

What characterizes youths with criminal recidivism?

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Abstract

This study analyses the characteristics of youths who reoffended that were given a judicial measure (disposition order) from a juvenile court in Spain. The study included 838 juvenile offenders (650 males and 188 females). Data on sociodemographic, criminal and psychosocial characteristics were collected from the juvenile court records, the technical team reports, and the Youth Level of Service/Case Management Inventory (YLS/CMI). The reoffending rate among minors in the sample was 28.9%. Comparisons between youths who reoffended and those who did not showed statistically significant differences in origin (being immigrants), type of crime (with more violence), belonging to a gang, and psychosocial characteristics (worse scores in parenting, education and employment, peer relations, substance use, leisure and recreation, personality and behaviour, attitudes and orientation, and family circumstances). The main variables related to the presence of repeated criminal offences were the type of imposed measure (specifically custody and probation), origin (being an immigrant), antisocial attitudes, chronic drug use, truancy, some delinquent acquaintances, and limited organized activities. These variables may be considered in the development of effective intervention programmes for youths who offend in order to decrease criminal reoffending.

Keywords: youths who offend, criminal recidivism, risk factors, psychosocial characteristics, official records.

¿Qué caracteriza a los jóvenes con reincidencia delictiva?

Resumen

Este estudio analiza las características de los jóvenes reincidentes a quienes un juzgado de menores impuso una medida judicial en España. Se incluyó en el estudio a 838 menores infractores (650 hombres y 188 mujeres). Se recopiló datos sociodemográficos, delictivos y psicosociales de los expedientes del juzgado de menores, los informes del equipo técnico y el Youth Level of Service/Case Management Inventory (YLS/CMI). La tasa de reincidencia entre los menores de la muestra fue del 28.9%. Las comparaciones entre los jóvenes reincidentes y los no reincidentes mostraron diferencias estadísticamente significativas en cuanto a origen (inmigrantes), tipo de delito (con mayor violencia), pertenencia a una banda y características psicosociales (peores puntuaciones en crianza, educación y empleo, relaciones con iguales, consumo de sustancias, ocio y recreación, personalidad y comportamiento, actitudes y orientación, y circunstancias familiares). Las principales variables relacionadas con la reincidencia fueron el tipo de medida impuesta (específicamente, prisión preventiva y libertad condicional), el origen (ser inmigrante), las actitudes antisociales, el consumo crónico de drogas, el absentismo escolar, la presencia de algunos conocidos delincuentes y la escasez de actividades organizadas. Estas variables deberían considerarse en el desarrollo de programas de intervención eficaces para jóvenes delincuentes con el fin de reducir la reincidencia.

Palabras clave: jóvenes delincuentes, reincidencia delictiva, factores de riesgo, características psicosociales, registros oficiales.

Juvenile delinquency is a serious social problem and a major concern in western societies (World Health Organization [WHO], 2015). The age with the highest prevalence of criminal acts committed by minors is between 16 and 17 years (Farrington, 2008). Some studies have shown that perpetration of crimes during adolescence is a major predictor of criminal and anti-social behaviour in adulthood (Basto-Pereira et al., 2015; Cuervo et al., 2020; Ferguson et al., 2013; Lussier et al., 2024; Piquero et al., 2012).

The criminal recidivism rate found for Spanish youths who offend ranges from 22% to 27% (Bravo et al., 2009; Ortega et al., 2014; Redondo et al., 2011). This rate is even higher for minors who have served judicial sentences in internment (between 62% and 70%), who present specific risk factors for recidivism (Bravo et al., 2009; Cacho et al., 2020). The offences of minors with criminal recidivism are progressively more severe and frequent (Elliott, 2000). Moreover, recent studies have found that youths who offend with serious crimes who experience formal contact with the criminal justice system exhibit high reoffending rates (75%-80%) during the following years (Brame et al., 2018). Therefore, from a prevention perspective, knowing the specific characteristics of youths who reoffend becomes crucial to develop effective intervention programmes that prevent minors from being involved in future criminal acts.

A number of studies have identified risk factors directly related to under-age criminal recidivism, including personal, family, school and social variables. From a personal perspective, some personality traits have been identified as risk factors: impulsivity (Leverso et al., 2015; Miller et al., 2022; Navarro-Perez & Pastor-Seller, 2017), adventurousness, egocentricity and aggressiveness (Sampson & Laub, 2005). Other personal variables are related to low frustration tolerance and low self-control (Beaver et al., 2008; Contreras et al., 2011; Navarro-Perez & Pastor-Seller, 2017), lack of adequate coping strategies (Mulder et al., 2011; Navarro-Perez et al., 2020), early concentration problems and hyperactivity (Hemphill et al., 2009), substance abuse (Colman et al., 2009; Graña et al., 2006, 2007), and behavioural disorders (Basanta et al., 2018; Cuervo & Villanueva, 2015, 2018; Makarios et al., 2017). Moreover, some studies have highlighted the risk of having criminal and judicial antecedents (Bouchard & Wong, 2017; Clarke et al., 2017; Graña et al., 2006; Mulder et al., 2011; Petitclerc et al., 2013; Petrosino et al., 2013).

From a family perspective, the main risk factors for criminal recidivism are lack of parental supervision (Alvarez-García et al., 2016; Makarios et al., 2017; Ortega-Campos et al., 2016), family problems (including drug abuse), economic difficulties, unemployment, family violence and criminal history (Becedóniz et al., 2007; Bravo et al., 2009; Colman et al., 2009; Contreras et al., 2011; Geller et al., 2009; Murray & Farrington, 2008) and adverse childhood experiences (Astridge et al., 2023). Conversely, family support is a protective factor that help minimize recidivism in criminal behaviour (Whitaker et al., 2015).

Other risk factors are related to school and social variables, such as school failure and/or low achievement at school, peer-pressure and violent friends (Basanta et al., 2018; Cuervo & Villanueva, 2015, 2018; Cuervo et al., 2020; Harder et al., 2015; Hemphill et al., 2011; Herrenkohl et al., 2012; Viljoen et al., 2009; Weerman, 2010), gang membership (Leverso et al., 2015; Trulson et al., 2005), poor social skills (Basanta et al., 2018), and lack of adherence to intervention programmes

(Mulder et al., 2011). These factors ought to be studied for causal links to re-offending and may be considered when implementing intervention programmes, focusing available resources on high-risk youths who offend (Clarke et al., 2017).

The above data show a wide number of risk factors for juvenile criminal recidivism. A systematic review of 15 longitudinal studies about juvenile recidivism found that 14 out of the 23 risk factors identified showed inconsistent support due to the wide variability among the different studies (Basto-Pereira et al., 2015). In Spain, a meta-analysis including 27 studies about juvenile recidivism risk factors showed a great heterogeneity in the effect sizes of the variables studied. This meta-analysis identified that the main variables related to juvenile recidivism were having peers with disruptive behaviours, previous violent crimes, lifetime physical abuse, family history of substance abuse and being male (Ortega et al., 2014). Moreover, a recent study exploring individual risk and protective factors for delinquency among youth males found that peer delinquency was a common predictor of recidivism (Aguilar-Ruiz & Pereda, 2021).

The Spanish juvenile justice system establishes that youths who offend are those who have committed an offense between 14 and 18 years of age. In these cases, the Law of the Minor in Spain establishes what measures can be imposed based on the best interests of the minor. Any intervention has to be proportional to the seriousness of the offense that the juvenile has committed and requires adapting the measure to the child's psychosocial circumstances. In all the Juvenile Courts in Spain there are technical teams formed by non-legal professionals that include educators, social workers and psychologists. Their purpose is to recommend the type of measure imposed. All decisions and measures adopted by the juvenile judge are based on the report of the technical team. It is very unlikely that a juvenile judge will make a decision without taking into account the guidelines of this technical report (Cuervo et al., 2020).

The court decision may be a dismissal or a sentence. The dismissal occurs when the technical team considers that prior to the judicial resolution the minor has repaired or has become aware and learned after the criminal act. In the case of the sentences, the main measures included in the juvenile justice system in Spain are socio-educative measures (community service, therapeutic treatment or cohabitation with another family), probation and custody in some type of institutionalized centres (in close, semiopen, or open regimen). As reported by the Spanish Ministerio de Sanidad Servicios Sociales e Igualdad (2018), probation is the most commonly applied penal sanction in juvenile justice in Spain (45%), followed by socio-educative measures (26%) and internment (incarceration) (14%).

In addition, there are some therapeutic programmes for minor youths who offend. They are focused on the educational, work, psychosocial, health, leisure, and family areas (Redondo et al., 2011). Some of them help overcome addictive processes or mental dysfunctions in the case of children with substance use disorders and/or mental health problems (Alcázar-Córcoles et al., 2019). The assessment of these programmes has shown lower rates of recidivism in youths who offend who complete them (Bravo et al., 2009; Redondo et al., 2011). A thorough evaluation of the factors that predict criminal recidivism and of the specific profile of youths who reoffend is required to improve the effectiveness of these intervention programmes (Augimeri et al., 2012).

One of the main tools used to conduct this evaluation of risk factors of recidivism in youths who offend is the *Youth Level of Service/Case Management Inventory* (YLS/CMI) (Hoge et al., 2002; Spanish version by Garrido et al. (2006). This tool performs a quantitative assessment of the most significant risk factors for adolescents. It is based on General Personality and Cognitive Social Learning theory (Hoge & Andrews, 2011). This theory has given rise to the Risk Need Responsivity (RNR) model of correctional practice, developed by Bonta and Andrews (2007), which is the prevailing model for explaining criminal behaviour and recidivism in youths who offend (Vitopoulos et al., 2012). Understanding the specific characteristics of youths at higher risk is critical for developing RNR-based interventions, such as specific educational interventions in juvenile detention centres aimed at providing youths who offend with appropriate skills to help them reintegrate socially and reduce the probability of recidivism in criminal acts (Cacho et al., 2020). The YLS/CMI has been used previously and has proven to be an adequate tool for identifying the main risk factors in this population (Hoge et al., 2002).

Therefore, based on the RNR model, this study has three objectives: 1) to determine the rate of criminal recidivism of youths who offend that enter a juvenile court in Spain, 2) to determine the differential psychosocial characteristics of youths who reoffended and those who did not, and 3) to explore the main variables that relate to recidivism. The variables explored are related to the type of offence/misdemeanour/crime, the number of participants in the offence, the belonging to a gang, and specific psychosocial characteristics (parenting, education and employment, peer relations, substance use, leisure and recreation, personality and behaviour, attitudes and orientation, and family circumstances). The ultimate goal is to support the implementation of specific measures aimed at effectively addressing the problems presented by youths who offend and preventing recidivism. Based on the previous literature, the main hypothesis of this study is that most of the participants will not reoffend; and that the re-offence rate will be related with the severity of the crime, the measure imposed, and gender (males will present a higher rate of recidivism than females).

The main contribution of this study is to increase the knowledge of the differential characteristics of youths who reoffend with a judicial measure (disposition order) from a juvenile court in a Spanish sample. Knowing the specific characteristics of youths who reoffend will allow for the implementation of individually tailored strategies in order to decrease criminal reoffending rates.

Methods

Participants

The sample of this study was composed of the 1,063 young offenders with whom the Juvenile Court of Navarra (Spain) intervened between 2010 and 2013. The inclusion criteria to be eligible for inclusion in the study were as follows: 1) to have committed an offence while between the ages of 14 and 18 years old; and 2) to have been given a judicial measure from the juvenile court in the period 2010-2013.

According to these criteria, 43 youths (4.1%) had been acquitted, and 182 (17.1%) were waiting for a judicial meas-

ure. Therefore, the sample of this study was composed of 838 young offenders (78.8% of the initial sample). Regarding the sociodemographic characteristics, 650 were males (77.6%) and 188 were females (22.4%). Moreover, 522 youths (62.3%) were born in Spain and 316 (37.7%) were immigrants. The majority of immigrants came from Latin America ($n = 201$, 63.6%), followed by other European countries ($n = 63$, 19.9%), Africa ($n = 50$, 15.8%), and Asia ($n = 2$; 0.6%).

Instruments

Records of youths who offended by the juvenile court. This record is part of the court's protocol. It contains relevant data on the sociodemographic (sex and origin), criminological (type of offence, type of misdemeanour, type of crime, number of participants in the offence, and offence belonging to a gang) and judicial characteristics of the minors (measures imposed). Moreover, it includes the juvenile court's technical team reports, which are psychosocial reports carried out by the technical team of the juvenile court. Juvenile courts in Spain have technical teams made up of non-legal professionals that include educators, social workers, and psychologists, whose purpose is to recommend the type of measure imposed. These professionals interview both the minors and their legal representatives about different aspects in the youth's environment. The interviews are performed at the Juvenile Court from 3 to 6 months after the charge. All decisions and measures imposed by juvenile judges take into account the guidelines on the report of this technical team (Cuervo et al., 2020).

Youth Level of Service/Case Management Inventory (YLS/CMI; Hoge et al., 2002; Spanish version by Garrido et al., 2006). This semi-structured inventory assesses the risk and protective factors associated with the development of criminal behaviour in youth aged 12 to 17 years. It also examines the risk of recidivism, performing a quantitative assessment of the most significant risk factors for adolescents subjected to intervention, and determines the degree of educational supervision these adolescents require. The YLS/CMI has seven sections. The first two sections of the Spanish version were used in this study, as they are those related to juvenile criminal activity. They consist of 42 items that assess known risk factors for criminal recidivism. These items are grouped into eight areas: 1) prior and current offences/dispositions, 2) family circumstances/parenting, 3) education and employment, 4) peer relations, 5) substance use, 6) leisure and recreation, 7) personality and behaviour and 8) attitudes and orientation. This assessment facilitates obtaining an estimate of the criminal recidivism risk of youths who offend and classifies them into four risk groups: low (0 to 8 points), moderate (9 to 21 points), high (22 to 32 points) and very high (33 to 42 points). The YLS/CMI has demonstrated high accuracy in predicting recidivism in youths who offend (Ortega-Campos et al., 2020).

Procedure

A retrospective ex post facto design based on the collection of file data was used. The protocol for this study was approved by the ethics committees of the Universidad Pública de Navarra (code: PI-015/15). Moreover, the Tribunal Superior de Justicia de Navarra authorized access to the data.

Once the juvenile court's permission was obtained to access the files, they were reviewed consecutively, beginning with the first file of the year 2010 and finishing with the last file of 2013. All the variables analysed in this study were compiled from the files, carefully reviewing all the information recorded for each adolescent. This assignment was carried out by a researcher hired specifically for this research, who was blinded to the goals of the study and was trained in the management of the YLS/CMI. Additionally, the YLS/CMI was completed for each of the youths who offended, considering the minors' records and the reports of the technical team filled at the time of access to the juvenile justice system. In the cases where the file consulted showed that the minor had previous judicial measures, information about the first measure was collected, regardless of the year of the measure. Moreover, a detailed tracking of the criminal history of each subject was made until attaining majority (18 years old in the Spanish legislation). This means a mean follow-up period of three years.

Therefore, the reoffending rate was established considering all the existing judicial measures for each minor, considering if there was a new conviction. Only under-aged reoffending was considered. Once the number of young individuals who had reoffended was established, comparisons between youths who reoffended and those who did not were carried out considering only the data from the first judicial measure.

Data Analysis

Statistical analyses were performed with SPSS software (version 23.0 for Windows). The distribution of missing data was studied, and no significant differences were found between subjects with and without available data in each of the variables studied. Therefore, the pairwise deletion method was selected; this method involves analysing the available cases in each variable. A descriptive analysis (percentages, means and standard deviations) was performed to determine the sample characteristics. The comparison among groups was performed with the X^2 test for categorical variables. In all cases, differences with p values < 0.05 were considered significant. Moreover, a logistic regression analysis (forward stepwise entry method) was conducted to determine which factors were the most important for differentiating between the presence and absence of criminal recidivism. Only variables with statistically significant differences were included as independent variables. The variable entry criterion was set to 0.05 and the variable retention criterion to 0.10. Moreover, the Hosmer-Lemeshow test was used to assess the goodness of fit of these models.

Results

Reoffending Rates in the Sample

Once the minors' records and the reports of the technical team were analysed, the number of judicial measures was 1,464 (1.7 measures per minor). The rate of criminal recidivism for the minors of the sample was 28.9% ($n = 242$). Most of the minors had not reoffended ($n = 596$; 71.1%)

Comparison of Sociodemographic Characteristics

Table 1 presents the results of comparisons between youths who reoffended and those who did not for the sociodemographic variables. The results showed statistically significant differences in the origin of youths who offended. Specifically, the reoffending rates observed were 24.7% for national minors and 35.7% for immigrants. No gender differences were observed.

Table 1. Comparison of sociodemographic variables between youths who reoffended and those who did not

	Total <i>N</i> = 838	With reoffence (<i>n</i> = 242)		Without reoffence (<i>n</i> = 596)		<i>X</i> ² (<i>df</i>)	<i>p</i>
		<i>n</i>	(%)	<i>n</i>	(%)		
Sex							
Male	650 (77.6%)	183	(75.6%)	467	(78.4%)	0.74 (1)	.390
Female	188 (22.4%)	59	(24.4%)	129	(21.6%)		
Origin							
National	522 (62.3%)	129	(53.3%)	393	(65.9%)	11.69 (1)	.001
	316 (37.7%)	113	(46.7%)	203	(34.1%)		
Immigrant							

Comparison of the Type of Offences Committed

Comparisons of the type of offences committed between youths with and without criminal recidivism are shown in Table 2. There are no significant differences in the rate of crimes or misdemeanour perpetrated, nor in the type of misdemeanour. However, there are significant differences in the types of crimes. In both groups, crimes against property without violence are the most prevalent. The second most frequent crime among youths who reoffended is bodily harm, followed by gender or domestic violence. In the case of youths who did not reoffend, the second most frequent crime is related to public health or road safety.

As regards the number of participants in the offence, no significant differences were observed between youths with and without repeated criminal offences. However, it is noteworthy that there is a higher proportion of youths who committed the offence belonging to a gang among youths who reoffended than among those who did not reoffend, although the rate of youths belonging to gangs was small.

Comparison of Measures Imposed

Comparisons of the type of measures imposed to the minors by the Juvenile Court are shown in Table 3. Almost half of the judicial interventions ended up with a dismissal, and almost one out of three were resolved with socio-educational measures. Youths who reoffended were more likely than non-reoffenders to have been given the most restrictive measures, specifically probation and detention. However, the court cases of non-repeat offenders were dismissed to a greater extent than those of youths who reoffended.

From the perspective of the measures imposed, the rates of re-offense were 21.7% in dismissal, 26.1% in socio-educative measures, 50% in probation, and 68.4% in custody in institutionalized centres.

Table 2. Comparison of the type of offence between youths who reoffended and those who did not

	Total N = 838	With reoffence (n = 242)		Without reoffence (n = 596)		χ^2 (df)	p
	n (%)	n	(%)	n	(%)		
Type of offence	(N = 987)*	(n = 297)		(n = 690)			
Misdemeanour	461 (46.7%)	149	(50.2%)	312	(45.2%)	2.0 (1)	.153
Crime	526 (53.3%)	148	(49.8%)	378	(54.8%)		
Type of misdemeanour	(N = 461)	(n = 149)		(n = 312)			
Against property	191 (41.4%)	64	(42.9%)	127	(40.7%)	2.8 (4)	.596
Bodily harm	155 (33.6%)	53	(35.6%)	102	(32.7%)		
Threats	69 (14.9%)	21	(14.1%)	48	(15.4%)		
Against public order	25 (5.4%)	7	(4.7%)	18	(5.8%)		
Slanders	14 (3.0%)	2	(1.3%)	12	(3.8%)		
Abuse	7 (1.5%)	2	(1.4%)	5	(1.6%)		
Type of crime	(N = 526)	(n = 148)		(n = 378)			
Against property without violence	174 (33.1%)	46	(31.1%)	128	(33.9%)	16.3 (5)	.006
Against public health or road safety	73 (14.2%)	15	(10.1%)	58	(15.3%)		
Gender or domestic violence	68 (12.9%)	21	(14.2%)	47	(12.4%)		
Bodily harm	59 (11.2%)	22	(14.9%)	37	(9.8%)		
Against public order or belonging to criminal gang	49 (9.3%)	10	(6.8%)	39	(10.3%)		
Against property with violence	39 (7.4%)	20	(13.5%)	19	(5.08%)		
Against public or justice system	18 (3.4%)	6	(4.0%)	12	(3.2%)		
Sexual abuse or harassment	18 (3.4%)	2	(1.3%)	16	(4.2%)		
Crimes against liberty	13 (2.5%)	2	(1.3%)	11	(2.9%)		
Against privacy or breaking and entering	7 (1.3%)	2	(1.3%)	5	(1.3%)		
Others	8 (1.4%)	2	(1.4%)	6	(1.6%)		
Number of participants in the offence	(N = 838)	(n = 242)		(n = 690)			
1	423 (50.5%)	121	(50.0%)	302	(50.7%)	1.82 (3)	.610
2	212 (25.3%)	64	(26.4%)	148	(24.8%)		
3	89 (10.6%)	29	(12.0%)	60	(10.1%)		
4 or more	114 (13.6%)	28	(11.6%)	86	(14.4%)		
Offence belonging to a gang	(N = 838)	(n = 242)		(n = 690)			
Yes	25 (3.0%)	13	(5.4%)	12	(2.0%)	6.70 (1)	.010
No	813 (97.0%)	229	(94.6%)	584	(98.0%)		

*The total number of offences is superior to the total number of the sample because there are minors who committed more than one offence in the same action.

Table 3. Comparison of measures imposed between youths who reoffended and those who did not

	Total N = 834	With reoffence (n = 242)		Without reoffence (n = 592)		χ^2 (df)	p
		n	(%)	n	(%)		
Dismissal	410 (49.2%)	89	(36.8%)	321	(54.2%)	56.8 (3)	<.001
Socio-educative measures	261 (31.3%)	68	(28.1%)	193	(32.6%)		
Probation	144 (17.3%)	72	(29.8%)	72	(12.2%)		
Custody in institutionalized centres	19 (2.3%)	13	(5.4%)	6	(1.0%)		

Comparison of Psychosocial Characteristics

The results in psychosocial variables are presented in Table 4. There are significant differences in practically all variables studied, with a more severe profile in youths who reoffended.

Prediction of Criminal Recidivism

The results of the logistic regression analysis showed that the main variables related to the presence of repeated criminal offences were the type of imposed measure (specifically cus-

tody and probation), origin (being an immigrant), antisocial attitudes, chronic drug use, truancy, some delinquent acquaintances, and limited organized activities. These variables correctly classified 74.3% of cases (Table 5), and the adjusted R^2 was .189.

Discussion

In this study, the rate of criminal recidivism and the specific characteristics of youths who reoffended in a sample of minors who had been given a judicial measure from the Juvenile Court of Navarra (Spain) was studied. The aim was to understand the

Table 4. Comparison of psychosocial characteristics between youths who reoffended and those who did not

	Total	With reoffence		Without reoffence		χ^2 (<i>df</i>)	<i>p</i>
	(<i>N</i> = 838)	(<i>n</i> = 242)		(<i>n</i> = 596)			
	<i>n</i> (%)	<i>n</i>	(%)	<i>n</i>	(%)		
Parenting							
Inadequate supervision	63 (7.5%)	35	(14.5%)	28	(4.7%)	23.6 (1)	<.001
Difficulty in controlling behaviour	91 (10.9%)	45	(18.6%)	46	(7.7%)	21.01 (1)	<.001
Inappropriate parental discipline	107 (12.8%)	50	(20.7%)	57	(9.6%)	19.1 (1)	<.001
Inconsistent parenting	258 (30.8%)	117	(48.3%)	141	(23.7%)	49.2 (1)	<.001
Poor relationship with father	115 (13.7%)	48	(19.8%)	67	(11.2%)	10.7 (1)	.001
Poor relationship with mother	134 (16.0%)	55	(22.7%)	79	(13.3%)	11.5 (1)	.001
Education and employment							
Disruptive classroom behaviour	119 (14.2%)	59	(24.4%)	60	(10.1%)	28.9 (1)	<.001
Disruptive behavior on school grounds	9 (1.1%)	8	(3.3%)	1	(0.2%)	n.a.	
Low achievement in school	505 (60.3%)	178	(79.6%)	327	(54.9%)	25.1 (1)	<.001
Problems with peers in school	89 (10.6%)	40	(16.5%)	49	(8.2%)	12.5 (1)	<.001
Problems with teachers	102 (12.2%)	45	(18.6%)	57	(9.6%)	13.1 (1)	<.001
Truancy	212 (25.3%)	106	(43.8%)	106	(17.8%)	61.6 (1)	<.001
Unemployment/ Not looking for work	93 (11.1%)	34	(14.0%)	59	(9.9%)	3.01 (1)	.083
Peer relations							
Some delinquent acquaintances	330 (39.4%)	109	(45.0%)	221	(37.1%)	4.57 (1)	.033
Some delinquent friends	55 (6.6%)	25	(10.3%)	30	(5.0%)	7.87 (1)	.005
No/ Few positive acquaintances	12 (1.4%)	9	(3.7%)	3	(0.5%)	12.6 (1)	<.001
No/ Few positive friends	122 (14.6%)	68	(28.1%)	54	(9.1%)	50.1 (1)	<.001
Substance use							
Occasional drug use	88 (10.5%)	35	(14.5%)	53	(8.9%)	5.6 (1)	.017
Chronic drug use	84 (10.0%)	50	(20.7%)	34	(5.7%)	42.6 (1)	<.001
Chronic alcohol use	24 (2.9%)	13	(5.4%)	11	(1.8%)	7.69 (1)	.006
Substance abuse interferes with life	84 (10%)	48	(19.8%)	36	(6.0%)	36.3 (1)	<.001
Substance use linked to offence	6 (0.7%)	5	(2.1%)	1	(0.2%)	8.72 (1)	.003
Leisure and recreation							
Limited organized activities	264 (31.5%)	124	(51.2%)	140	(23.5%)	61.4 (1)	<.001
Could make better use of free time	157 (18.7%)	82	(33.9%)	75	(12.6%)	51.3 (1)	<.001
No personal interests	134 (16.0%)	67	(27.7%)	67	(11.2%)	34.6 (1)	<.001
Personality and behaviour							
Inflated self-esteem	3 (0.4%)	2	(0.8%)	1	(0.2%)	n.a.	
Physical aggressiveness	27 (3.2%)	11	(4.5%)	16	(2.7%)	1.91 (1)	.167
Outbursts of anger	103 (12.3%)	52	(21.5%)	51	(8.6%)	26.7 (1)	<.001
Short attention span	74 (8.8%)	22	(9.1%)	52	(8.7%)	0.03 (1)	.866
Poor frustration tolerance	64 (7.6%)	33	(13.6%)	31	(5.2%)	17.3 (1)	<.001
Inadequate guilt feelings	0 --	0	--	0	--	n.a.	
Verbally aggressive	109 (13.0%)	54	(22.3%)	55	(9.2%)	26.1 (1)	<.001
Attitudes and orientation							
Antisocial/ Procriminal attitudes	41 (4.9%)	29	(12.0%)	12	(2.0%)	36.7 (1)	<.001
Not seeking help	6 (0.7%)	5	(2.1%)	1	(0.2%)	n.a.	
Rejecting help	17 (2.0%)	10	(4.1%)	7	(1.2%)	n.a.	
Defies authority	79 (9.4%)	40	(16.5%)	39	(6.5%)	20.1 (1)	<.001
Callous/ Little concern for others	11 (1.3%)	7	(2.9%)	4	(0.7%)	6.55 (1)	.010
Family circumstances							
Changes of address	372 (44.4%)	130	(53.7%)	242	(40.6%)	11.9 (1)	.001
Crime history	24 (2.9%)	10	(4.1%)	14	(2.3%)	1.96	.161
Emotional or psychiatric problems	52 (6.2%)	20	(8.3%)	32	(5.4%)	2.48 (1)	.115
Alcohol or drug abuse	41 (4.9%)	19	(7.9%)	22	(3.7%)	6.40 (1)	.011
Marital conflict	118 (14.1%)	63	(26.0%)	55	(9.2%)	40.1 (1)	<.001
Financial or housing problems	216 (25.8%)	85	(35.1%)	131	(22.0%)	15.5 (1)	<.001
Little collaborative father	43 (5.1%)	24	(9.9%)	19	(3.2%)	16.1 (1)	<.001
Little collaborative mother	39 (4.7%)	14	(5.8%)	25	(4.2%)	0.98 (1)	.322
Ethnic/ cultural difficulties	5 (0.6%)	4	(1.7%)	1	(0.2%)	6.40 (1)	.011
Abusive father	54 (6.4%)	30	(12.4%)	24	(4.0%)	20.0 (1)	<.001
Abusive mother	4 (0.5%)	2	(0.8%)	2	(0.3%)	0.87 (1)	.350
Significant family trauma	336 (40.1%)	123	(50.8%)	213	(35.7%)	16.3 (1)	<.001
Father deceased or absent	147 (17.5%)	48	(19.8%)	99	(16.6%)	1.23 (1)	.266

	Total (N = 838)	With reoffence (n = 242)		Without reoffence (n = 596)		χ^2 (df)	p
	n (%)	n	(%)	n	(%)		
Mother deceased or absent	33 (3.9%)	14	(5.8%)	19	(3.2%)	3.07 (1)	.080
Parents reported by the minor	9 (1.1%)	3	(1.2%)	6	(1.0%)	0.08 (1)	.767
Minor reported by parents	40 (4.8%)	17	(7.0%)	23	(3.9%)	3.79 (1)	.051
Changes of guardianship between parents	7 (0.8%)	5	(2.1%)	2	(0.3%)	6.22 (1)	.013
Adopted or host family	32 (3.8%)	10	(4.1%)	22	(3.7%)	0.09 (1)	.763
Separate brothers	26 (3.1%)	12	(5.0%)	14	(2.3%)	3.89 (1)	.048
Brothers with judicial file	54 (6.4%)	23	(9.5%)	31	(5.2%)	5.28 (1)	.002

Note: n.a. = not applicable

Table 5. Variables related to criminal recidivism

Logistic regression (Dependent variable = Criminal recidivism; 0 = Absence; 1 = Presence)			
Variables	Odds Ratio	95% Confidence interval	
Imposed measure (custody)	3.766 (p = .013)	(1.319 – 10.755)	
Imposed measure (probation)	1.672 (p = .030)	(1.050 – 2.664)	
Antisocial/Procriminal attitudes	2.180 (p = .049)	(1.003 – 4.735)	
Chronic drug use	1.883 (p = .023)	(1.091 – 3.248)	
Truancy	1.858 (p = .002)	(1.244 – 2.774)	
Limited organized activities	1.753 (p = .004)	(1.200 – 2.560)	
Origin (immigrant)	1.485 (p = .022)	(1.064 – 2.071)	
Some delinquent acquaintances	1.436 (p = .032)	(1.031 – 1.999)	
Constant	0.159 (p = .000)		
Adjusted R2	.189		
Correctly classified	74.3% (Total)	92.7% (No recidivism)	29.3% (Recidivism)

Only final step is presented

Variables with statistically significant differences between youths who reoffended and those who did not were included as independent variables

variables related to criminal recidivism in order to develop effective intervention programmes tailored to the needs of youths who reoffend (De Swart et al., 2012). The results found in this study revealed that 28.9% of the youths in the sample had reoffended. This rate is slightly higher than the rate found in other studies with youths who offend (between 22% and 27%). However, the rate of re-offense found for minors who serve judicial sentences in internment (68.4%) is similar to other Spanish studies (between 62% and 70%) (Bravo et al., 2009; Redondo et al., 2011).

From a sociodemographic perspective, no gender differences between youths who reoffended and those who did not were found. These results are not consistent with other studies that show a greater recidivism rate in men (Colman et al., 2010; Ortega et al., 2014). Therefore, the gender perspective seems to be a relevant field of research as recent studies have shown different risk factors for reoffending between men and women (Pusch & Holtfreter, 2018; Rhoades et al., 2016). On the other hand, both groups of youths differed regarding origin. In this study 37.7% of the sample were immigrants; this rate is much higher than the official rate of 13.7% of immigrants in Navarra (Spain). In this region, being immigrant is a determining factor linked to poverty (Observatorio de la Realidad Social, 2020). More specifically, there were more immigrants in the reoffenders group (46.7%) than in non-reoffenders (34.1%). This higher reoffending rate for immigrants supports the results of previous studies included in the only meta-analysis carried out in Spain (Ortega et al., 2014).

Regarding comparisons of the type of offence, the group of

reoffenders presented more violent crimes than did the non-reoffenders. Therefore, it seems that having been involved in previous offences increases the probability of being involved in more severe future crimes. These results could be related to the higher rate of recidivism found for minors serving judicial sentences in detention centres (Bravo et al., 2009; Redondo et al., 2011). Internment in detention centres is a measure used in more severe situations, primarily when the committed offence is serious in nature and characterized by violence, intimidation or endangering others (Bravo et al., 2009; Redondo et al., 2011). From this perspective, it can be hypothesized that there is a close relationship between recidivism and the severity of crimes. Nevertheless, it should be noted that serious crimes can give rise to internment measures and this (internment and the living conditions in it) may be a factor that explains further recidivism.

From the perspective of the measures given to youths who offend, almost half of them were dismissal and almost one out of three socio-educative measures. In this study, dismissal and socio-educative measures have been associated with lower criminal recidivism, in the line found in other studies. Although a minority in the judicial system, youths who offend interned in institutionalized centres tend to have higher rates of recidivism (Cuervo et al., 2020; Moffitt, 2007). In fact, in this study custody and probation measures have been associated with higher criminal recidivism.

One relevant result of this study is the more severe profile regarding psychosocial characteristics of youths who reoffend. All significant psychosocial areas are more affected for youths who reoffend than for who do not: parenting, education and

employment, peer relations, substance use, leisure and recreation, personality and behaviour, attitudes and orientation, and family circumstances. These results are coincident with previous studies (Astridge et al., 2023; Basanta et al., 2018; Bouchard & Wong, 2017; Bravo et al., 2009; Clarke et al., 2017; Colman et al., 2009; Cuervo et al., 2020; Graña et al., 2006, 2007; Harder et al., 2015; Leverso et al., 2015; Makarios et al., 2017; Mulder et al., 2011; Ortega-Campos et al., 2016; Petitclerc et al., 2013; Petrosino et al., 2013). Moreover, five specific psychosocial variables (antisocial attitudes, chronic drug use, truancy, some delinquent acquaintances, and limited organized activities), together with being immigrant, were specifically related with reoffending.

Some previous studies that have assessed the effectiveness of tailored interventions taking into account the specific risk factors found in youths who offend have shown lower rates of recidivism (Bravo et al., 2009; Redondo et al., 2011). According to our results, intervention programmes must include specific measures that mainly address the psychosocial factors found in this study. All of them, except immigration, are modifiable dynamic factors.

Therefore, interventions with minors in problematic environments aimed at providing attractive organized activities for youth could be effective measures to reduce recidivism in criminal behaviour. In addition, the collaboration of educational services is crucial to help in giving support and reducing truancy in these minors. Interventions aimed at providing coping and emotion regulation strategies could be effective to prevent criminal recidivism. Furthermore, adopting social measures and policies to prevent drug use, working on youth integration, and preventing the emergence of criminal gangs are some of the interventions that appear necessary in light of the results of this study. It should be noted that youth with a greater risk of recidivism should be the beneficiaries a greater number of resources, while those with a lower risk of recidivism should not receive large interventions (Bouchard & Wong, 2017).

According to the results of this study, the interventions recommended by the technical teams carried out in the least restrictive measures (dismissal and socio-educative measures) are associated with a lower recidivism. It is necessary to deepen in the study of the type of personalized interventions in the case of minors with both probation and an internment measure. In these cases, the level of recidivism is higher. Maybe this is related to the fact that the profiles in these minors are more complex, and they are associated with more deteriorated psychosocial characteristics and a greater severity of the crimes committed (Cacho et al., 2020). Therefore, interventions with youths who offend with serious crimes that require a measure of detention should be the focus of future studies, as there is wide margin for improvement in terms of recidivism.

Strengths and Limitations

The main contribution of this study is the provision of detailed information about the specific variables related to juvenile recidivism for minors who have been given a judicial measure in Spain. Although this aspect is already included in the Spanish juvenile justice legislation it is necessary to delve into it.

This study has several limitations. First, the sample is limited and only addresses a specific population and context: The Juvenile Court of Navarra. Although the subjects are all the

juvenile offenders in Navarra who met the admission criteria, the results should be generalized with caution. Second, all the information analysed in this study was collected by only one researcher, and no interrater reliability can be provided. Third, this is an ex post facto study. Its results do not facilitate establishing causal relationships among the studied variables. Thus, longitudinal studies that analyse the role of different variables in the development of criminal recidivism are necessary. Fourth, as the study was conducted in the juvenile court, only under-aged reoffending was considered. The reason for this is that both the juvenile and adult judicial systems in Spain do not share information with each other. Therefore, the recidivism of those over the age of 18 years was unknown. Finally, in this study, non-recidivism was better predicted than recidivism. Future studies should consider more accurate variables related to repeated criminal offences, such as gender or being immigrant, and the relationships between severity of crime, measure imposed and re-offence rate.

Conclusion

The goal of this study was to identify the association between the characteristics of youths who offend and reoffending in order to implement specific measures aimed at reducing recidivism. This research supports the need of searching tailored interventions to reduce risk factors and, consequently, the reoffending rates. Child-related prevention policies may consider these variables and work on the development of protective factors related to them (Navarro-Perez et al., 2020).

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Conflict of interest

The authors report no conflict of interest.

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