyordu ve altmış dördü (%27) bir veya daha fazla madde kullanım öyküsüne sahipti. Olguların %47,7'si kasten yaralama suçu, %20,3'ü ise hırsızlık suçu işlemişti. Yüz elli iki olgu (%64,1) ilk kez suç işlemişti. Yüz on (%46,4) olgu suçu bir grup arkadaşı ile birlikte işlemişti. Kırk yedi olguda (%19,8) psikiyatrik bozukluk vardı. Olguların %60,8'inde (n=144) suçun hukuki anlam ve sonuçlarını algılayamadıkları ve davranışlarını yönlendirme yeteneğine sahip olmadıkları tespit edilmiştir.

**Sonuç:** Çocuk destek merkezlerinin sayısının artırılması ve bu merkezlerde suçta sürüklenen çocuklar için etkili müdahale yöntemlerinin geliştirilmesi ve bunun için daha fazla sayıda çalışma yapılması gerekmektedir.

**Anahtar Kelimeler:** Suçta sürüklenen çocuklar, ceza ehliyeti, psikiyatrik hastalıklar



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## INTRODUCTION

Adolescence is a potentially sensitive period in which the adolescent exhibits rapid changes in aggressive - criminal behavior (1). Adolescents, trying to find themselves and beginning to shape their personality, want to be more effective in decisions about their lives and friends, and this situation makes conflict with parents acting with the instinct of protecting their children inevitable (2). Unlike childhood, adolescents react more to a social threat, have more conflicts with adults, want more acceptance and respect among their peers (3). Moreover, there is a significant increase in risky behaviors such as alcohol intake, smoking, drug abuse, theft, bullying, the tendency to physical violence, damage to property, and attempted suicide during adolescence (4). Evaluation of juveniles pushed to crime should be different from adult offenders. Unlike adult offenders, in juveniles pushed to crime; It is necessary to evaluate factors such as the environment in which the child grows up, family and social surrounding characteristics and their effects on the child, the developmental characteristics of the adolescence period, the nature of the crime, planning the crime in advance, whether the crime is repeated or not (5).

In this study, it is aimed to evaluate the reports about juveniles pushed to crime whose criminal responsibility was evaluated between 2016 and 2018 in Bolu Abant İzzet Baysal University Faculty of Medicine Forensic Medicine Department and Bolu Forensic Medicine Branch Office and discuss with literature.

## MATERIALS and METHODS

### Study Design

The study was performed in Bolu. The juveniles pushed to crime under the age of 18, who were asked whether they had criminal capacity, were evaluated. The reports prepared between January 1, 2016 and December 31, 2018 at Bolu Abant İzzet Baysal University Faculty of Medicine Department of Forensic Medicine and Bolu Forensic Medicine Branch were retrospectively analyzed.

### Sampling

Juveniles pushed to crime under the age of 18, who were asked if they had the criminal capacity or not for the crime they committed, were included in the study.

### Data Collection

Permission was obtained from İstanbul Council of Forensic Medicine and Bolu Abant İzzet Baysal University Management of Medical Faculty Hospital for the study. Subsequently, files and reports prepared in two centers on these cases were retrospectively analyzed. A total of 237 juveniles pushed to crime were evaluated in terms of "age, gender, school achievement, family structure and socioeconomic level, smoking, alcohol and drug use, type of crime, recidivism, whether s/he committed the

crime alone or together with a group, psychiatric examination findings, intelligence level, criminal capacity" parameters.

### Statistical Analysis

SPSS 21.0 (Armonk, NY) statistics program was used for data analysis of the study. Descriptive statistics are presented with frequency, percentage, mean, standard deviation, minimum, maximum values. The relationship between categorical variables was analyzed using Pearson's exact chi-square test and  $p < 0.05$  was considered statistically significant.

### Ethics Approval

Firstly, permission was obtained from the hospital management and Council of İstanbul Forensic Medicine to scan the data to be used in the study. Ethics committee scientific approval was obtained from the Clinical Research Ethics Committee of Bolu Abant İzzet Baysal University, dated November 5, 2019 and numbered 392.

## Results

Of the 237 cases, 76.8% ( $n=182$ ) were male and 23.2% ( $n=55$ ) were female (Table 1). The cases were between the ages of 11-16 and the mean age was  $13.38 \pm 0.83$ . Twenty six of the cases (11%) dropped out of school, and 211 (89%) were attending school. Only 4.2% ( $n=10$ ) of the cases had good school success (taking certificate of high achievement or appreciation) (Table 1). Of the cases 17.3% were unable to perform simple mathematical operations and 50.6% did not know the multiplication table by heart. The father of nine cases, the mother of two cases, and both the mother and father of two cases had died. Of the cases, 80.6% were living in the nuclear family (Table 1). In 21 (31.8%) of the 66 cases with information about monthly income, the monthly income was 2000 TL and below (Table 1). Twenty two cases (9.3%) were working in any job (Table 1). Sixty four (27%) of the cases had one or more substance use history (only cigarette in 54 cases, cigarette + alcohol in four cases, cigarette + alcohol + drugs in three cases, cigarette + drugs in two cases, only alcohol in one case) (Table 2).

Of the cases, 47.7% committed deliberate injury crime, and 20.3% committed burglary crime (Table 2). One hundred fifty-two cases (64.1%) were sent due to their first crime, and the remaining 85 cases (35.9%) had one or more crimes committed before. While 127 cases (53.6%) committed the alleged crime alone, 110 cases (46.4%) committed the crime together with a group of friends (Table 2). Forty-seven cases (19.8%) had a psychiatric disorder [conduct disorder in 35 cases, attention deficit hyperactivity disorder (ADHD) in 9 cases, depression in one case, specific learning disability in one case, ADHD + specific learning disability + conduct disorder in one case] (Table 2). While 97% ( $n=230$ ) of the cases had normal intelligence, two cases had borderline intelligence, four cases had mild and one case had moderate mental retardation (Table 2).

Demographic features		n (%)	Demographic features		n (%)	
Gender	Female	55 (23.2)	Family structure	Elementary family	191 (80.6)	
	Male	182 (76.8)		Single parent family	10 (4.2)	
Education	Unschooling	3 (1.3)		Extended family	6 (2.6)	
	Primary school	2 (0.8)		Broken family	28 (11.8)	
	Secondary school	113 (47.7)		Stay at dorm	2 (0.8)	
	High school	96 (40.5)		School success	High	10 (4.2)
	Secondary school graduated	5 (2.1)			Mediate	79 (33.3)
	Primary school dropout	1 (0.4)			Low	148 (62.5)
	Secondary school dropout	9 (3.8)	Family monthly income	2.000 TL and less	21 (31.8)	
	High school dropout	8 (3.4)		2.001-3.000 TL	21 (31.8)	
Child labor	Yes	22 (9.3)		3.001-4.000 TL	12 (18.2)	
	No	215 (90.7)		4.001 TL and over	12 (18.2)	

Clinical characteristics		n (%)	Clinical characteristics		n (%)
Substance abuse	Cigarette	54 (22.8)	Number of people in crime	Alone	127 (53.6)
	Alcohol	1 (0.4)		With group	110 (46.4)
	Cigarette - alcohol	4 (1.7)	Crime type	Deliberate injury	113 (47.7)
	Cigarette - drugs	2 (0.8)		Burglary	48 (20.3)
	Cigarette - alcohol - drugs	3 (1.3)		Blackmail, threats and insult	30 (12.7)
Simple math operation	Can do	196 (82.7)		Sexual abuse	15 (6.3)
	Can't	41 (17.3)		Damage to property	9 (3.8)
Multiplication table	Don't know by heart	120 (50.6)		Violation of privacy	7 (3)
	Know by heart	117 (49.4)		Disturbing individuals' peace and harmony	5 (2.1)
Intelligence	Normal	230 (97.1)		Others*	10 (4.1)
	Borderline	2 (0.8)	Psychiatric disease	Yes	47 (19.8)
	Mild	4 (1.7)		No	190 (80.2)
	Moderate	1 (0.4)	Number of crime	Single	152 (64.1)
		More than one		85 (35.9)	

\*Others: Calumniation, arson, the act of terrorism, gambling, kidnapping, etc.

In 60.8% of the remaining cases (n=144), it was reported that they could not perceive the legal meaning and consequences of the crime and that they did not have the ability to direct their behavior.

Children who had criminal capacity (group 1) were compared with the children who did not have criminal capacity (group 2) (Table 3). There was no significant difference between the male/female ratio. The substance use history (cigarette, alcohol, drugs) of children in group 1 was statistically significantly higher than the children in group 2 ( $\chi^2$ : 11.746,  $p=0.001$ ).

Among the children whose monthly family income is known, the monthly family income to be 2.000 TL or less in group 1 was significantly higher than group 2 ( $\chi^2$ : 10.558,  $p=0.001$ ). The rate of recidivism of children in group 1 was statistically

significantly higher than group 2 ( $\chi^2$ : 8.719,  $p=0.003$ ). Children in group 1 had significantly lower school success than group 2 ( $\chi^2$ : 7.432,  $p=0.006$ ). Children in group 1 were working as child labor at a significantly higher rate than group 2 ( $\chi^2$ : 8.52,  $p=0.004$ ). The rate of committing crime with the group of children in group 1 was statistically significantly higher than group 2 ( $\chi^2$ : 8.354,  $p=0.004$ ). When the crime type is evaluated, while the rate of theft crime committed by children in group 1 was significantly higher, the rate of deliberate injury and blackmail, threat and insult committed by children in group 2 was significantly higher (Table 3).

Children who committed a crime alone were compared with children who committed crime together with the group (Table 4). The rate of substance use (cigarette, alcohol, drugs) was

Table 3. Comparison of group 1 (children with criminal responsibility) and group 2 (children without criminal responsibility)						
Demographic and Clinical Features		Group 1		Group 2		p
Mean age		13.19±0.84		13.67±0.72		
		n	%	n	%	
Gender	Male	75	31.6	107	45.2	0.259
	Female	18	7.6	37	15.6	
Substance abuse	Yes	37	15.6	28	11.8	0.001
	No	56	23.6	116	49	
Number of crime	Single	49	20.7	103	43.5	0.003
	More than one	44	18.5	41	17.3	
Number of people in crime	Alone	39	16.5	88	37.1	0.004
	With group	54	22.8	56	23.6	
School success	Low	68	28.7	80	33.8	0.006
	Mediate-high	25	10.5	64	27	
Family monthly income	2.000 TL and below	16	24.2	5	7.6	0.001
	2.001 TL and over	15	22.7	30	45.5	
Child labor	Yes	15	6.3	7	3	0.004
	No	78	32.9	137	57.8	
Crime type	Deliberate injury	34	14.3	79	33.3	0.006
	Burglary	29	12.2	19	8	0.001
	Blackmail, threats and insult	3	1.3	27	11.4	<0.001
	Sexual abuse	8	3.4	7	2.9	0.248
	Damage to property	4	1.7	5	2.1	0.744
	Violation of privacy	4	1.7	3	1.3	0.325

Pearson's chi-squared test, Fisher's exact test

significantly higher in children who committed crime together with the group ( $\chi^2$ : 6.647,  $p=0.010$ ). The rate of girls committing crimes with the group was significantly higher than boys ( $\chi^2$ : 5.316,  $p=0.021$ ). There was no significant difference between the two groups in terms of school success ( $\chi^2$ : 0.986,  $p=0.321$ ). The rate of family monthly income of 2.000 - TL and less was significantly higher for children who committed crime together with the group ( $\chi^2$ : 4.797,  $p=0.029$ ). There was no significant difference in the rate of child labor between the two groups ( $\chi^2$ : 1.567,  $p=0.211$ ). When the committed crimes were evaluated; the rates of burglary ( $\chi^2$ : 7.990,  $p=0.005$ ) in children who committed crime together with a group, and blackmail, threat, and insult ( $\chi^2$ : 7.537,  $p=0.007$ ) in children who committed a crime alone were significantly higher (Table 4).

## DISCUSSION

### Evaluation of the Power of Discernment

Inadequate power of discernment rates in studies involving juveniles pushed to crime in Türkiye is a broad range of 6.8-89.2% (5-10). In current study, since three cases were sent 3-5.5 years after the alleged event by the judicial authorities, no evaluation could be made, and in 60.8% of the cases ( $n=144$ ), it was reported that they could not perceive the legal meaning

and consequences of the crime and did not have the ability to direct their behavior. The fact that there are such wide ranges between the rates in the studies carried out suggests that there is no standard assessment among the units evaluating criminal competence in children. On the other hand, the fact that the physician performing the examination is a child psychiatrist or forensic medicine specialist may be another factor that may affect the result.

### Age

Early juvenile onset is associated not only with the earlier onset of aggressive/criminal behavior but also with a potentially consistently higher level of aggression/guilt (1). Early age crime and arrest are recognized as an important indicator of re-offending in adolescents within five years (11). In studies involving juveniles pushed to crime in Türkiye, the average age is between 13.76-14.38 (5-7,10). In current study, the cases were between the ages of 11-16 and the mean age was  $13.38\pm 0.83$ .

### Gender

Progression in adolescence is associated with increased levels of aggressive/delinquent behavior for both men and women and is of approximately similar magnitude (1). In studies conducted in Türkiye, it has been reported that 85-96.4% of the juveniles

Table 4. Comparison of children who commit the crime alone and with a group

Demographic and Clinical Features		Alone		With a group		p
Mean age		13.39±0.82		13.37±0.84		
		n	%	n	%	
Gender	Male	105	44.3	77	32.5	0.021
	Female	22	9.3	33	13.9	
Substance abuse	Yes	26	11	39	16.4	0.010
	No	101	42.6	71	30	
Number of crime	Single	84	35.4	68	28.7	0.489
	More than one	43	18.2	42	17.7	
School success	Low	83	35	65	27.4	0.321
	Mediate-high	44	18.6	45	19	
Family monthly income	2000 TL and less	7	10.6	14	21.2	0.029
	2001 TL and over	28	42.4	17	25.8	
Child labor	Yes	9	3.8	13	5.5	0.211
	No	118	49.8	97	40.9	
Crime type	Deliberate injury	62	26.2	51	21.5	0.706
	Burglary	17	7.2	31	13.1	0.005
	Blackmail, threats and insult	23	9.7	7	3	0.007
	Sexual abuse	10	4.2	5	2.1	0.294
	Damage to property	2	0.8	7	3	0.054
	Violation of privacy	2	0.8	5	2.1	0.168

Pearson's chi-squared test

pushed to crime are male (5-7,9,10,12). In this study, 76.8% of the cases were male and 23.2% were female (Table 1). This may be due to the fact that boys are raised more freely, are more prone to aggression, spend more time outside, and therefore more involved in social life than girls (5-10).

### School Success

In male adolescents, low school success has been closely associated with criminal behavior (13). In a study, it was reported that 54.6% of juveniles pushed to crime in Sivas province had poor school success (5).

Güler et al. (7) reported that 31.7% of the juveniles pushed to crime dropped out the school, 46.6% of them had low school success, and school failure was significantly higher in children pushed to crime who had criminal responsibility. In current study, 24 of the cases (11.7%) dropped out of school, and only 4.2% (n=10) of the cases have high school success (Table 1). Seventeen point three percent of the cases could not perform simple mathematical operations and 50.6% of the cases did not know the multiplication table by heart. Juveniles pushed to crime in group 1 had more significantly lower school success ( $p<0.01$ ) (Table 3).

### Family Structure

In a meta-analysis study, it was shown that a decrease in parental control is seriously associated with increased crime in

adolescents, and the relationship between parental support and guilt is stronger between father-son and mother-daughter (2). Poor parental control and having a tolerant and insufficiently responsive parent have been associated with high crime rates among girls (13).

According to the studies conducted in Türkiye, of the juveniles pushed to crime 78 to 88.1% were living in nuclear families (5-7), 2.4-10.3% of these children's mother and/or father have died (5-7,10), and 5.8-19.5% of their mother and father are separate (5-7,10,12). In current study, the father of nine cases, the mother of two cases, and both the mother and father of two cases have died. While 80.6% (n=191) of the cases were living in nuclear family, 2.6% cases were living in extended family (Table 1). Therefore, in our study, 83.2% of the cases were involved in crime despite living with their parents. This situation suggests that adequate communication cannot be established within the family where the children live and parental control is insufficient.

### Family Monthly Income

Financial problems in adolescents and young adults generally increase the risk of delinquency (14). More than half of the juveniles pushed to crime are from low- and middle-income families (5,7,8,12). In this study, there is information about the monthly income of 66 cases, and in 21 of these cases (31.8%), the monthly income was below 2.000 TL (Table 1). Among the

children whose monthly income is known, the monthly family income to be 2.000 TL or less in group 1 was significantly higher than group 2 ( $p<0.01$ ) (Table 3). Moreover, the rate of family income of 2.000 TL and below was significantly higher for children who committed crime together with the group ( $p<0.05$ ) (Table 4).

### Child Labor

Child and adolescent employment contributes to antisocial behavior. Also, the risk of delinquent behavior is higher in adolescents working during school time (15). In our series, 22 cases (9.3%) were working in any job (Table 1). In addition, children in group 1 were working as child workers at a higher rate ( $p<0.01$ ) (Table 3). We think that this situation may be related to the high prevalence of factors such as academic failure, dropping out of school among child workers (15).

### Substance Use

Adolescent and young adult delinquency females are more drug-addicted than their peers, and crime in adolescent boys is closely related to substance addiction (13). Delinquency adolescents who use substances or have substance use disorders have more risk factors and fewer protective factors in terms of recidivism than adolescents who do not use substances (16). Among adolescent homicide offenders, drug users are more likely to go back to prison after being released (11). Alcohol consumption has been closely associated with delinquent behavior in adolescents (17).

In addition, problematic alcohol consumption in late adolescence has been associated with increases in the likelihood of delinquent behavior in young adulthood (more than twice in men and one and a half times for women) (17). Erbay and Buker (18) showed that 11% of the adolescents who committed murder were under the influence of drugs while committing the crime, and 10.4% were under the influence of alcohol. In Sivas province, 45.3% of the children pushed to crime who use substances or have substance use disorders have more risk factors and fewer protective factors in terms of recidivism than adolescents who do not use substances were using cigarettes and 4.6% were using drugs (5). Smoking/alcohol/substance use is significantly higher in juveniles pushed to crime with criminal liability (7). In current study, 27% ( $n=64$ ) of the cases had one or more substance use history (only cigarette in 54 cases, cigarette + alcohol in four cases, cigarette + alcohol + drugs in three cases, cigarette + drugs in two cases, only alcohol in one case) (Table 2). The substance use history (cigarette, alcohol, drugs) of children in group 1 was statistically significantly higher than the children in group 2 ( $p<0.01$ ) (Table 3). Besides all these, the rate of substance use (cigarette, alcohol, drugs) was significantly higher in children who committed a crime together with the group ( $p<0.05$ ) (Table 4).

### Crime Type and Number of Crime

In the majority of studies conducted in Türkiye, juveniles pushed to crime most frequently committed burglary crime (39-73.8%) (5,6,8-10). However, there are studies showing that deliberate wounding is more common (7). In the study, it was observed that the cases committed the crime of deliberate injury with the rate of 47.7% ( $n=113$ ) at most, followed by the crime of theft with a rate of 20.3% ( $n=48$ ) (Table 2).

In a study involving 1.015 male juveniles pushed to crime, the rate of recidivism was reported to be 40.16% (19). In another study involving 113 adolescents aged between 13-18 years, 53% of the participants were involved in crime again (20). In Türkiye, 12.2-71.7% of juveniles pushed to crime have a previous criminal record (5-8,10). In this study, 35.9% of the cases ( $n=85$ ) had one or more criminal records history. The rate of committing crimes of burglary by children in group 1 was found to be significantly higher ( $p<0.01$ ). On the other hand, the rate of committing crimes of deliberate injury ( $p<0.01$ ) and blackmail, threat, and insult ( $p<0.001$ ) by children in group 2 was found to be significantly higher (Table 3).

### Committing the Crime Alone or Together with a Group

Having a criminal circle of friends, joining a gang, or acting with a group of friends that exhibit many criminal behaviors are closely related to adolescent criminal behavior (13). Also, gang and group memberships are significantly prevalent among adolescent murder offenders (21). In this study, 53.6% ( $n=127$ ) of the cases committed the alleged crime alone, while 46.4% ( $n=110$ ) committed the crime together with a group of friends (Table 2). The rate of girls committing crimes together with the group was significantly higher than boys ( $p<0.05$ ) (Table 4). Also, the rates of burglary ( $p<0.01$ ) in children who committed a crime in a group, and blackmail, threat, and insult ( $p<0.01$ ) in children who committed a crime alone were significantly higher (Table 4). The rate of committing crime together with a group in group 1 was statistically significantly higher than children in group 2 ( $p<0.01$ ) (Table 3).

### Psychiatric Disorder

Psychiatric illness increases the probability of committing crime significantly in adolescents (22). In Taylor et al. (19) study where juvenile delinquents were divided into five groups as "anxious/inhibited, impulsive/reactive, psychopathic, confirming and unremarkable", it was shown that the rate of recidivism was the highest (48.6%) among the offenders in the psychopathic group. It is estimated that at least 40-80% of juvenile offenders who face the justice system have at least one diagnosable mental health disorder such as emotional disorders, psychotic disorders, anxiety disorders, behavioral disorders, substance use disorders (23). In a study using the National Comorbidity Survey-Adolescent Participation (NCS-A) data in the United States, it was reported that young people with a diagnosis of

psychiatry were more likely to commit crimes, including violent crimes, for a lifetime (22). It has been reported that 53% of male adolescents who commit theft crime in Türkiye have at least one psychiatric diagnosis and the most common diagnosis is ADHD (24). In the United States, if all mental illnesses from adolescents can be ruled out, it is estimated that there will be an 85.8% decrease in crime committed by adolescents whereas if conduct disorders are excluded there will be a 67.9% decrease in crimes committed by adolescents (22). In Türkiye, 21-43.6% of juveniles pushed to crime have at least one mental illness, the most common being conduct disorder and ADHD (5-7,18). In this study, 47 cases (19.8%) had a psychiatric disorder (conduct disorder in 35 cases, ADHD in 9 cases, depression in one case, specific learning disability in one case, ADHD + specific learning disability + conduct disorder in one case) (Table 2). While 97% (n=230) of the cases had normal intelligence, two cases had borderline intelligence, four cases had mild and one case had moderate mental retardation (Table 2).

### Study Limitations

This study includes only adolescents who applied for forensic psychiatric evaluation in Bolu province. For this reason, the data obtained cannot be generalized to the cases of juveniles pushed to crime in Türkiye. Since this study is based on the reports prepared by forensic medicine clinics, it does not include the social examination records of juveniles pushed to crime.

### CONCLUSION

The main purpose of the juvenile justice system should always be to rehabilitate the child, not to punish (25). In juveniles pushed to crime, the justice system should not only punish with imprisonment and fines, but should also include programs to prevent juvenile delinquency such as counseling interventions, behavioral therapy, addiction treatment, and skill based training (26). It is more difficult to change criminal behavior with treatment in adolescents who use substances, and the treatment should include behavioral therapies and addiction treatment, post-treatment care, and long-term management programme (16). Among the counseling approaches, counseling programs for adolescents and group counseling programs reduce recidivism by more than 20%, and among the skill development activities, behavioral and cognitive-behavioral interventions are quite effective (26). In Türkiye, the Child Support Center Regulation was published on March 29, 2015. In this regulation, Child Support Centers are defined as “Boarding social service organizations that are individually structured or specialized according to the victimization, delinquency, age, and gender status of children. Among the children who are given care measures or protection orders due to being driven to crime, being victims of crime or facing social dangers on the street; those who are

determined to need psychosocial support are provided with care and protection for a temporary period until their needs are met, and studies are carried out to regulate family, close environment and community relations during this period in this center”. Approximately 62 Child Support Centers have been opened up to date in Türkiye. Each child admitted to these centers is filled with an Individualized Risk Assessment Form, and supportive programs such as Anka Child Support Program, Supporting Environment Components, Group Studies, Individual Counseling, Family Studies are used. However, unfortunately, there is not a Child Support Center for juveniles pushed to crime in every province, and there are not enough studies on the effectiveness of the methods applied there. Buran and Çalık Var (27) interviewed 10 children who stayed at the Child Support Center for three months and stated that these centers could not prevent children from meeting with crime again, that more effective service models were needed to develop appropriate social behaviors in these children, and that the interventions currently implemented in these centers were insufficient. It is necessary to increase the number of Child Support Centers and to develop effective intervention methods for juveniles pushed to crime in these centers, and more studies should be conducted on these issues.

### Ethics

**Ethics Committee Approval:** Ethics committee scientific approval was obtained from the Clinical Research Ethics Committee of Bolu Abant İzzet Baysal University, dated November 5, 2019 and numbered 392.

**Peer-review:** Internally and externally peer-reviewed.

Authorship Contributions

Surgical and Medical Practices: E.H., Z.Z.E., Concept: E.H., Design: E.H., A.Y., Data Collection or Processing: E.H., A.Y., Analysis or Interpretation: E.H., Z.Z.E., Literature Search: E.H., A.Y., Writing: E.H., A.Y., Z.Z.E.

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