

Substance use correlates of male juvenile delinquency in Albania

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Abstract

Aim: Problem behaviour among juveniles, particularly delinquency and substance use (smoking, alcohol use, and drugs) is becoming a major concern for the Albanian society. Previous research indicates a strong correlation between youth offending and substance use. The aim of this study was to assess the prevalence and the association between substance use and delinquency.

Methods: 150 male delinquents aged 14-18 years (mean age 16.5) detained in the Detention Institute for Juvenile Offenders in Kavaja, Albania, were interviewed using a structured instrument. The current study examines the prevalence of substance use, the onset age and the statistical associations of these with delinquent variables, such as the age of first offending, number of previous convictions, and type of offence.

Results: The univariate analysis of substance use variables showed a high prevalence of cigarette smoking, followed by alcohol and cannabis use. Results showed that male delinquents share common tendencies related to substance use. About 90% of them smoked cigarettes with a significantly low age onset (12.4 years), followed by alcohol (86%) and cannabis (79%) commenced at 13-14 years of age. Data from bivariate analyses showed a moderate to strong positive correlation between lifetime use and onset age of three substances (tobacco, alcohol and cannabis). Correlations between substance use and onset age of delinquency variables were significant and strong. Engaging in illicit behaviour was strongly associated with substance use variables ($P < 0.01$).

Conclusion: Age appeared an important factor for both delinquent behaviours and substance use. Juveniles who used substances were more likely to be involved in offending in this study conducted in Albania.

Keywords: Albania, correlation, male juvenile delinquency, onset age, substance use prevalence.

Introduction

With an exponential expansion of violent crimes, the issues of youth crime and disruptive behaviour are becoming a growing social and policy concern in Albania. Data from the Albanian Ministry of Justice (1) show an increase in the number of minors involved in offending (in 2011, 8% of persons involved in crimes were below 18 years old). Of several antisocial behaviours, such as truancy, gambling and peer conflicts, delinquency is often associated, especially among boys (2), to another deviant behaviour, namely substance use (3,4). When and how juveniles develop these co-occurring patterns of substance use and criminal activity is less clear and a challenge to evaluate, because of the illegal nature of both activities. The many complex findings from research show that the same factors that put an individual at risk of involvement in delinquency, may as well be similar for substance use and dependence problems (5). Family history of substance use (6), poor parenting, antisocial peers (7), community high tolerance and availability of illicit substances raise/ present the risk for an adolescent to use drugs and alcohol and/ or to engage in offending (8). Though substance use is certainly not the primary cause of involvement in illegal activities, it may, however, initiate or increase the risk of offending either independently, or in conjunction with other risk factors (9,10).

Moreover, criminal behaviour and substance use tend to run parallel over time, though there is controversy as to what causes such behaviour. Research (11-14) confirms that aggression and behaviour problems in childhood seem to hint at substance use and dependence during adolescence and early adulthood years. On the other hand, juveniles who are substance users, especially from an early age, are more likely to become chronic and serious offenders (15-18).

Studies (19-21) support findings that substance use and offending might have a mutual, but not simple relationship; drug and alcohol abuse can lower inhibitions against involvement in crimes or risky behavior. On the other hand, using substances might be a preferable way of escape when teenagers are dealing with personal or interpersonal difficulties, such as family conflicts and school problems. Moreover, offending might be a way to afford the

costs of substance use (22) and dependency. Drugs, tobacco and alcohol are often started and used in peer groups; just like most of the antisocial activities (in fact substance use is a component of antisocial behaviour). Both offending and using drugs may be considered as 'glue' activities of socialization and conformation with peer groups who are regular users, because they (peers) provide access, opportunity and reinforcement for the adolescent. Hereto, if members of the family and other adults use and tolerate tobacco (and sometimes reinforce the use) alcohol and drugs, or even if they are easily available for adolescents to obtain within the community, then using substances may be considered not to be illegal behavior from the adolescents' point of view.

Especially in Albania, similar to the other Balkan countries, alcohol and tobacco are culturally used substances among different age groups, and in various environments, so it becomes even more difficult for children, adolescents, and adults to develop an awareness of the many, (not just health related) risks that substance use brings.

Despite the laws (23,24) that prohibit selling and supplying tobacco and alcohol to persons under the age of 18, it is common to see Albanian adolescents smoking and drinking alcohol below the legal age, even around schools and in public places. Though Albania is ranked among the low prevalence countries for substance use in the 2011 European survey (25,26), statistics are still worrying. Six out of ten students (more boys than girls) had consumed at least one glass of alcohol by the age of 13, 32% of Albanian students questioned had consumed alcohol in the previous 30 days, compared to the average of 57% of the European sample surveyed. Because of the lack of periodic assessments (27) of this population (it was the first time Albania participated in the above mentioned European study), it becomes difficult to draw a significant and supported conclusion on the nature, prevalence and cohort trajectory of substance use among Albanian adolescents, especially those who are exposed to other risk factors.

The objective of this research was to assess the nature and prevalence of substance use, as one of the risk factors of juvenile delinquency, and to show associations between lifetime use, onset age of substance use and delinquency variables, in a sample of institutionalized juvenile male offenders.

Methods

Research period

The article presents some of the results of a ten-month study covering a period from May 2012 to February 2013, involving the Albanian Juvenile Detention Institute, Kavaja, Albania.

Instrument and study population

A structured assessment instrument (28-30) was used to interview a sample of 150 male offenders (62% of juveniles detained in overall Albanian prison system during that period) at the time held in the Juvenile Offenders Institute. This is the only institution in Albania that detains minors (males only) from all around the country, who have been sentenced, or are held in a pre-trial period for committing offences. For that reason, this institution was considered as the appropriate place to sample the population of juvenile offenders and then to carry out interviews. The institute has four sections, with the juveniles being divided mostly according to their age, the type of crime they had committed, or if they are recidivists or not.

Subjects were randomly selected from monthly lists of names presented by the institution staff, to be then approached and asked if they would like to participate. Participation in the interviews was voluntary and confidential. Following the selection, the juveniles were given an explanation on the purpose of the research and ensuring the confidentiality of their responses. The interviews, with the consent of each of the participants and the psychologist of the institution, were paper recorded, and carried out by just the researcher in a separate room inside the institution. Each interview lasted 45 to 60 minutes on the average. Data was coded and processed using SPSS (Statistical Package for Social Sciences), version 21.

The interviewing instrument is composed of 12 domains; each of them with dichotomic variables, representing static and dynamic risk factors, ranging from individual, family, peers, community, education, substance use, mental and physical health. Besides this information, socio-demographic data related to the criminal history of the juvenile, was also gathered. Substance use domain (18 items) attested a good internal consistency

(Cronbach $\alpha = .82$) and reflects juvenile delinquent history of substance use and his attitudes and choices related to this.

Statistical analysis

In this research, the substance use considered included alcohol, tobacco and drugs, such as cannabis, heroin and cocaine. Univariate analysis of substance use variables was used to determine the prevalence and the onset age of using. Correlation analysis was used between substance use variables and type of the offence, onset age of offending, age of first reprimand from the police and number of previous disposals or convictions, considered as dependent variables, to determine the association and significance.

Results

Mean age of study participants was 16.5 ± 0.82 and mode was 17 years. Of the overall study participants, 28% were from ethnic minorities and 72% were white. Only 6.7% reported their current offence to be drug law violence, mainly for selling cannabis or other types of drugs. Mean age of their first offending is 13.7 years, with more than 57% having had their first reprimand from the police at 14 or below. 66.7% of them had offended in a group, with peers or older friends. More than half of them had lived with family members with criminal history, such as drug dealing and cultivating marijuana. 40.7% of the participants had family members with alcohol use history (drinking more than twice weekly), whilst siblings of 7.3% of them used cannabis regularly. Nearly 61% of them reported living in a neighborhood with a high drugs availability (selling and using), and 67% perceived their community as one with a high level of crime, and with little or no access to pro-social activities. 90% reported having friends involved in criminal or antisocial behavior.

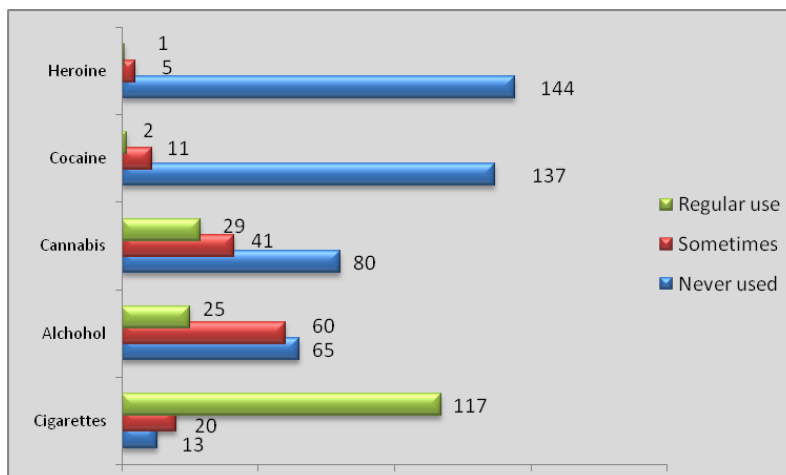
As shown in Figure 1, cigarette smoking on a regular basis (more than 1 pack a day), or occasionally, was a common habit for more than 90% of juveniles. According to ESPAD, Albanian boys (15-18 years old and non delinquents) had a prevalence of 55% life time smoking, a significant difference compared to 90.7% of the juvenile delinquents interviewed. A total of 57% reported regularly consuming alcohol,

and less than a half (46.7%) of life time cannabis use; almost 5 times more than the boys of that age range, who had never been jailed or detained. As for heroin and cocaine, the data reported was low

and not significant.

Table 1 summarizes general statistics related to substance use variables (N=150). Mean onset age of cigarette smoking was low (range 5-17). Alcohol

Figure 1. Frequency of lifetime substance use



mean onset age was just above that of smoking, but still low. Most juveniles who had used cannabis, said that when they first used it they were 14 years old (Mean=14.1; SD=1.9; range=8-17). Around 5% of them reported to have taken more than one type of drug, but they (28%) had been engaged in risky behaviour like selling or obtaining drugs, or

offending to be able to afford to buy the illicit substances (16%). Answers to the last items are to be taken with suspicion, because of the illegal nature of these actions; reporting the truth would have aggravated their offending conditions.

No significant differences were found between respondents of different ethnicities, or geographical

Table 1. Distribution of age of onset and other substance use variables

	Life time use (n%)	Age at first use Mean (\pm SD) / n (%)	Range (years)
Cigarettes	137 (90.7)	12.4 \pm 2.5	5-17
Alcohol	86 (57.4)	13.6 \pm 1.6	9-16
Cannabis	70 (46.7)	14.1 \pm 1.9	8-17
Practices which put him in risk		8 (5.3)	
Considers substance use as positive and/or essential to life		31 (20.7)	
Negative effects on education, relationships, daily functioning		29 (19.3)	
Offending to obtain money for substances		24 (16)	
Supplying/selling drugs		42 (28)	
Engaged in antisocial behaviour to use/obtain drugs		40 (26.7)	

areas of their provenience.

To determine the relation between substances, bivariate correlation analysis was used (Table 2), which showed a significant and moderate positive association between cigarette use, alcohol and cannabis use (Spearman $\rho=0.255$ $P=0.002$; $\rho=0.390$; $P < 0.001$ and $\rho=0.392$; $P < 0.001$,

respectively) at the 0.01 level of confidence (two-tailed). Early smoking of cigarettes correlates positively and significantly with both early smoking of cannabis and the early drinking of alcohol ($r=0.497$ and $r=0.438$). The considering of substance use as positive and essential in young offenders' life has correlated moderately with all

Table 2. Statistical correlations between substance use variables

Variable	Lifetime use of cigarettes	Onset age of smoking [†]	Lifetime use of cannabis	Onset age of using cannabis [†]	Lifetime drinking alcohol	Onset age of drinking alcohol [†]
Considers substance use as positive and/or essential to life	0.257**	0.288**	0.620**	0.321**	0.308**	0.254*
Lifetime use of cigarettes	-	-0.307**	0.390**	-	0.255**	-
Onset age of smoking	-	-	-0.427**	0.358**	-0.282**	0.438**
Onset age of using cannabis	-	-	-0.399**	-	-	0.497**
Lifetime use of cannabis	-	-	-	-	0.392**	-

[†] Pearson coefficient was used for correlating numerical variables and Spearman for nominal variables.

* Correlation is significant at the 0.05 level (2-tailed). ** Correlation is significant at the 0.01 level (2-tailed).

Table 3. Correlation between substance use and variables of delinquency/antisocial behaviours

Variable	Onset age [†] of smoking	Onset age of drinking alcohol [†]	Onset age of using cannabis [†]	Lifetime use of cannabis	Lifetime use of cigarettes	Lifetime drinking alcohol
Onset age criminal behavior	0.447** ($P < 0.01$)	0.377** ($P < 0.01$)	0.454** ($P < 0.01$)	-0.301** ($P < 0.01$)	-0.157	-0.101
Offence typology	0.084	0.086	0.077	0.032	-0.097	0.026
Age first reprimand	0.357** ($P < 0.01$)	0.233*	0.345**	-0.331** ($P < 0.01$)	-0.230**	-0.003
Single vs. † group offence	0.017	-0.008	-0.086	0.109	0.155	0.042
Nb. previous convictions	-0.124	-0.229*	-0.144	0.164*	0.153	0.226**
Negative effects on daily functioning	0.366** ($P < 0.01$)	0.205	0.428** ($P < 0.01$)	0.522** ($P < 0.01$)	0.221**	0.337** ($P < 0.01$)
Offending to obtain money for substances	0.230**	0.307** ($P < 0.01$)	0.483** ($P < 0.01$)	0.365**	0.256**	0.186
Supplying/selling drugs	0.199*	0.151	0.178	0.499** ($P < 0.01$)	0.247** ($P < 0.01$)	0.231** ($P < 0.01$)
Engaged in antisocial behaviours to use/obtain drugs	0.350** ($P < 0.01$)	0.312**	0.482** ($P < 0.01$)	0.608** ($P < 0.01$)	0.244**	0.291** ($P < 0.01$)

[†] Pearson coefficient was used for correlating numerical variables and Spearman for nominal variables.

* Correlation is significant at the 0.05 level (2-tailed). ** Correlation is significant at the 0.01 level (2-tailed).

substance use variables, but particularly strong with lifetime using cannabis.

To determine association between variables of delinquency and substance use, correlation analysis

was used (Table 3). As expected, substance use (both onset age and lifetime use) were significantly associated with delinquency variables taken into analysis. The onset age of the criminal behaviour and

first conviction correlated moderately, but significantly ($r=0.447$; $r=0.377$; $r=0.454$; $r=0.357$; $r=Z0.345$; $P<0.01$) with the onset age of all three substances. Substance use variables are not associated with the 'type of offences', or with 'alone vs. group offending', suggesting that there is no difference between property and violent offences, and group or solitary offending, if considering lifetime and onset age of substance. Using substances has had negative consequences on daily activities, family and

peer relationships for the respondents; this variable is significant and associated strongly and moderately ($r=0.366$; $r=0.428$ and $\rho=0.522$; $\rho=0.221$; $\rho=0.337$) with both lifetime use and onset age of all three substances (except alcohol onset age).

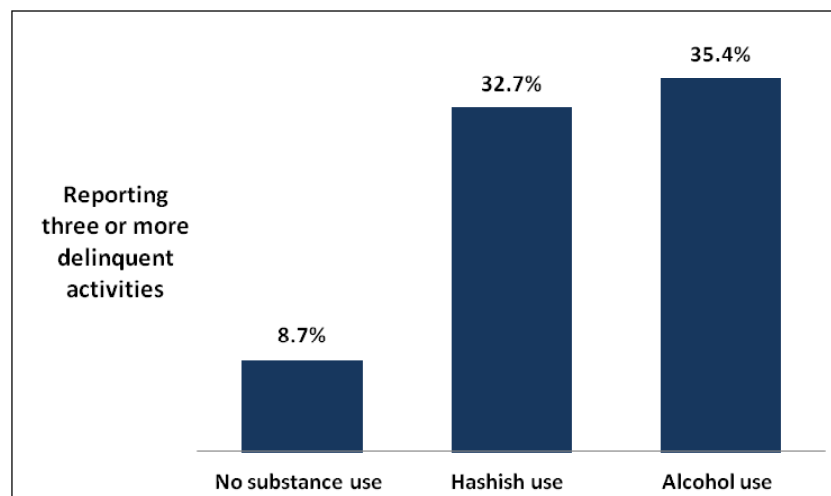
Figure 2 suggests that respondents who report using alcohol and cannabis, are about four times likelier to be involved in three or more delinquent activities than those who do not use these substances at all (35.4% and 32.7% vs. 8.7%).

Discussion

The purpose of this article is to describe the extent and the patterns of substance use found among

juvenile delinquent males and to analyse correlations between substance use variables and delinquency

Figure 2. Delinquency and substance use



factors.

Results show that levels of substance use are higher among delinquent than non delinquent boys; there is a higher prevalence of smoking cigarettes (90% of the participants were regular to moderate smokers), followed by alcohol and cannabis use. The percentage of use of other illicit substances was low (4% had used heroin and 8.6% cocaine) and with no significant correlation with the variables of research. Thus, there is no relevant indication for multiple drug use, probably because of the unaffordable costs of these substances and the limited availability within their peer groups or neighbourhood.

Positive correlation coefficients between lifetime smoking and lifetime use of alcohol and cannabis,

suggest that juveniles, who report a high use of smoking cigarettes, are also likely to use alcohol and cannabis at a high level. This, together with a positive consideration of substance use and the tolerant environment of peers and family members, who are substance users, suggest that they are at a great risk of developing substance abuse and dependency further on in life, and in the involvement in criminal activities.

The onset age of smoking is also a worrisome indicator; almost half of the juveniles interviewed, had started smoking at the age of 13 or younger (59.6%), significantly higher than the national percentage of 4% (boys only) and the ESPAD European average of 7%.

Although data from the sample did not indicate for

drug-related crimes (6.7% convicted for drug dealing), the majority of juveniles reported having used illegal drugs and alcohol during the period of their criminal history. The statistical results show strong and significant correlation between the juvenile crime and lifetime substance use variables, indicating that there are co-occurring problem behaviours when dealing with juvenile offenders; these findings are consistent with conclusions drawn by several surveys (31,32).

Moderate to strong and significant ($P < 0.01$) correlation coefficients between an early involvement (12-14 years old) with all three illicit substances and delinquent variables support the research (33) findings that the younger the child is when he (or she) first starts smoking, drinking alcohol and using drugs, the greater the risks for engagement in juvenile

crime and antisocial behaviour, and the likelier he is to be arrested or detained before entering adulthood.

Using illicit substances increases significantly ($\rho = 0.449$; $\rho = 0.608$; $P < 0.01$) with participation in delinquent and antisocial activities, such as gambling, vagrancy, vandalism, weapon dealing, motor vehicle theft and drug selling, in order to afford cigarettes, drugs or alcohol.

In conclusion, given the significant associations between the onset and lifetime substance use in early adolescence and the development of criminal behaviours, implementing early substance use prevention strategies among Albanian children and adolescents could result in long term juvenile justice prevention benefits, as well as a significant betterment of youth health conditions.

Conflicts of interest: None declared.

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