Juvenile Delinquency in Turkey: A Descriptive Study

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Abstract: The aim of this study is to analyse juvenile delinquency in Turkey for the year 2003. Data from 36.048 offence charged juveniles have been analysed with logistic regression using SPSS computer software. Among the study, 91.0% were male and 82.8% were between 14-18 years of age. About 64.4% were primary school educated and 62.8% committed a crime with others. Most of the offenders (90.5%) lived with their families and 88.6% were not using addictive substances. The most common crime type was theft followed by assault and battery. Among the offenders 71.0% had not been arrested previously. Drug use, illiteracy and male sex were found to be important risk factors for delinquent behaviour.

Key words: Juvenile delinquency, crime, Turkey

INTRODUCTION

Juvenile delinquency refers to antisocial or criminal acts committed by juveniles and is a growing problem throughout the world. Calhoun and many other sociologists examine delinquency as an act that defies or diverges from cultural or legal norms[1]. Tomovic cites Breckenridge's definition of delinquency in his book: "a condition arising in the matrix of sociopersonal disorganization and in the sequence of experience and influences that shape behavior problems. It is the dynamic social process, involving numerous variables and the failure of personal and social controls. It is a symptom of deep socioeconomic and social ailments[2]. This definition of delinquency views crime as a basic lack of positive social ties or bonds. Delinquency is usually specific and age specific. According to Redl : "The legal concept of delinquency simply states which type of behavior is forbidden by law, in which state, for which age group of childern and so forth. The cultural meaning of the word might summarize all statements indicating that a piece of behavior is in contradiction with the value demands of the dominant culture within which a given child moves[3]. Just as the causal factors of delinquency are diverse and numerous, so are the definitions. All of the definitions hold merit. The key concept to understand is that the the theories and definitions should be used in conjunction with one another. Because as with any social problem, the causal factors are numerous, there are exceptions to any

theory. If theories can be used together, juvenile delinquency will be better understood.

Juvenile delinquency has existed for centuries. Regoli and Hewittnote "legal prohibitions of specific behavior by juveniles is centuries old[4]. Juvenile crime is mentioned as long ago as ancient Sumeria and Hammurabi (2270 B.C), where laws concerning juvenile offenders first appear in written form. In ancient Britain, children at age seven were tried, convicted and punished as adults. Until the 1700's children were viewed as non-persons and did not recieve special treatment or recognition. At the end of the 18th century, "The Enlightenment" appeared as a new cultural transition. This period was the beginning of reason and humanism. The invention of childhood, love and nurturing replaced beatings to keep maintain children's conformity. Children had finally begun to emerge as a distinct group. This action began with the upper-class.

Industrialization set into motion the processes needed for modern juvenile delinquency. With urbanization, lack of parental control, huge increases in the amount of movable goods, overwhelmed urban areas and growing unemployment, stealing became a way of life. In Massachusetts in 1871, 1,354 boys and 109 girls were handled by the courts. Poorhouses were created to keep youthful offenders out of trouble. The aim was to take the children out of their dangerous environment. However, these houses, sometimes referred to as reform schools, were very harsh and contradictory to the ideas of their establishment. They were criticized for failing to prevent

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the apparent increase in delinquency. Reformers-called "child savers"-believed that juveniles required noninstitutional treatment relecting a natural family[5]. This legal and humanitarian concern for the well-being of children led to the establishment of the first juvenile court in Cook County, Illinois in 1899. Industrialization and urbanization played a tremendous role in the modern era of juvenile delinquency. However, it seems fair to say that the idea of "juvenile delinquency" is a relatively modern construction.

The data on delinquency, however, are not limited to the legal status of "juvenile delinquents". Studies on unofficial data are also very important because much of the behaviordefined by the law as delinquent is not detected, reported, or acted on by legal agents.Because of different procedures and practices regarding the legal status of juvenile delinquency, easy generalizations both within and between countries when examining official data should be made cautiously. On the other hand, difficulties likewise warn against drawingfirm conclusions and methodological shortcomings may exist when unofficial data areexamined. There may be advantages in utilizing all the data of delinquency (official and unofficial) in pursuit of its understanding. However, in many countries, unofficial data may not exist or represent the actual situation. Turkey is one of the countries in which collecting unofficial juvenile delinquency data is a very new concept. Therefore, we used the official data for our study that aimed to analyse juvenile delinquency in Turkey in the year 2003 andto note some methodological issues when analysing this kind of data.

MATERIALS AND METHODS

The data considered in this study concerned juvenile offenders received into security units of the General Commandership of Gendarme and General Directorate of Security. The data include 27 provinces in Turkey and were attained from the State Institute of Statistics, Department of Justice Statistics, considering the 2003 "juvenile received database". 36,048 cases have been analysed using the SPSS computer software.

Logistic regression analysis has been applied to analyse the data. In our model, "previously arrested" represents the dependent variable and "sex", "Living Conditions" (LC), "Using Drug" (DR) and "literate" (ED) represent the independent explanatory variables. All variables are binary coded in the analysis according to the following definitions.

If the juvenile was arrested before the case studied, the dependent variable takes the value "1", otherwise (i.e., the juvenile is arrested for the first time), the dependent

variable takes the value "0". The variable "sex" takes the value "0" for boys and "1" for girls. The variable "living conditions" takes the value "0" if the juvenile is living with his/her family and "0" otherwise. The variable "using drugs" takes the value "1" if the juvenile is using drugs and "0" otherwise. The variable "literate" takes the value "1" if the juvenile is literate and "0" otherwise.

The effect of one variable on another is conveniently studied by formulating a regression model in which the parameters can be interpreted as effects. The relation between variables was studied by means of logistic regression models and odds ratios. The odds are the ratio of the probability that the event of interest occurs to the probability that it does not and the odds ratio is defined as the ratio between odds for the event under two different conditions represented by values on the background variables. An odds ratio equal to one indicates there is no difference in the odds as a background variable is changed (i.e., the explanatory variable has no influence on the event under study). A value larger (smaller) than one indicates that the odds are larger (smaller) in one group than in another group, where the groups are defined as explanatory variables.

In the current study, we also wanted to include the possible effects of interactions. Therefore, we constructed new variables that represent two-way interactions, three way interactions, etc. With binary variables, as is the study in our material, the variables representing the two-way interactions are formed by multiplying two of the explanatory variables. For example, the variable "sex" takes the value "0" for boys and the value "1" for girls. Similarly, the variable "living conditions" takes the value "0" if the juvenile is living with his/her family and the value "1" otherwise. The variable representing the two-way interaction effect of "sex" and "living conditions" takes the value "1" if the juvenile is a girl ("sex" equals "1") that is not living with his/her family ("living conditions" equals "1"). In all other study, ("sex" equals "0" or "living conditions" equals "0") the two-way interaction variable assumes the value "0".

All two-way interactions are constructed similarly by combining all possible pairs of variables. In our material, we combine "sex" with "using drugs", "sex" with "literate", "living conditions" with "using drugs", "living conditions" with "literate" and "using drugs" with "literate". In total, with p explanatory variables, there will be $p!/(2(p-2)!)$ two-way interactions. In our study, we have four explanatory variables, making $4!/(2\cdot2)=6$ two-way interaction effects.

Variables representing tree-way interactions are obtained by multiplying three explanatory variables. In this study, a three-way interaction is obtained by

multiplying "sex" by "living conditions" by "using drugs". This variable will assume the value "1" only in the subgroup with girls ("sex" equals "1") that are not living with his/her family ("living conditions" equals "1") and that are using drugs ("using drugs" equals "1"). In all other subgroups, the variable that represents the three-way interaction assumes the value "0".

Other variables representing three-way interaction effects are obtained by multiplying "sex" by "living conditions" by "literate", multiplying "sex" by "using drugs" by "literate" and multiplying "living conditions" by "using drugs" by "literate". With p explanatory variables, there will be a total of p!/(3!(p-3)!) three-way interaction effects. In our study with 4 explanatory variables, we have 4!/(3!·1)=4 three-way interaction effects.

The process of constructing variables representing interaction effects continues with higher order interactions. The highest possible order equals the number of explanatory variables. The highest order interaction in our study is a four-way interaction obtained by multiplying all four explanatory variables.

RESULTS

36,048 cases were analysed. 2,057 cases were collected from the Commandership of Gendarme and 33,991 cases from the Directorate of Security. The monthly distribution of juvenile offenders in the year 2003 is shown in Fig. 1.

We found no statistically significant differences among monthly frequencies. Among juvenile offenders, 91.0% were male and 9.0% female. The age distribution of juvenile offenders is shown in Table 1.

Among 36,048 cases, 12.2% were illiterate, 64.4% finished primary school, 3.5% finished secondary school and 19.9% graduated from high school. About 90.5% of the juveniles were living together with their own family (father, mother, sisters and brothers) and 9.5% lived with

others (alone, in boarding school, friends, relatives, in children's home). Some 88.6% were not using addictive substances. About 37.2% of the study committed the delinquent behaviour alone, 45.0% committed the behaviour together with others but without planning and 17.7% committed the behaviour together with others by planning. Juvenile offences were defined and categorized according to the US Juvenile Court Statistics Source Book (Stahl, Finnegan and Kang, 2003:605-7). Distribution of the offences within categories is shown in Table 2.

About 71.0% of the juveniles were first time offenders and 29% had been arrested previously. The distribution of the previously arrested juveniles according to the crime categories is shown in Table 3.

The purpose of this study was to analyse the impact of the explanatory variables on the response variable. This impact is conveniently assessed by estimates of the odds ratio, which can be obtained by estimating a logit model. The odds ratio of "sex" vs. "previously arrested" is found to be 1.557, indicating that the odds for previously been arrested is 1.577 higher for girls than for boys. The small p-value reported indicates a highly significant difference from an odds ratio of 1, which corresponds to equal behaviour between the sexes.

In many studies, it is argued that the absence of other explanatory variables in the model will bias the estimates. When introducing all explanatory variables in our model, we obtain an odds ratio for sex equal to 1.336 with a p-value less than 0.0005. Although this number is different from that obtained with only "sex" as an explanatory variable, the results lead to qualitatively similar conclusions.

Unfortunately, these estimates of odds ratios may be misleading unless a more careful analysis that includes possible effects from interactions is conducted. We performed a logistic regression analysis and put all the variables, both explanatory and constructed interactions, into our model and tested for possible significant interaction effects.
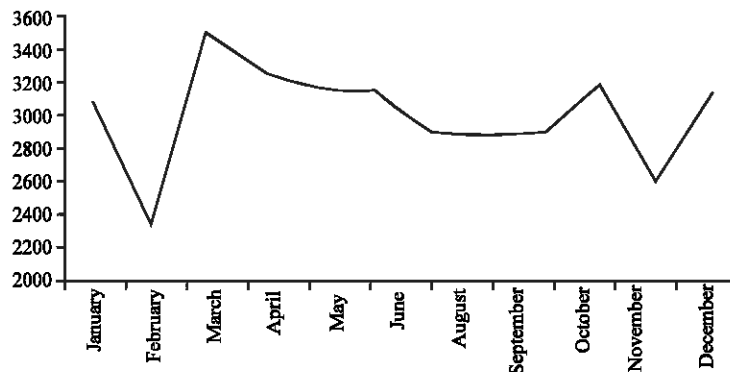

Fig. 1: Distribution of juvenile offenders by months

Table 1: Age distribution of juvenile offenders (Turkey 2003)

Age	N	%
<12	2396	6.6
12	1367	3.8
13	2462	6.8
14	4049	11.2
15	5789	16.1
16	8129	22.6
17	9049	25.1
18	2807	7.8
Total	36,048	100.0

Table 2: Type of offences (Turkey 2003)

Category	Type	N	%
Crimes against persons	Robbery	1031	2.9
	Criminal homicide	250	0.7
	Assault	10804	30.0
	Rape and sodomy	429	1.3
	Kidnapping	593	1.6
	Insult and threats	1010	2.8
Crimes against property	Larceny	10970	30.4
	Pick pocketing	2084	5.8
	Arson	159	0.4
	Burglary	86	0.2
	Motor vehicle theft	3195	8.9
	Vandalism	958	2.7
	Fraud	150	0.4
Offences against public order	Prostitution	153	0.4
	Violation of firearm law	1122	3.1
	Gambling	20	0.1
	Smuggling	575	1.6
	Sex offences	218	0.6
	Disorderly conduct	306	0.8
Public security offences	Terrorism	324	0.9
	Illegal demonstration	230	0.6
	Other	911	2.5
Drug offences	Narcotics	470	1.3
Total		36,048	100.0

Table 3: Distribution of previously arrested juveniles by crime categories

Category	Type	N	%
Crimes against persons	Robbery	130	1.20
	Criminal homicide	12.	0.10
	Assault	1842	17.6
	Rape and sodomy	20	0.20
	Kidnapping	63	0.60
	Insult and threat	64	0.60
Crimes against property	Larceny	5985	57.2
	Pick pocketing	376	3.60
	Arson	7	0.10
	Burglary	9	0.10
	Motor vehicle theft	351	3.40
	Vandalism	59	0.60
	Fraud	17	0.20
Offences against public order	Prostitution	22	0.20
	Violation of firearm	60	0.60
	Gambling	4	0.00
	Smuggling	70	0.70
	Sex offences	22	0.20
	Disorderly conduct	233	2.10
Public security offences	Terrorism	722	7.00
	Illegal demonstration	22	0.20
	Other	295	2.90
Drug offences	Narcotics	66	0.60
Total		10451	100.0

When we consider the four-way interaction effect, the associated p-value is 0.664, which usually implies a

conclusion that the effect is of minor importance and can be removed from the model. The current model then contains all explanatory variables and all variables representing interaction effects up to and including the three-way effects. The next step then becomes testing for significant three-way interaction effects in the current model. Table 4 shows the p-values are all too high (ranging from 0.237 to 0.972) to keep the three-way interactions in the model. Removing the non-significant three-way interaction effects therefore further reduces the model. There are now only the explanatory variables (main effects) and the two-way interaction effects in the model. The focus in the next step is the possible significance of the two-way interactions.

The interaction between "living conditions" and "using drugs" has a p-value exceeding 0.05. However, the purpose here is to ensure that no effect exists rather than indicating a plausible existence. Therefore, we usually require the p-values to exceed a much larger value than 0.05 before the corresponding variable can safely be removed. In our material, the interaction effects are significant at a level that does not allow us to remove them. If we are interested in investigating the effect of "sex" on the response variable, the significance of interactions with "sex" implies that an analysis can only be performed in the subgroups defined by the two-way interactions that include "sex". Thus, in our material, the analysis must be performed in the subgroups defined in Table 5. The odds ratios for the different subgroups are also reported in this Table.

The odds ratio of "sex", in the subgroup of juveniles living with close relatives, using drugs and literate was 0.402 with a p-value of 0.007. The numbers of juveniles in this subgroup falling into the different categories of the variables are shown in Table 6. Proportions for the two possible response categories within each sex are also shown in the table. These indicate that the proportion of boys that have previously been arrested is much higher than the proportion that has not. The odds for previously been arrested are therefore $0.629/0.371 = 1.695$ for boys and $0.405/0.595 = 0.680$ for girls. Thus, the odds are $1.695/0.680 = 2.5$ times higher for boys than for girls or $0.680/1.695 = 0.402$ as high for girls as for boys. This odds ratio is reported in Table 5.

Similarly, in the group of juveniles not living with a close relative, not using drugs and illiterate, the odds was 2.355 with a p-value less than 0.001. Table 7 the odds for having previously been arrested are 0.648 for boys and 1.526 for girls. Thus, in this subgroup, it is more likely that boys are "first timers" and that girls have a criminal history. The odds ratio for previously being arrested is 2.355 times higher for girls than for boys.

Table 4: Logistic regression analysis with all independent variables and interaction effects

Variables	Step 1			Step 2			Step 3		
	B	Sig.	Exp(B)	B	Sig.	Exp(B)	B	Sig.	Exp(B)
Sex	.514	.000	1.673	.516	.000	1.675	.516	.000	1.676
LC	-.260	.367	.771	-.244	.393	.784	-.254	.179	.775
DR	2.296	.000	9.937	2.423	.000	11.279	2.652	.000	14.181
ED	-.297	.023	.743	-.293	.024	.746	-.303	.011	.738
Sex and LC	.342	.063	1.408	.331	.069	1.392	.338	.004	1.402
Sex andDR	-.742	.229	.476	-.863	.109	.422	-1.084	.000	.338
Sex and ED	-.502	.000	.605	.505	.000	.603	-.495	.000	.609
LC and DR	.929	.469	2.532	.436	.464	1.547	-.189	.061	.828
LC and ED	.261	.448	1.298	.235	.488	1.264	.319	.002	1.376
DR and ED	.469	.528	1.598	.303	.630	1.354	.277	.000	1.320
Sex, LC and DR	-1.082	.368	.339	-.611	.237	.543			
Sex, LC andED	.054	.828	1.055	.073	.762	1.076			
Sex, DR and ED	-.181	.798	.835	-.021	.972	.979			
LC, DR and ED	-.591	.677	.554	.012	.965	1.012			
Sex, LC, DR and ED	.578	.664	1.782						
Constant	-1.030	.000	.357	-1.033	.000	.356	-1.033	.000	.356

Table 5: Odds ratios for "sex" vs. "previously arrested" in different subgroups

Variables	Exp (B)	Sig.
Living with close relative/not using drug/Illiterate	1.673	.000
Living with close relative/not using drug/literate	1.012	.857
Living with close relative/using drug/Illiterate	0.797	.710
Living with non-close relative/not using drug/Illiterate	2.355	.000
Living with close relative/using drug/literate	0.402	.007
Living with non-close relative/not using drug/literate	1.503	.006
Living with non-close relative/using drug/Illiterate	0.380	.342
Living with non-close relative/using drug/literate	0.361	.018
Without restrictions	1.557	.000
With all variables but without restrictions	1.326	.000

Table 6: Cross Table of "sex" vs. "previously been arrested" in the subgroup of juveniles living with close relatives, using drugs and literate

	Sex		
	Male	Female	Total
Not previously arrested	1101	22	
	0.371	0.595	1123
Previously arrested	1866	15	
	0.629	0.405	1881
Total	2967	37	3004

Table 7: Cross table of "sex" vs. "previously been arrested" in the subgroup of juveniles who are not living with a close relative, not using drugs and illiterate

	Sex		
Previously arrested	Male	Female	Total
Not previously arrested	179	116	
	0.607	0.396	295
Previously arrested	116	177	
	0.393	0.604	293
Total	295	293	588

Table 8: Odds ratios for "living conditions" vs. "previously been arrested" in different subgroups

Variables	Exp (B)	Sig.
Male/not using drug/Illiterate	1.086	.521
Male/not using drug/literate	1.486	.001
Male/nsing drug/Illiterate	.932	.752
Female/not using drug/Illiterate	1.528	.001
Male/using drug/literate	1.258	.021
Female/not using drug/literate	2.207	.000
Female/using drug/Illiterate	.444	.487
Female/using drug/literate	1.128	.822
Without restrictions	1.811	.000
With all variables but without restrictions	1.406	.000

Table 9: Odds ratios for "using drugs" vs. "previously been arrested" in different subgroups

Variables	Exp (B)	Sig.
Male/living with family/Illiterate	4.732	.000
Male/living with family/literate	6.312	.000
Male/not living with family/Illiterate	4.061	.000
Female/living with family/Illiterate	2.254	.178
Male/not living with family/literate	5.342	.000
Female/living with family/literate	2.508	.007
Female/not living with family/Illiterate	.655	.675
Female/not living with family/literate	1.282	.575
Without restrictions	5.647	.000
With all variables but without restrictions	5.825	.000

Table 10: Odds ratios for "education" vs. "previously been arrested" in different subgroups

Variables	Exp (B)	Sig.
Male/living with family/not using drug	.450	.000
Male/not living with family/using drug	.600	.000
Male/not living with family/not using drug	.616	.000
Female/living with family/not using drug	.272	.000
Male/not living with family/using drug	.810	.320
Female/living with family/using drug	.303	.803
Female/not living with family/not using drug	.393	.000
Female/not living with family/using drug	.769	.809
Without restrictions	.406	.000
With all variables but without restrictions	.430	.000

The more complete list of odds ratios for different subgroups, as shown in Table 5, reveals that conclusions can be very different in different subgroups. The reason why these results appear is that this material shows strong interaction effects that must be considered in a careful analysis.

Juveniles not living with family and who were male, using drugs and literate were 1.3 times more likely to have been arrested previously than juveniles living with family. On the other hand, juveniles not living with family, who

are female, illiterate and not using drugs have odds 2.2 times more than living with family in terms of having been arrested previously

Juveniles who were drug users and part of the subgroup male, living with close relatives and illiterate have odds of previously being arrested 4.7 times more than the same subgroup of non-drug users. The odds are higher at 5.3 if they were living with non-close relatives.

Educational status of juvenile offenders was found to be an important factor among almost every subgroup. Illiterate juveniles in the subgroup of male, living with family and not using drugs are 2.2 times more likely to have been previously arrested than those who are literate. In the subgroup of male, living with family and using drugs, the odds are 1.7 times more than those who are literate.

DISCUSSION

In this study, we evaluated findings obtained from official data of juvenile delinquency. The inability of recording real crime numbers is an important problem in almost all countries. Some crimes are not handed over officially and some offenders are not detected; underreporting always occurs. In our study, the distribution of types of crimes was as follows: 48.8% crimes against property (first rank larceny 30.4% followed by motor vehicle theft 8.9%), 39.2% crimes against persons (first rank assault 30.0% followed by robbery 2.9%), 6.6% offences against public order (first rank violation of law involving f firearms 1.3% followed by smuggling 1.6%), 4.1% public security offences and 1.3% drug offences. In general, among all the different types of crimes, the most seen were larceny 30.4%, assault 30.0%, motor vehicle theft 8.9%, pick pocketing 5.8%, violation of the firearm law 3.1%, robbery 2.9%, insult and threat 2.8% and vandalism 2.7%. Other types were under 2.0%. This numbers suggest that the most frequently committed crimes were theft. Additionally, we found that crimes related to drugs and firearms were not as high as in many western countries[6]. This was also demonstrated in another regional studies from Turkey[7-9]. For example, Karagoz and Atilgan evaluated 1408 case records in the Antalya region of Turkey and found that theft was the most common type of crime at 66.5%[7]. Kart studied 108 juveniles in Bursa city and found that 63.5% committed theft[8]. Ozen and colleagues, in their study among 165 juveniles performed in the south-eastern part of Turkey, noted that theft was the most seen crime as 52%[9].Our results show a parallel with the juvenile court data. The juvenile delinquency cases (% distribution) handled in 2004 by Turkish courts with juvenile jurisdiction were as

follows: 51.3% theft, 16.6% assault and battery, 7.0% traffic crimes, 5.5% burglary, 3.4% fraud and extortion offences, 2.6% kidnapping and detainment, 2.0% rape, 1.4% violation of different laws, 1.3% larceny, 1.3% weapons offences, 0.9 drug law violations, 0.8% homicide and 5.9% others[10]. The present study shows an evident male preponderance for juvenile delinquency. Reports from other parts of the world also demonstrated very low crime rates in female adolescents as compared to male[6,11,12].s The scarcity of delinquent girls may also found in other studies from Turkey[7-9]. The low incidence of delinquency in females could result from general differences in cultural demands and biological factors and may be because girls are kept away from social life and are more tightly controlled by their parents and relatives in Turkey than in other countries.

Our data showed that most crimes were committed at 17 years of age. Only 7.8% of all study were committed at 18 years of age. In Turkey, individuals are considered adults when they reach 18 years of age and must originate in the adult criminal court. This fact seems to prevent juveniles from committing crimes at older ages. According to studies, the delinquency rate in Japan was highest when juveniles were 14-16 years old and declined as they grew older[13]. In the USA, it was reported that most crimes among juveniles were committed by 16 years of age and declined as they grew older[12].

In our study, we found that not living together with their own families, being illiterate and using drugs are important factors for juvenile delinquency. Family structure was one of the most controversial factors that were singled out for analysis in the delinquency literature. Some studies documented the relationship between delinquency and family disruption[14-20]. However, in our study, we did not analyse the structure of the families of delinquent juveniles. Instead, we evaluated whether they lived with their own families or not. Female, not using drugs and literate juveniles who were not living with their families were 2.2 times more likely to have been arrested previously than those who were living with their families. This was 1.5 times the rate for male juveniles with the same characteristics.

The relationship between delinquency and educational outcome is thought to be so clear that Gottfredson and Hirshistate without qualification: Offenders do not do well in school. They do not like school. They tend to be truant and to drop out an early age. As a result, every school variable correlates strongly with crime and delinquency[21]. Studies about educational attainment found a consistently strong mediating effect on delinquency[22]. We found that in every subgroup, being illiterate was an important factor for delinquent

behaviour. A Canadian survey investigated the role of classroom and school climates on the development of early violence and found that emotional support within the classroom was very important for some high-risk children[23]. Many other studies found school attendance as a preventive factor for juvenile delinquent behaviour[24-28].

In our study, 88.6% of the juveniles were not using any addictive substances. Only 11.4% were users; for 5.6%, alcohol was the most used addictive substance. Juveniles who were using addictive substances, male, living with family and literate had odds of being arrested that were 6.3 times that of those not using addictive substances. The odds were 5.3 when they were not living with family.

CONCLUSION

Juvenile delinquency is one of the world's most pressing social problems because of the dire negative emotional, physical and economic effects felt throughout societies. Considering the prevalence, stability and detrimental impact of juvenile offending, the development of effective treatments is of the utmost importance. Our descriptive study based on official records showed the importance and complexity of this subject. Factors related to the escalation of offending need to be better understood and more research related to prevention of offending needs to be performed. The underlying mechanisms differentiating offenders from non-offenders merits substantial research attention. Delineating developmental pathways, discovering differences in the progression of offending and exploring changes in offending related to life transitions underscore the significance of utilizing a multidimensional perspective on juvenile delinquency. Finally, longitudinal studies are necessary to uncover essential information on issues such as critical risk and protective factors that do not exist in official database records.

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