Self-Reported Juvenile Delinquency in Switzerland in 2006: Overview and Explanations

Second International Self-reported Delinquency Survey: Swiss national survey (Swiss ISRD-2), FNS n°100012-109265/1

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Introduction

This paper presents the results of the second national self-reported juvenile delinquency survey conducted in Switzerland. The survey was carried out using the standardized questionnaire developed for the ISRD2, to which a few questions were added. This assures comparability with the other participating countries. At the same time, the analysis of crime trends will also be possible because Switzerland participated in the first International Self-Reported Delinquency study (ISRD1) that took place in 1992. It must be mentioned that in the meantime no national surveys were conducted, but some cantonal or city surveys took place (e.g. in the cantons of Zurich and Vaud). The first part of this paper includes a brief socio-demographic and economic description of the country, while the rest of the paper is dedicated to the presentation of the methodology applied in Switzerland and the main results of the survey.

1 Demographic and economic characteristics of Switzerland[1]

Switzerland is a small country, with a surface of approximately 41,285 square kilometres, of which 25.5% are non-productive. Woods make up 30.8% of the total territory, whilst agricultural surfaces count for 23.9%, and dwellings and built-up surfaces for 6.8%. When the total surface is considered, the population density is 182 inhabitants per square kilometre.
On December 31st, 2004, the resident population was 7,415,100, of which 20.6% were foreigners. Among them, Italians (19.8%) and citizens from Ex-Yugoslavia (22.7%) are the largest groups (Table 1). The languages spoken in Switzerland are Swiss-German (63.7%), French (20.4%), Italian (6.4%) and Romansh (0.5%).

Table 1: Nationality of foreign residents in Switzerland in 2004, in %

Country	%
Italy	19.8
Serbia and Montenegro	13.1
Macedonia	4.0
Bosnia-Herzegovina	2.9
Croatia	2.7
Portugal	10.5
Germany	9.6
Turkey	5.1
Spain	4.9
France	4.5
Austria	2.1
Other European Countries	7.4
Other continents	13.3

Source: Mémento statistique de la Suisse, p. 5, OFS 2006

The age distribution shows that population is ageing (Table 2). As in many other Western European countries, this is mainly due to an increase in life expectancy and a low fecundity rate.

[1] Mémento statistique de la Suisse et Annuaire statistique de la Suisse , Office Fédéral de la Statistique, 2006

Table 2: Age distribution in Switzerland in 2004

Age group	%
0-19	22.1
20-64	62.1
65 and more	15.8

Source: Annuaire statistique de la Suisse, p. 34, OFS 2006

The marriage rate is 5.3 per 1,000 inhabitants and the divorce rate is 2.4. In 2000, 6% of the households were single parent families.
In 2005, 56.1% of the resident population was employed, of which 55.5% were males and 44.5% females. The majority of the females (56.3%) were part-time workers, compared to only 10% of the men. According to economic sectors, 72.5% of the active population was employed in the tertiary sector, 23.7% in the secondary sector and 3.8% in the primary sector. The level of unemployment was extremely low over many decades, before increasing during the late 1990s to reach its highest level in 1997 (5.2%). This was followed by a decreased until 2001 (1.7%) and a new increase afterwards until reaching its current level of 3.8%. In 1992, the gross domestic product was approximately 31,000 US dollars per capita, while in 2005 it had increased up to 48,889.
As far as education is concerned, 18.0% of the population aged 25 to 64 had only primary education (compulsory school), 53.2% had secondary education acquired in high schools, professional schools or through an apprenticeship combined with school, 28.8% had higher education (diplomas from universities, technical schools or higher professional schools). The education level has increased over the last decades and is higher for males (Table 3).

Table 3: Education level in Switzerland in 2005

Age group	Gender	Compulsory school %	College / worker-schools %	University, technicum, superior worker-schools %
25-34	Females	15.2	59.6	25.2
	Males	11.0	51.7	37.3
35-44	Females	19.6	57.9	22.6
	Males	12.8	45.9	41.3
45-54	Females	25.0	55.7	19.3
	Males	13.6	48.7	37.6
55-64	Females	32.9	55.1	12.0
	Males	16.1	51.9	32.0
65 and more	Females	50.8	44.1	5.2
	Males	24.0	52.1	23.8
Total (25-64)		**18.0**	**53.2**	**28.8**

Source : Annuaire statistique de la Suisse, p.370 and Mémento statistique de la Suisse, p.28, OFS 2006

2 Swiss alcohol and drug policy[2]

2.1 Alcohol

There is no minimum drinking age legislation in Switzerland, although it is an offence to offer alcoholic drinks in excessive quantities to persons below 16 (section 136 of the Swiss criminal Code). Alcohols cannot be sold to juveniles below 18, except wine and cider which can be sold since they are 16 years old (18 in the Italian-speaking canton of Switzerland). Juveniles below 16 cannot order alcoholic drinks in restaurants or pubs, except if they are accompanied by adults. Alcohol advertising is prohibited on television and radio as well as any advertisement on that subject specially intended for minors. However, in practice, it is not extremely difficult for Swiss juveniles to get alcoholic drinks.

Switzerland has traditionally applied a policy of relative tolerance towards alcohol. It is a country with a culture of wine –due to its large production– and with a substantial alcohol consumption in international comparison. However, between 1992 and 2005, the Swiss annual per capita alcohol consumption went down from 10.1 litres to 8.5 (ISPA, 1993 et 2004). Indeed, Swiss alcohol consumption has been decreasing since the 1970s, but in the last few years there has been an increase in the use of alcohol among juveniles (see appendix I, Graph 1). Moderate drinking among juveniles has never been seen as problematic in Switzerland. Traditionally, as in most European wine producer countries, adolescents were allowed to taste small quantities of wine during family meals as a part of their social learning. However, this recent upward trend is not related to wine but to beer, alcopops and spirits, which are the kind of alcohols that are not consumed in family but with peers. Thus, it is a worrisome development.

According to a national survey of juveniles aged 11-16 (ISPA, 2004, see appendix I, Graphs 1 and 2), 16% of them regularly drank alcohol in 2002. This behaviour was less frequent for females than males. From 1986 to 2002, there was a substantial increase for weekly alcohol consumption and binge drinking among those aged 15 to 16.

As it has been mentioned before, beer drinking among juveniles is increasing, as well as alcopops and spirits consumption (usually used for binge drinking). Alcopops appeared in the market in 1996. Its use was not regulated by law until one year later when it was submitted to alcohol taxes –which led to an increase in its price– and forbidden to persons under 18 years old. As a consequence, their prices increased and there was a reduction of their sales. However, in 1999, a unique tax rate –inferior to the one used before– was introduced and sales went up again.

2.2 Drugs

Concerning drugs, the traditional Swiss policy has been quite restrictive. However, in the 1990s the country introduced a new drug policy known as the policy of the "four pillars model". These four pillars are prevention; therapy and reintegration; harm reduction; and repression and control. Drug addicts are currently considered as ill people, while the criminal justice system focused is mainly engaged in the repression and control of drug trafficking. Since the introduction of this policy –which included methadone and heroin prescription programs– the consumption of hard drugs such as cocaine and heroin has been quite stable, but there has been an increase in the use of cannabis. Currently, the cultivation, sell,

[2] Data quoted from *Institut suisse de prévention de l'alcoolisme et autres toxicomanies, 2004*

consumption and possession of all drugs including cannabis (with a THC rate higher than 0.3) are forbidden.
Indeed, the congress even analyzed the possibility of legalizing cannabis in 2004, but it backed up, partly because some studies were showing that the percentage of active substance (THC) contained in cannabis was extremely high.
The drug legislation is more severely enforced in the French-speaking area of the country, but the life prevalence of cannabis consumption is not lower in the German part. Only the Italian speaking cantons shows a lower rate of cannabis consumption. According to ISPA data (2004), there was an increase in the prevalence and the frequency of cannabis consumption for people aged 15 to 39 between 1992 and 2002. These data also reveal that at age 15-16, about 50% of the male and 40% of the female population had already tried cannabis. Juveniles rarely experiment other drugs at that age. From 1986 to 2002 (see appendix I, Graphs 3 and 4), cannabis consumption of young people aged 15-16 in the category "multiple consumption of cannabis" has increased four times, while the increase is less impressive in the category "only one consumption".

3 Study design

3.1 Sampling method

The Swiss ISRD2 involves a national random sample of 3'000 male and female juveniles aged 13 to 15. This sampling procedure was preferred over the city-sampling procedure –used in most of the participating countries– because Switzerland is a small country and does not have any large city but only medium ones (the largest city, Zurich, has a population of less than 400'000 inhabitants). The sampling was drawn out of a list given by the Swiss Federal Statistical Office containing all school facilities (public and private) from 7th to 9th grade existing in each Swiss canton.
The first step consisted in a random selection of the cantons, taking their relative pupils' population into account. As the next step, schools were selected proportionally to the size of the student population within each school, in order to ensure equal probability of selection. Subsequently, and with the aim of having simultaneously a city sample that would allow comparisons with other countries using that approach, one urban and one half-urban canton had to be over-sampled. The cantons of Zurich and Ticino accepted. The last step consisted in a random selection of 3 classes in each school, one for each grade, regardless of the school track.
The school principals were then asked to provide the list of their classes from 7th to 9th grade. Four of the selected schools refused to participate in the survey. In two cases, the reasons given were legitimate in the sense that these schools figured in the samples of other research projects during the critical period. They were substituted by two other schools randomly selected within the same canton. Thus, the Swiss sample is composed of 70 schools (of which only two are private[3]) in 20 cantons, and 3648 interviews have been completed. 2549 questionnaires are in German, 806 in French and 293 in Italian.

[3] In Switzerland, private schools represent approximately 5% of all schools of the grades at steak. Taking size into account, two private schools in 70 matches their share in the Swiss educational system.

3.2 Data collection

Instead of the paper-pencil questionnaire used in most countries participating in the ISRD2, Switzerland used a computer questionnaire translated into French, German and Italian. The reason is that a randomized controlled test showed previously that data collection through Internet and paper-pencil instruments produced very similar prevalence and incidence rates of offending, substance use and victimization (Lucia, Herrmann, Killias, 2007). In addition, automatic recording in the Internet condition reduced inconsistent or erroneous indications. Further, this method allowed to reduce costs considerably, and improved cooperation with school staff due to the possibility to integrate questionnaire administration into ordinary computer lessons. In the end, 3551 interviews were conducted through the Internet. Due to technical problems, 97 interviews had to take place using paper-pencil instruments in the classroom and 65 questionnaires were lost.

Items on three topics have been added at the end of the questionnaire, namely about cruelty towards animals, hooliganism and bullying. The 2006 offence definitions being fairly similar to those used in the first ISRD conducted on a national sample in 1992, some comparisons of offending and victimization rates in 2006 compared with 1992 will be added.

As Switzerland is a federal country, the Department of Education of each of the 20 selected cantons had to be contacted and their agreement was necessary to get in touch with schools. All Departments contacted supported the project. Copies of their letters of support were sent to each school along with a letter from the Institute of Criminology and Criminal Law of the University of Lausanne requesting participation in the survey. Among 74 schools approached, only 2 refused to participate, and 2 more have been substituted.

Each school principal sent a letter (written by the Lausanne research team) to the parents describing the study briefly. Parents who did not want their children to participate were asked to inform the school of their decision (passive consent); children whose parents did not want them to participate were asked to inform the school's principal who made appropriate arrangements to keep these pupils busy during that time. However, there were no refusals.
The computer rooms of the schools were used for the survey. The interviewers were trained students from the Lausanne Institute of Criminology and Criminal Law for the Italian and the French areas of the country, and students from the University of Zurich for the German area. The interviewers were trained to present the survey and answer eventual pupils' questions in a standardized way. They also had to fill in the interviewer form. Due to the very low rate of absentees (6.3%) during the interviews, and given the schools excellent cooperation, no call-backs were carried out. The presence of a teacher during the survey was not mandatory and, most of the times, the teacher eventually present was the one in charge of computer lessons who, as a rule, is not particularly familiar with the pupils. For that reason, it was not possible to use the teacher questionnaire in Switzerland. However, some of the information on the school was collected through the interviewer form.

3.3 Validity and Bias

The validity of self-reported delinquency studies have been a matter of discussion since the first surveys were conducted in the 1940s. Research shows that self-reported delinquency are a valid measure of delinquency for teenagers as well as for some categories of offenders such as prison inmates or hard-drug addicts under heroin treatment (Aebi, 2006). As the current survey was conducted with student's 7th to 9th grade, it belongs to one of the categories for which the self-reported delinquency survey is considered as valid.
On the other hand, as there is no universal measure of delinquency, the validity of self reported delinquency studies has often been tested by comparing its results with other measures of delinquency, such as police or court records. No such comparisons were conducted for this study. In fact, current European personal data protection laws make such comparisons almost impossible.

The validity of a self-reported delinquency study can be established in an indirect way by comparing the logic of the answers given to the different questions. The tables presented in this report support the validity of the survey. As it will be seen, there are no contradictions between prevalence and incidence rates, less serious offences are
more frequent than serious offences, and "rare" offences remain rare.

In that context, it must be mentioned that the answers to the survey were carefully screened in order to spot and delete inconsistent answers as well as typing mistakes. Only a few answers belonged to these categories and they were deleted from the database and replaced by missing values.

Finally, no biases were found neither in the methodology nor in the concrete answers received. The use of the Internet method for the answers is recent but its validity has been corroborated by research (Lucia et al, 2007). At the same time, the use of a national sample reduces the bias that could be due to the choice of a particular city, that has been considered subjectively by the researcher as representative of other similar cities.

4 Prevalence of delinquency, problem behaviour and victimization

4.1 Life-time and last year prevalence rates in 2006 and 1992

The following Tables will give first the prevalence rates of substance use, victimization and offending in Switzerland in 2006. We then shall look at possible changes since 1992, when the first ISRD went into the field in Switzerland.

4.1.1 Overview of the results in 2006

In this section, we shall look at last year vs. life-time rates of the several problem behaviours and offences as well as of victimization experiences, and present the way these behaviours have been grouped to larger categories throughout this report.

Table 4*: *Life-Time and last month prevalence of alcohol and soft drug use (in %)

	life-time		last month	
	%	% missing	%	% missing
beer/wine	67.8	0.5	38.8	1.5
strong spirits	38.0	1.0	16.2	1.7
marijuana, hashish use	17.5	1.2	7.2	1.3

Unweighted n = 3648; weighted data; percentages based on valid cases

Table 5*: *Life-time and last month prevalence of risk factors (in %)

	life-time		last month [a]	
	%	% missing	%	% missing
alcohol total [b]	68.2	0.3	39.1	0.4
marijuana, hashish use	17.5	1.2	7.2	1.3
truancy	–	–	18.0	0.7
two risk factors present [c]	–	–	14.3	0.2

Unweighted n = 3648; weighted data; percentages based on valid cases

Truancy refers to the last year, whereas alcohol and drug use have been asked for the last month. There is no life-time prevalence for truancy.

b beer/wine and strong spirits

c "risk" assesses whether at least two of the following three behaviours have been reported: (1) Having drunken beer/wine or strong spirits at least once during the last month, (2) having used marijuana/hashish at least once during the last month, and (3) being truant at least once during the last year.

The preceding Tables show that alcohol use is fairly common, including use of strong spirits. Marijuana is also relatively wide-spread, although rates of last-month (i.e. regular?) are relatively low (7%). Truancy is also relatively frequent, particularly in comparison with the rates for 1992 (see below).

Table 6*: *Last year prevalence of victimization and reporting to the police (in %)

	victimization		reporting to the police [a]
	%	% missing	%
robbery/ext.	2.3	0.6	22.3
assault	2.4	0.9	32.4
theft	22.6	0.8	32.3
bullying	12.4	1.0	7.8

Unweighted n = 3648; weighted data; percentages based on valid cases

[a] percentage based on number of victims; no answer: no reporting assumed

The prevalence rates of victimization are lower than, according to the Swiss Crime Survey of 2005, for the respondents aged 20 or younger (Killias, Haymoz, Lamon 2007). However, the rates of reporting to the police are comparable to what is being found among adults.

Table 7*: *Life-time and last year prevalence of offences (in %)

	life time		last year [a]	
	%	% missing	%	% missing
group fight	15.5	1.3	8.4	1.7
carrying a weapon	11.1	1.3	7.8	1.5
Assault	2.9	1.5	1.2	1.6
pick pocketing/snatching	2.4	0.9	1.1	0.9
robbery/extortion	1.4	1.1	0.9	1.1
Vandalism	13.4	0.9	7.8	1.2
Shoplifting	23.6	0.6	9.1	1.0
bicycle/motor bike theft	6.6	0.8	3.7	0.9
car break	2.7	1.1	1.0	1.1
burglary	2.0	1.1	0.9	1.2
car theft	0.8	1.0	0.4	1.1
computer hacking	7.3	1.1	5.3	1.2
drug dealing	3.7	1.2	2.8	1.4
XTC/speed use	1.3	1.1	0.4	1.2
LSD/heroin/cocaine use	1.4	1.1	0.4	1.2

Unweighted n = 3648; weighted data; percentages based on valid cases

[a] XTC/speed and LSD/heroine use: last month prevalence

In order to have more reliable rates of offending, we have grouped the several offences to larger categories of aggregated offences. The purpose has always been to keep separate the frequent, often rather trivial offences, and the rare and usually more serious behaviours that may earn some closer attention during the analysis. The ways the several offences have been grouped will be explained in the appendix IV. All offences in the instrument have been taken into account, except computer downloading (Q 59) that did not include illegal downloading of files.

Table 8*: *Life-time and last month prevalence of aggregated offences (in %)

	life-time		last year [a]	
	%	% missing	%	% missing
freq. violent offences [b]	21.0	0.5	13.1	0.5
rare violent offences [c]	5.5	0.4	2.6	0.4
vandalism	13.4	0.9	7.8	1.2
shoplifting	23.6	0.6	9.1	1.0
rare property offences [d]	8.9	0.3	4.8	0.3
computer hacking	7.3	1.1	5.3	1.2
drug dealing	3.7	1.2	2.8	1.4
hard drugs use [e]	2.0	0.3	0.6	0.3

Unweighted n = 3648; weighted data; percentages based on valid cases

[a] hard drug use: last month prevalence

[b] group fight and carrying a weapon

[c] pick pocketing/snatching, robbery/extortion, and assault

[d] burglary, bicycle/motor bike theft, car theft, and car break

[e] XTC/speed and LSD/heroine/cocaine use

4.1.2 Comparison between 2006 and 1992

In 1992, the first International Self-report Survey was conducted in 12 countries including Switzerland. At that time, the Swiss study was based on a national probability sample of juveniles aged 14 to 20 (Killias, Villettaz, Rabasa 1994). Interviews took place face to face, mostly at the respondent's home. In the following Table, we shall give an overview of rates of self-reported delinquency in 1992 compared to 2006. The comparison will be limited to offences whose definition is comparable and where similar or identical time frames have been used. (Unfortunately, the reference period for drug use and victimizations was very different, and some offences, such as vandalism, were measured in substantially different ways.) In order to standardize the age composition, only respondents aged 14 to 17 have been used in both surveys. A list of offence definitions will be given in the appendix V.

Table 9: Last year prevalence rates (in %, weighted data) of delinquent behaviour, 1992 and 2006 (respondents aged 14 to 17)

Offences	*1992 (N=529)*	*2006 (N=2'787)*
Shoplifting	15.3	9.3
Burglary	0.6	1.0
Vehicle theft	1.5	4.5
Breaking into a car	1.0	1.1
Pick pocketing/snatching	0.4	1.1
Robbery/extortion	0.0	1.0
Carrying a weapon	9.5	8.5
Group fight	10.0	8.5
Assault	0.5	1.4
Selling drugs	1.5	3.3

The rates for 2006 deviate slightly from those in Table 7, due to the exclusion of respondents below age 14. Overall, the comparison shows that some offences have remained stable or even decreased, such as breaking into a car, shoplifting and carrying a weapon. The reason may be that breaking into a car and shoplifting may have become substantially more complicated over the last 15 years due to improved technologies of protection. In connection with weapons, it is possible that more recent legislation, effective since 1999 that outlaws carrying weapons in public, may have reduced this behaviour. On a more general scale, the ban on carrying weapons has had a substantial effect (Burlet, Pellet and Viredaz 2007), and it is possible that this affected also the age-groups studied here.

For the remaining offences, the data suggest a clear upward trend, particularly for selling drugs, vehicle thefts and violent offences, such as assault and robbery including "mugging" (snatching). Of course, the possibility has always to be kept in mind that changing offence definitions may have affected rates. In the case of the offences showing a strong increase, this does not seem to have occurred, however, as the definitions explained in the appendix V illustrate. Another possibility is that interview methods (i.e. Internet in 2006, face to face in 1992) may have elicited more positive answers in 2006 than in 1992. However, as Table 9 illustrates, not all rates have gone up, pointing to the validity of the comparison. Beyond the inconsistency of trends, what is known from the literature does not support the idea that response behaviour is heavily affected by interview method (Lucia et al. 2007). It rather seems that questionnaire design and definitions (including temporal and spatial limitations) can make a major difference, as experiments conducted in several countries illustrate (Lucia et al. 2007). In these respects, the questionnaires of 2006 and 1992 were perfectly comparable in design.

In sum, the increase of violent offences, as illustrated by Table 9, matches parallel observations based not only on police statistics, but also on victimization surveys conducted regularly in Switzerland since 1984 (Killias, Haymoz and Lamon, 2007). The trend observed here is, looking at it in context, nothing more than an additional piece in a puzzle showing an increasing trend in violence in Switzerland over 20 years. Recent evaluations have also pointed to the possibility that juvenile life-style, i.e. going out during late night hours and parental control over children's leisure-time, may have substantially changed since 1992 (Lucia et al., forthcoming). Thus, the increase in interpersonal violence is not only well

documented, but also fairly plausible given the trend in factors usually associated with juvenile delinquency.

4.2 Prevalence rates in the canton of Zurich and in the rest of the country

In order to have some basic idea about the frequency of different behavioural problems in a more urban area as well as on the national level, the following Tables will present the national data (without the Canton of Zürich) along those for the canton of Zurich. The data used are weighted.

Table 10*: *Life-time and last month prevalence of alcohol and soft drug use (large city sample vs. national sample), in %.

	Canton of Zurich (unweighted *n* =981)				Rest of Switzerland (unweighted *n* =2467)			
	life time		last month		life time		last month	
	%	% miss.	%	% miss.	%	% miss.	%	% miss.
beer/wine	65.1	0.3	35.9	0.8	68.3	0.6	39.9	1.7
strong spirits	35.6	1.2	17.5	1.7	38.4	0.9	15.9	1.7
marijuana/hashish use	19.2	1.4	8.2	1.6	17.2	1.1	7.0	1.2

Weighted data; percentages based on valid cases

Table 11*: *Life-time and last month prevalence of risk factors (large city sample vs. rest of sample), in %

	Canton of Zurich (unweighted *n* =981)				Rest of Switzerland (unweighted *n* =2467)			
	life time		last month [a]		life time		last month [a]	
	%	% miss.	%	% miss.	%	% miss.	%	% miss.
alcohol total [b]	65.4	0.3	36.3	0.4	68.7	0.2	39.7	0.4
marijuana, hashish use	19.2	1.4	8.2	1.6	17.2	1.1	7.0	1.2
Truancy	–	–	24.7	0.9	–	–	16.8	0.6
two risk factors present [c]	–	–	17.9	0.2	–	–	13.7	0.2

Weighted data; percentages based on valid cases

[a] Truancy refers to the last year, whereas alcohol and drug use have been asked for the last month. There is no life-time prevalence for truancy.

[b] beer/wine and strong spirits

[c] "risk" assesses whether at least two of the following three behaviours have been reported: (1) Having drunken beer/wine or strong spirits at least once during the last month, (2) having used marijuana/hashish at least once during the last month, and (3) being truant at least once during the last year.

As the data in the two preceding Tables reveal, adolescents in the urban area of the canton of Zurich use substances at very similar rates as those in Switzerland overall. However, truancy is remarkably more frequent in the Zurich area, probably as a result of a more outgoing life-style among urban youths.

Table 12*: *Last year prevalence of victimization and reporting to the police (large city sample vs. rest of sample), in %

	Canton of Zurich (unweighted *n* =981)			Rest of Switzerland (unweighted *n* =2467)		
	victimization		reporting to the police [a]	victimization		reporting to the police [a]
	%	% miss.	%	%	% miss.	%
robbery/ext.	4.6	0.4	22.2	1.8	0.6	22.4
assault	2.7	0.8	34.6	2.3	0.9	31.9
theft	27.9	0.8	29.5	21.6	0.7	32.9
bullying	11.0	1.2	5.6	12.7	1.0	8.1

Weighted data; percentages based on valid cases

a percentage based on number of victims; no answer: no reporting assumed

The data show that urban youth are no more often victims of bullying than those in Switzerland in general. Theft as a relatively wide-spread experience is not dramatically more

frequent among adolescents in Zurich. However, they are far more often victims of robbery and extortion, an indication that this kind of victimization is far more frequent in areas with more outdoor-leisure time activities. Rates of assault are, again, more similar in the national as well as in the Zurich sample. Reporting to the police is very similar in Zurich as well as in Switzerland in general.

Table 13*: *Life-time and last year prevalence of offences (in %)

	Canton of Zurich (unweighted *n* =981)				Rest of Switzerland (unweighted *n* =2467)			
	life time		last year [a]		life time		last year [a]	
	%	% miss.	%	% miss.	%	% miss.	%	% miss.
group fight	15.5	2.1	8.7	2.4	15.4	1.1	8.3	1.5
carrying a weapon	11.1	1.3	7.8	1.6	11.1	1.2	7.8	1.5
assault	3.6	1.6	2.0	1.7	2.7	1.4	1.0	1.5
pick pocketing/snatching	3.4	1.4	2.0	1.4	2.3	0.8	0.9	0.9
robbery/extortion	2.3	1.5	1.4	1.5	1.3	1.0	0.8	1.0
vandalism	16.0	1.4	10.1	1.4	13.0	0.8	7.3	1.1
shoplifting	23.5	1.1	8.4	1.2	23.6	0.5	9.3	0.9
bicycle/motor bike theft	6.8	1.3	4.2	1.6	6.5	0.7	3.6	0.8
car break	3.2	1.4	1.6	1.4	2.6	1.1	0.9	1.1
burglary	2.1	1.4	1.0	1.5	2.0	1.1	0.8	1.2
car theft	1.4	1.0	0.6	1.3	0.7	1.0	0.4	1.1
computer hacking	7.7	1.4	5.1	1.4	7.3	1.1	5.3	1.2
drug dealing	4.1	1.9	3.2	1.9	3.6	1.1	2.7	1.3
XTC/speed use	1.6	1.4	0.9	1.4	1.3	1.1	0.3	1.2
LSD/heroin/cocaine use	1.4	1.5	0.6	1.7	1.4	1.1	0.3	1.1

Weighted data; percentages based on valid cases

a XTC/speed and LSD/heroine use: last month prevalence

The detailed indications show very similar rates of frequent self-reported behaviours, such as group fights, carrying a weapon, vandalism, shoplifting, computer offences and drug use. However, adolescents in Zurich admit considerably more often – as a rule, about twice as often – having assaulted other persons, having snatched bags or other items or having robbed or extorted somebody. When the offences are grouped to larger categories, all differences disappear, with the exception of rare violent offences committed during the last year.

Table 14*: *Life-time and last year prevalence of aggregated offences (large city sample vs. rest of sample), in %

	Canton of Zurich (unweighted *n* =981)				Rest of Switzerland (unweighted *n* =2467)			
	life time		last year [a]		life time		last year [a]	
	%	% miss.	%	% miss.	%	% miss.	%	% miss.
freq. violent offences [b]	20.7	0.6	12.7	0.6	21.1	0.5	13.2	0.5
rare violent offences [c]	7.2	0.6	4.4	0.6	5.1	0.4	2.3	0.4
vandalism	16.0	1.4	10.1	1.4	13.0	0.8	7.3	1.1
Shoplifting	23.5	1.1	8.4	1.2	23.6	0.5	9.3	0.9
rare property offences [d]	8.8	0.4	5.2	0.4	8.9	0.2	4.7	0.2
computer hacking	7.7	1.4	5.1	1.4	7.3	1.1	5.3	1.2
drug dealing	4.1	1.9	3.2	1.9	3.6	1.1	2.7	1.3
hard drugs use [e]	2.0	0.4	1.0	0.4	2.0	0.3	0.5	0.3

Weighted data; percentages based on valid cases

[a] hard drug use: last month prevalence

[b] group fight and carrying a weapon

[c] pick pocketing/snatching, robbery/extortion, and assault

[d] burglary, bicycle/motor bike theft, car theft, and car break

[e] XTC/speed and LSD/heroine/cocaine use

4.3 Social background variables and delinquency, problem behaviour and victimization

4.3.1 Correlations with the grade

Grade is obviously associated with age. Therefore, any behaviour that increases with age will be associated also with grade. This is particularly true for substance use, as the following Table shows.

Table 15*: *Grade and last month prevalence of substance use (in %)

	Grade 7	Grade 8	Grade 9
alcohol total [a]	23.9	38.9	55.3
marijuana, hashish use	2.5	8.5	10.7
hard drugs use [b]	0.3	0.6	0.8

Weighted data; percentages based on valid cases

a beer/wine and strong spirits

b XTC/speed and LSD/heroine/cocaine use

Alcohol: p≤0.001 between all three grades
Marijuana, hashish use: p≤0.001 between grades 7 and 8 and between grades 7 and 9

Table 16*: *Grade and last year prevalence of aggregated offences (in %)

	Grade 7	Grade 8	Grade 9
freq. violent offences [a]	10.2	15.0	14.3
rare violent offences [b]	2.3	2.8	2.7
vandalism	6.1	8.5	8.7
shoplifting	7.9	10.0	9.4
rare property offences [c]	3.0	5.5	5.9
computer hacking	4.5	6.3	4.9
drug dealing	0.6	3.2	4.6

Weighted data; percentages based on valid cases

[a] group fight and carrying a weapon

[b] pick pocketing/snatching, robbery/extortion, and assault

[c] burglary, bicycle/motor bike theft, car theft, and car break

Frequent violent offences: p≤0.01 between grades 7 and 9 ; p≤0.001 between grades 7 and 8.
Rare property offences: p≤0.01 between grades 7 and 8 ; p≤0.001 between grades 7 et 9
Vandalism: p≤0.05 between grades 7 and 8 and between grades 7 and 9
Computer hacking: p≤0.05 between grades 7 and 8
Drug dealing: p≤0.001 between grades 7 and 8 and between grades 7 and 9

Whereas most offending behaviours continue to increase, certain forms of victimization, such as bullying seem to decrease with age and grade.

Table 17*: *Grade and last year prevalence of victimization (in %)

	Grade 7	Grade 8	Grade 9
robbery/ext.	2.2	2.9	1.6
assault	2.0	1.9	3.2
theft	22.7	23.5	21.4
bullying	15.1	12.1	10.1

Weighted data; percentages based on valid cases

Bullying: $p \leq 0.05$ between grades 7 and 8; $p \leq 0.001$ between grades 7 and 9.

4.3.2 The role of gender

Substance use is, as the following Table shows, more frequent among male respondents. However, the gender gap varies across substances. For alcohol, the difference is moderate, it is substantial for cannabis use, and dramatic when it comes to hard drugs.

Table 18*: *Gender and last month prevalence of substance use (in %)

	Female	Male	
alcohol total [a]	36.1	42.3	***
marijuana, hashish use	5.0	9.4	***
hard drugs use [b]	0.1	1.0	***

Weighted data; percentages based on valid cases, * $p \leq 0.05$, ** $p \leq 0.01$,*** $p \leq 0.001$

a beer/wine and strong spirits

b XTC/speed and LSD/heroine/cocaine use

However, self-reported offending is, with the exception of shop-lifting, far more frequent among male respondents. This is a remarkable shift compared with the results of the 1992 ISRD-1 when rates did by far not differ as much between boys and girls (Killias, Villettaz and Rabasa, 1994).

Interestingly, males are far more often involved even in offences where the gender role seems, at first sight, less obvious, such as with computer hacking.

Table 19*: *Gender and last year prevalence of aggregated offences (in %)

	Female	Male	
freq. violent offences [a]	5.0	21.3	***
rare violent offences [b]	1.2	4.0	***
vandalism	4.7	10.9	***
shoplifting	8.8	9.4	Ns
rare property offences [c]	2.3	7.3	***
computer hacking	1.9	8.5	***
drug dealing	1.1	4.4	***

Weighted data; percentages based on valid cases, * p≤0.05, ** p≤0.01,*** p≤0.001

[a] group fight and carrying a weapon

[b] pick pocketing/snatching, robbery/extortion, and assault

[c] burglary, bicycle/motor bike theft, car theft, and car break

Girls and boys experience bullying and theft at similar rates, whereas boys are more often victims of violent offences. This matches their higher involvement in self-reported violent acts, as well as presumably their greater involvement in outdoor activities.

Table 20*: *Gender and last year prevalence of victimization (in %)

	Female	Male	
robbery/ext.	1.4	3.1	**
Assault	1.8	2.8	*
Theft	21.8	23.2	Ns
Bullying	13.5	11.4	Ns

Weighted data; percentages based on valid cases, , * p≤0.05, ** p≤0.01,*** p≤0.001

4.3.3 The role of age

It is well known that delinquency and other forms of problem behaviour change with age. It is, therefore, not surprising that alcohol and cannabis use increase consistently and strongly with age. Drug use does not seem to follow that pattern, but it is possible that younger children do more often try out certain substances that might qualify for hard drugs, whereas those who say using them at a later age do so perhaps more frequently. More detailed analyses will allow studying hard drug use in different respects.

It should be kept in mind, however, that the usual age for children in grades 7 to 9 is 12/13 to 15. The oldest age category (above 15 and up to 17) may, therefore, include many children with a somewhat disturbed school career. The high rates in the oldest age-group according to all of the following Tables may be related, therefore, to the group's more problematic background rather than to an age effect.

Table 21*: *Age and last month prevalence of substance use (in %)

	12 years old	13 years old	14 years old	15-17 years old
alcohol total [a]	9.9	20.4	32.6	53.5
marijuana, hashish use	2.2	1.6	5.4	11.3
hard drugs use [b]	2.2	0.4	0.1	0.9

Weighted data; percentages based on valid cases

a beer/wine and strong spirits

b XTC/speed and LSD/heroine/cocaine use

Hard drugs use: 2 cells (25.0) have expected counts of less than 5

Alcohol: $p \leq 0.001$ between all age-brackets (except between 12 ans and 13 $p \leq 0.01$)
Marijuana, hashish use: $p \leq 0.001$ between all age-brackets except between 12 and 13/14.

Keeping this reservation concerning the oldest age-group in mind, offending rates do not seem to increase dramatically with age or at least not between ages 12 and 14.

Table 22*: *Age and last year prevalence of aggregated offences (in %)

	12 years old	13 years old	14 years old	15-17 years old
freq. violent offences [a]	10.9	11.2	11.9	15.1
rare violent offences [b]	2.2	2.0	2.5	3.1
vandalism	2.2	6.6	7.3	8.9
shoplifting	6.6	8.8	9.1	9.5
rare property offences [c]	4.4	2.4	4.1	6.3
computer hacking	4.4	4.9	5.8	5.1
drug dealing	3.3	0.6	2.0	4.3

Weighted data; percentages based on valid cases

[a] group fight and carrying a weapon

[b] pick pocketing/snatching, robbery/extortion, and assault

[c] burglary, bicycle/motor bike theft, car theft, and car break

Rare violent offences: 1 cell (12.5) have expected counts of less than 5
Rare property offences: 1 cell (12.5) have expected counts of less than 5
Computer hacking: 1 cell (12.5) have expected counts of less than 5
Drug dealing: 1 cell (12.5) have expected counts of less than 5

Frequent violent offences: p≤0.01 between 13 and 15-17; p≤0.05 between 14 and 15-17
Vandalism: p≤0.05 between 12 and13; p≤0.01 between 12 and 14; p≤0.001 between 12 and 15-17
Rare property offences: p≤0.05 between 13 and 14; p≤0.01 between 14 and 15-17

Concerning victimization, the following Table shows a surprising stability over the several age-groups. It may not be a surprise that bullying decreases with age. However, it is noteworthy that violent offences, such as robbery and extortion or assault, seem to concern the youngest age-groups disproportionately.

Table 23*: *Age and last year prevalence of victimization (in %)

	12 years old	13 years old	14 years old	15-17 years old
robbery/ext.	3.4	1.7	2.4	2.3
assault	2.3	2.0	1.5	3.1
theft	23.3	22.0	22.7	22.8
bullying	16.9	14.6	12.2	11.5

Weighted data; percentages based on valid cases

Robbery, assault: 1 cell (12.5) have expected count less than 5

Assault: p≤0.01 between 15-17 and 14
Bullying: p≤0.05 between 15-17 and 13

4.3.4 Migrant background

In the present study, several variables have been used to assess respondents' history of migration. In this chapter, we shall consider as "non-migrant" any respondent who has been born in Switzerland and whose parents were both born in Switzerland as well. A respondent born abroad is also considered as non-migrant if one or both of his parents were born in Switzerland. A "second generation migrant" is a person born in Switzerland with one or both of his parents born abroad. A "first generation migrant" is a respondent who was born abroad with none of his parents born in Switzerland.

The following Tables reveal important differences between these three categories, thus illustrating the usefulness of these differentiations. In the next Table, it becomes obvious that alcohol use is far less common among more recent migrants. With cannabis and hard drugs, the differences are modest.

Table 24*: *Migrant background and last month prevalence of substance use (in %)

	Not migrant	2nd generation migrant	1st generation migrant
alcohol total [a]	42.5	35.7	29.4
marijuana, hashish use	6.8	8.3	6.4
hard drugs use [b]	0.4	0.7	1.1

Weighted data; percentages based on valid cases

a beer/wine and strong spirits

b XTC/speed and LSD/heroine/cocaine use

Hard drugs use: 1 cell (16.7) has expected count of less than 5

Alcohol: $p \leq 0.05$ between 2nd generation migrant and 1st generation migrant; $p \leq 0.001$ between non-migrant and 1st generation migrant; $p \leq 0.001$ between non-migrant and 2nd generation migrant

In relation to self-reported offending, the differences point consistently in the direction of higher offending rates among migrant adolescents. For most offences, the differences between first and second-generation migrants are modest and vary in direction. Whereas certain studies have observed that minorities often underscore their delinquent involvement (Junger 1990, 22; Killias 2002, 164; Aebi 2006) and that comparisons between minority and majority youths based on self-report data may, therefore, be of questionable validity, we may conclude that these problems have not affected our data, or that the differences are sufficiently robust to overcome such measurement problems.

Table 25*: *Migrant background and last year prevalence of aggregated offences (in %)

	Not migrant	2nd generation migrant	1st generation migrant
freq. violent offences [a]	11.0	15.2	18.9
rare violent offences [b]	1.8	3.8	4.0
vandalism	6.5	9.5	9.9
shoplifting	8.3	10.9	8.5
rare property offences [c]	3.7	6.6	5.4
computer hacking	4.3	6.7	6.4
drug dealing	2.4	3.2	3.5

Weighted data; percentages based on valid cases

[a] group fight and carrying a weapon

[b] pick pocketing/snatching, robbery/extortion, and assault

[c] burglary, bicycle/motor bike theft, car theft, and car break

Frequent violent offences: $p \leq 0.001$ between non-migrant and 1st generation migrant; $p \leq 0.001$ between non-migrant and 2nd generation migrant
Rare violent offences: $p \leq 0.01$ between non-migrant and 2nd generation migrant; $p \leq 0.05$ between non-migrant and 1st generation migrant
Vandalism: $p \leq 0.01$ between non-migrant and 2nd generation migrant; $p \leq 0.05$ between non-migrant and 1st generation migrant
Shoplifting: $p \leq 0.05$ between non-migrant and 2nd generation migrant
Rare property offences: $p \leq 0.001$ between non-migrant and 2nd generation migrant
Computer hacking: $p \leq 0.01$ between non-migrant and 2nd generation migrant

Interestingly, migrant youths of the first as well as the second generation experience victimizations at far higher rates than non-migrant adolescents. The noteworthy exception is bullying where the rates are more even. The reason of this disproportionate exposure to victimization may be the life-style and particularly a higher proximity to potential offenders (Felson 2002, 2006; Hindelang, Gottfredson and Garofalo 1978; Killias 2002, 307) – two possible explanations whose relevance will be further illustrated throughout this report.

Table 26*: *Migrant background and last year prevalence of victimization (in %)

	Not migrant	2nd generation migrant	1st generation migrant
robbery/ext.	1.7	2.8	3.7
assault	1.8	3.3	2.8
theft	11.9	26.1	28.8
bullying	12.0	13.2	12.0

Weighted data; percentages based on valid cases

Assault: $p \leq 0.05$ between non-migrant and 2nd generation migrant
Theft: $p \leq 0.001$ between non-migrant and 2nd generation migrant ; $p \leq 0.001$ between non-migrant and 1st generation migrant

In sum, migrant status seems to be an important variable and more so in connection with those who were born abroad than for those with at least one immigrant parent, but who were born in Switzerland. In this connection, the question has often been debated whether children who arrive at an early age may integrate better than those who arrive at later ages. Intuitively, age at immigration may make a difference in adjusting to the new environment and particularly with respect to learning the local language and a successful career at school and later in life. For this reason, we have dichotomized the so-called "first" generation, i.e. those who were born abroad, along whether or not they arrived before age 10. The results do tentatively not confirm such a hypothesis, although we have, in our sample, only 99 respondents who arrived at age 10 or later. But in no comparison did the group of the "later comers" differentiate from the "early immigrants" by higher rates. The reasons are not entirely clear, and further analyses will be required to look more in detail into this aspect of migration.

4.3.5 Household composition

The role of the household composition n adolescents' behaviour has often been debated. The evidence so far has shown a strong impact in the USA, but rather mixed results in Europe (Junger-Tas, Marshall and Ribeaud 2003; Haas et al. 2004). The ISRD-1 had shown, in Switzerland, rather weak differences between children from single-parent and traditional households (Aebi 1997). The following Tables show rather high and significant differences between boys and girls from traditional and single-parent families, with the exception of violent and computer offences. Particularly strong is the difference in connection with drugs, as observed already by Aebi (1997) a decade ago.

Table 27*: *Household composition and last month prevalence of substance use (in %)

	Traditional family	Broken home	
alcohol total [a]	37.3	45.1	***
marijuana, hashish use	5.6	12.4	***
Hard drugs use [b]	0.4	1.1	*

Weighted data; percentages based on valid cases, * p≤0.05, ** p≤0.01,*** p≤0.001

a beer/wine and strong spirits

b XTC/speed and LSD/heroine/cocaine use

Hard drugs use : 1 cell (25.0) have expected count less than 5

Table 28*: *Household composition and last year prevalence of aggregated offences (in %)

	Traditional family	Broken home	
freq. violent offences [a]	12.6	14.9	ns
rare violent offences [b]	2.5	3.0	ns
vandalism	6.9	10.5	***
shoplifting	8.0	12.8	***
rare property offences [c]	4.1	7.0	***
computer hacking	5.2	5.6	ns
drug dealing	2.3	4.1	**

Weighted data; percentages based on valid cases, * p≤0.05, ** p≤0.01,*** p≤0.001

[a] group fight and carrying a weapon

[b] pick pocketing/snatching, robbery/extortion, and assault

[c] burglary, bicycle/motor bike theft, car theft, and car break

The differences are also quite large in connection with victimization. To some extent, this may be due to a more out-going life-style of many adolescents from single-parent families. However, the difference also concerns bullying – a rather sad finding, pointing to the fact that children with more difficulties at home may not necessarily be preserved from unpleasant experiences in the school environment.

Table 29*: *Household composition and last year prevalence of victimization (in %)

	Traditional family	Broken home	
robbery/ext.	2.2	2.6	ns
assault	2.0	3.7	**
theft	21.2	27.0	***
bullying	10.9	17.5	***

Weighted data; percentages based on valid cases, , * p≤0.05, ** p≤0.01,*** p≤0.001

It is not clear why the role of the family structure has increased since 1992 when the first ISRD went into the field. Is this related to the increasing divorce rates? Or has the social position of single-parent families been negatively affected over the last decade? We shall certainly return to this issue in the analyses that we plan to conduct in the near future.

4.3.6 Father's (un)employment

Father's employment history, and particularly longer periods of unemployment, have often been said to be related to adolescent's delinquency and problem behaviour. In the present study, we have collected information on father's and mother's employment history. In particular, respondents have been asked whether the father (or mother) has a stable job, whether he or she is currently or frequently without work, or whether he or she benefits from a pension or lives on social security payments. This last category includes, therefore, fathers and mothers who may be retired due to their age; however, given the relatively young age of the children in our sample, we suspect this not to be the case too often. Rather, the majority of fathers or mothers who are in this third category may benefit from a social security plan for handicapped persons or live on welfare.

The following Table shows that father's employment history has no effect on substance use, nor does it affect delinquency (Table 29).

Table 30: Father's (un)employment and last month prevalence of substance use (in %)

	Stable work	Out-of-work / unstable work	In pension
alcohol total [a]	39.4	28.4	39.4
marijuana, hashish use	6.9	6.9	5.8
hard drugs use [b]	0.5	0.0	1.0

Weighted data; percentages based on valid cases

a beer/wine and strong spirits

b XTC/speed and LSD/heroine/cocaine use

Hard drug use: 2 cells (33.3) have expected counts of less than 5

Alcohol: p≤0.01 between stable and unstable
Hard drugs use: p≤0.001 between stable and unstable

Table 31*: *Father's (un)employment and last year prevalence of aggregated offences (in %)

	Stable work	Out-of-work / unstable work	In pension
freq. violent offences [a]	12.7	16.7	16.5
rare violent offences [b]	2.5	3.4	3.9
vandalism	7.3	11.1	9.7
shoplifting	8.8	7.6	15.5
rare property offences [c]	4.6	4.8	6.8
computer hacking	5.1	6.2	7.8
drug dealing	2.7	2.1	0.0

Weighted data; percentages based on valid cases

[a] group fight and carrying a weapon

[b] pick pocketing/snatching, robbery/extortion, and assault

[c] burglary, bicycle/motor bike theft, car theft, and car break

Rare violent offences: 2 cells (33.3) have expected counts of less than 5
Rare property offences: 1 cell (16.7) have expected counts of less than 5
Drug dealing: 2 cells (33.3) have expected counts of less than 5

Drug dealing: p≤0.001 between stable and pension

However, father's employment status is related to adolescents' experiences of victimization. Sadly enough, children from severely disadvantaged families seem to be substantially more exposed to unpleasant experiences, including bullying at school.

Table 32*: *Father's (un)employment and last year prevalence of victimization (in %)

	Stable work	Out-of-work / unstable work	In pension
robbery/ext.	2.0	2.7	8.7
assault	2.1	1.4	5.9
theft	21.5	28.8	33.7
bullying	11.9	16.0	15.5

Weighted data; percentages based on valid cases

Robbery, assault: 2 cells (33.3) have expected count less than 5

Robbery/extortion: p≤0.05 between pension and stable
Theft: p≤0.01 between pension and stable

4.3.7 Mother's (un)employment

In the case of the mother, the questionnaire included further the possibility that she cares for the household without being employed. As the following Table reveals, there is no consistent relation between the mother's employment status and substance use. Children whose mother stays at home tend to use less often alcohol and cannabis.

Table 33*: *Mother's (un)employment and last month prevalence of substance use (in %)

	Stable work	Out-of-work / unstable work	In pension	Household
alcohol total [a]	42.1	37.6	27.4	32.1
marijuana, hashish use	7.7	8.3	6.3	4.4
hard drugs use [b]	0.5	0.3	0.0	0.5

Weighted data; percentages based on valid cases

a beer/wine and strong spirits

b XTC/speed and LSD/heroine/cocaine use

Marijuana use: 1 cell (25.0) have expected count less than 5
Hard drug use: 2 cells (37.5) have expected count less than 5

Alcohol: $p \leq 0.05$ between stable and all other categories ($p \leq 0.001$ with household); $p \leq 0.05$ between unstable and household.
Hashish: $p \leq 0.001$ between stable and household
Hard drugs use: $p \leq 0.05$ between pension and household; $p \leq 0.001$between stable and pension

Although the differences are not particularly large, there seems to be a trend that adolescents of mothers who stay at home, either to care for the household or because they benefit from a regular social security or welfare payment, commit somewhat less offences. A similar result had already been found by Morales Ortega (1996) in her analysis of the Swiss ISRD-1 data.

Table 34*: *Mother's (un)employment and last year prevalence of aggregated offences (in %)

	Stable work	Out-of-work / unstable work	In pension	Household
freq. violent offences [a]	13.3	13.0	9.8	12.9
rare violent offences [b]	2.5	3.2	1.6	2.3
vandalism	7.7	7.3	8.2	8.0
shoplifting	9.5	11.4	6.5	6.5
rare property offences [c]	4.7	5.2	4.8	4.2
computer hacking	5.7	5.7	1.6	4.2
drug dealing	2.7	3.8	1.7	2.0

Weighted data; percentages based on valid cases

[a] group fight and carrying a weapon

[b] pick pocketing/snatching, robbery/extortion, and assault

[c] burglary, bicycle/motor bike theft, car theft, and car break

Rare violent offences: 1 cell (12.5) has expected count of less than 5
Vandalism: 1 cell (12.5) has expected count of less than 5
Rare property offences: 1 cell (12.5) has expected count of less than 5
Computer hacking: 1 cell (12.5) has expected count of less than 5
Drug dealing: 1 cell (12.5) has expected count of less than 5

Shoplifting: $p \leq 0.01$between stable and household; $p \leq 0.01$between out-of-work/unstable work and household
Computer hacking: $p \leq 0.05$ between stable and pension; $p \leq 0.05$ between out-of-work/unstable work and pension

Children whose mother stays at home seem also to experience less often violent offences. Contrary to children with fathers in a similar situation, they do not seem to be more often victims of bullying at school. It could be that mothers staying at home have more resources to care for their offspring, and that going out may be less prevalent in this group.

Table 35*: *Mother's (un)employment and last year prevalence of victimization (in %)

	Stable work	Out-of-work / unstable work	In pension	Household
robbery/ext.	2.1	3.4	1.6	1.5
assault	2.3	2.8	0.0	2.1
theft	22.7	23.1	34.9	19.5
bullying	12.1	12.8	7.9	13.0

Weighted data; percentages based on valid cases

Robbery, assault: 1 cells (12.5) has expected count of less than 5

Robbery: $p \leq 0.05$ between unstable and household
Assault: $p \leq 0.001$ between pension and all other categories
Theft: $p \leq 0.05$ between pension and stable / household

4.3.8 Socio-economic status (SES)

Social class and socio-economic status has been considered a key-variable in delinquency over many decades. In the literature, it has often been observed, however, that measuring social class is at least as intricate as delinquency, particularly when it comes to juveniles whose social position is not defined yet beyond their parents' status and their school record.

In the ISRD-2, it has been decided to measure social class through four variables, namely whether or not the respondent has at home a room for his own, whether or not he/she owns a computer or a mobile phone, and whether or not his family owns a car. In the Swiss questionnaire, we have added two additional questions, namely how many cars the respondent's family owns, and whether the last car bought was a new or a used car. After several reclassifications and tests, we decided to use the four common instrument items, combined to the question how many cars the family owns. This led to the following classifications:

- High SES: "yes" to all 4 common items, the family owning more than 2 cars;
- Medium SES: "yes" to all 4 common items, the family owning 1 or 2 cars;
- Low SES: all respondents not owning all the 4 items (i.e. either they do not have a room on their own, or no computer, or no mobile phone, or the family does not own a car).

According to this way of defining the three levels of SES, 365 respondents ranked "high" on SES, 2'394 "medium", and 885 "low". It should be kept in mind, however, that the way social class has been defined in the international as well as in the Swiss study measures, practically speaking, the level of consumption rather than hierarchical position.

Table 36*: *SES and last month prevalence of substance use (in %)

	High	Medium	Low
alcohol total [a]	45.1	41.8	29.1
marijuana, hashish use	8.0	7.7	5.5
hard drugs use [b]	0.5	0.3	1.4

Weighted data; percentages based on valid cases

a beer/wine and strong spirits

b XTC/speed and LSD/heroine/cocaine use

Hard drug use: 2 cells (33.3) have expected count less than 5

Alcohol: $p \leq 0.001$ between Low SES and High/Medium SES
Hard drugs use: $p \leq 0.01$ between Medium SES and Low SES
Hashish: $p \leq 0.05$ between Medium SES and Low SES

The Table 34 shows that "high SES", i.e. a generally high level of consumption, goes along with higher levels of alcohol and cannabis use, whereas lower class adolescents seem to use slightly more often hard drugs.

Table 37: SES and last year prevalence of aggregated offences (in %)

	High	Medium	Low
freq. violent offences [a]	18.5	12.1	13.5
rare violent offences [b]	4.1	2.3	2.8
vandalism	9.7	7.6	7.2
shoplifting	12.4	8.9	8.4
rare property offences [c]	7.7	4.1	5.6
computer hacking	7.3	4.9	5.5
drug dealing	4.5	2.7	2.2

Weighted data; percentages based on valid cases

[a] group fight and carrying a weapon

[b] pick pocketing/snatching, robbery/extortion, and assault

[c] burglary, bicycle/motor bike theft, car theft, and car break

Frequent violent offences: $p \leq 0.01$ between High SES and Medium SES; $p \leq 0.05$ between High SES and Low SES
Shoplifting: $p \leq 0.05$ between High SES and Low SES

Rare property offences: $p \leq 0.05$ between High SES and Medium SES

According to Table 35, lower SES is associated with lower involvement in delinquency. Since SES, as measured here, is defined by the level of consumption, we presume that adolescents from "wealthy" families offering many consumer goods to their children may exert less control over their offspring. In this sense, the result found here matches what had been observed in the Swiss ISRD-1 study, namely a positive correlation between amounts of cash available to respondents and delinquency (Lorenz Cottagnoud 1996). Similar results were found in the Cambridge study where, compared to non-delinquents, young delinquents were found to have more cash available for their personal needs at age 20 (Farrington 1995). Other studies on self-reported delinquency in Switzerland (Eisner, Manzoni and Ribeaud, 2000, 75) and in Germany reported similar results (Oberwittler et al. 2001).

***Table 38*: SES and last year prevalence of victimization (in %)**

	High	Medium	Low
robbery/ext.	2.2	1.9	3.1
assault	3.6	1.8	3.3
theft	24.6	22.1	23.2
bullying	11.6	11.4	15.6

Weighted data; percentages based on valid cases
Assault: $p \leq 0.05$ between Medium and Low SES
Bullying: $p \leq 0.01$ between Medium and Low SES; $p \leq 0.05$ between High and Low SES

Adolescents from families with a low level of consumption are more often victims of assault and of bullying. It could be that this is due to their usual residence in rather poor neighbourhoods where such problems may be more frequent (see below). On the other end of

the scale, high SES children have rather high levels of assault, probably due to a more outgoing life-style.

4.3.9 Relationship with parents

Through several variables has been assessed how close the respondent feels to his parents. (question 16 and 17, appendix III) The results in the following Tables illustrate the importance of this variable. Interestingly, the association is stronger for more serious problems than for behaviour that, as alcohol use, is rather wide-spread in Switzerland's adolescent population.

Table 39*: *Relationship with parents and last month prevalence of substance use (in %)

	Strong relationship with both parents	Weak relationship with at least one of the 2 parents	
alcohol total [a]	36.8	60.2	***
marijuana, hashish use	5.7	18.3	***
hard drugs use [b]	0.3	1.5	**

Weighted data; percentages based on valid cases, * p≤0.05, ** p≤0.01,*** p≤0.001

a beer/wine and strong spirits

b XTC/speed and LSD/heroine/cocaine use

Hard drugs use: 1 cell (25%) has expected count of less than 5

Table 40*: *Relationship with parents and last year prevalence of aggregated offences (in %)

	Strong relationship with both parents	Weak relationship with at least one of the 2 parents	
freq. violent offences [a]	12.4	19.9	**
rare violent offences [b]	2.2	6.8	***
vandalism	6.8	14.6	***
shoplifting	7.8	21.8	***
rare property offences [c]	4.3	7.5	*
computer hacking	4.8	9.9	***
drug dealing	2.2	7.7	***

Weighted data; percentages based on valid cases, * p≤0.05, ** p≤0.01,*** p≤0.001

[a] group fight and carrying a weapon

[b] pick pocketing/snatching, robbery/extortion, and assault

[c] burglary, bicycle/motor bike theft, car theft, and car break

For all offences, juveniles with problematic relationships with one or both parents admit far more frequently having committed offences. There is rather little difference across offences, but the difference is largest for violent offences and drug dealing.

Table 41*: *Relationship with parents and last year prevalence of victimization (in %)

	Strong relationship with both parents	Weak relationship with at least one of the 2 parents	
robbery/ext.	1.9	5.3	***
assault	1.9	6.1	***
theft	21.2	32.3	***
bullying	10.9	21.8	***

Weighted data; percentages based on valid cases, , * p≤0.05, ** p≤0.01,*** p≤0.001

What has been observed for substance use and self-reported offending, seems valid also with respect to victimization. Adolescents with strong relationships with both parents are far less often victimized across all types of offences. This may be due to the fact that juveniles with strong ties to their parents presumably spend far more time at home or with their parents and families, whereas young people with rather difficult relationships with their parents may be more often in the streets, particularly during evening hours. However, juveniles with good relationships with their parents are also less often victims of theft and of bullying at school, i.e. two experiences that may not be directly related to the influence of parents. As we shall see in the next section, juveniles whose parents are not well informed about their whereabouts are not more frequently victims of bullying and theft. Despite the intuitive proximity of parental supervision and the quality of child-parent relationships, there seems to be some difference between the two factors that are not fully understood at this moment.

In this connection, it is important to see that the difficulties with parents may not necessarily be the cause, but can just as well be the effect of problem behaviour, frequent absences from home and offending on the side of juveniles.

4.3.10 Parental supervision

Parental supervision has been measured by parents' knowledge of the respondent's friends and by whether or not they usually set a time by which the youth has to be back home (questions 20 and 21, appendix III). It has turned out to be a very important variable, comparable to the quality of the relationship between the respondent and his/her parents.

Table 42*: *Parental supervision and last month prevalence of substance use (in %)

	Strong supervision	Weak supervision	
alcohol total [a]	39.6	57.3	***
marijuana, hashish use	6.6	15.0	***
hard drugs use [b]	0.3	1.7	***

Weighted data; percentages based on valid cases, * p≤0.05, ** p≤0.01,*** p≤0.001

a beer/wine and strong spirits

b XTC/speed and LSD/heroine/cocaine use

Hard drugs use: 1cell (25%) has expected count of less than 5

Table 43*: *Parental supervision and last year prevalence of aggregated offences

	Strong supervision	Weak supervision	
freq. violent offences [a]	11.8	24.6	***
rare violent offences [b]	1.8	7.3	***
vandalism	6.8	16.1	***
shoplifting	8.9	14.3	***
rare property offences [c]	4.1	10.4	***
computer hacking	4.1	10.9	***
drug dealing	2.2	7.6	***

Weighted data; percentages based on valid cases, * p≤0.05, ** p≤0.01,*** p≤0.001

[a] group fight and carrying a weapon

[b] pick pocketing/snatching, robbery/extortion, and assault

[c] burglary, bicycle/motor bike theft, car theft, and car break

Again, adolescents whose parents are generally well informed about their whereabouts commit far less offences. The difference is particularly impressive in connection with rare violent offences and drug dealing. The same is true for violent victimization (robbery/extortion and assault), as the following Table reveals. However, children who are poorly supervised by their parents are not more often victims of theft and bullying at school.

Table 44*: *Parental supervision and last year prevalence of victimization (in %)

	Strong supervision	Weak supervision	
robbery/ext.	1.9	4.0	**
assault	2.1	4.8	***
theft	23.5	22.5	ns
bullying	12.1	10.7	ns

Weighted data; percentages based on valid cases, , * p≤0.05, ** p≤0.01,*** p≤0.001

In sum, although parental supervision and the quality of parent-child relationship seem to affect problem behaviour, self-reported offending and victimization in very similar ways, there seems to be some difference with respect to bullying and theft, i.e. two offences that may not be much affected by parental influence, at least not intuitively.

4.3.11 Life events

In the questionnaire, respondents were asked whether they had experienced any traumatic events, such as loss of a parent, illness of a parent, divorce of parent (question 22, appendix III).

The following Tables show that adolescents who experienced more than two traumatic events in their life tend to display more problem behaviour, to offend more often and to be victimized more often than other juveniles.

Table 45*: *Life events and last month prevalence of substance use (in %)

	0-1 traumatic life events	At least 2 life events	
alcohol total [a]	37.0	46.2	***
marijuana, hashish use	5.7	11.8	***
hard drugs use [b]	0.3	1.3	***

Weighted data; percentages based on valid cases, * p≤0.05, ** p≤0.01,*** p≤0.001

a beer/wine and strong spirits

b XTC/speed and LSD/heroine/cocaine use

Hard drugs use: 1 cell (25%) has expected count of less than 5

Table 46*: *Life events and last year prevalence of aggregated offences (in %)

	0-1 traumatic life events	At least 2 life events	
freq. violent offences [a]	12.0	17.3	***
rare violent offences [b]	2.0	4.6	***
vandalism	6.4	11.9	***
shoplifting	7.4	15.0	***
rare property offences [c]	3.9	7.5	***
computer hacking	4.7	7.3	**
drug dealing	2.1	4.9	***

Weighted data; percentages based on valid cases, * p≤0.05, ** p≤0.01,*** p≤0.001

[a] group fight and carrying a weapon

[b] pick pocketing/snatching, robbery/extortion, and assault

[c] burglary, bicycle/motor bike theft, car theft, and car break

Table 47*: *Life events and last year prevalence of victimization (in %)

	0-1 traumatic life events	At least 2 life events	
robbery/ext.	1.9	3.3	*
assault	1.8	4.1	***
theft	19.8	31.3	***
bullying	9.8	20.8	***

Weighted data; percentages based on valid cases, , * p≤0.05, ** p≤0.01,*** p≤0.001

The findings concerning victimization match what has been observed before. Interestingly, children who have experienced traumatic events more than once in their lifetime tend to be also far more victims of bullying at school. This is a clear indication that bullying may be directed in the first place against particularly vulnerable children. We have seen similar trends already before, concerning children living in a single-parent family (Table 27), having an unemployed father (Table 30), having little material resources (Table 36) and living a difficult relationship with one or both of their parents (Table 39). This is in line with Olweus' (1995) observation that bullied children tend, over all, to differentiate from bullies mostly by physical strength and inferiority in prestige and popularity. It may well be that lack of resources, including parental support, is an important factor as well.

4.4 The physical and social environment of adolescents

Juveniles are not acting in an empty space, but interact with their social and physical environment in many ways. For example, schools are part of the environment in which offending and victimization occur, along with the neighbourhood and groups of other juveniles including gangs. In this section, we shall give attention to association with several of these variables.

4.4.1 Attachment to school

In the following Table, respondents have been dichotomized according to whether or not they like going to school (question 41, appendix III). As one can see, a strong attachment lowers substance use, but less so alcohol and even cannabis use than use of hard drugs. One can, in view of the extreme scores, even say that hard drug use is incompatible with strong school attachment.

Table 48*: *Attachment to school and last month prevalence of substance use (in %)

	Strong attachment	Weak attachment	
alcohol total [a]	32.6	48.6	***
marijuana, hashish use	5.1	10.4	***
hard drugs use [b]	0.2	10.4	***

Weighted data; percentages based on valid cases, * p≤0.05, ** p≤0.01,*** p≤0.001

a beer/wine and strong spirits

b XTC/speed and LSD/heroine/cocaine use

If it seems logical that hard drug use is incompatible with strong attachment to school, it is interesting to see that this variable also lowers self-reported offences. The association is consistent across offence types, but strongest for rare (i.e. severe) violent acts and drug dealing.

Table 49*: *Attachment to school and last year prevalence of substance use (in %)

	Strong attachment	Weak attachment	
freq. violent offences [a]	9.7	18.2	***
rare violent offences [b]	1.6	4.1	***
vandalism	5.5	11.1	***
shoplifting	7.0	12.3	***
rare property offences [c]	3.6	6.5	***
computer hacking	4.2	6.8	**
drug dealing	1.7	4.4	***

Weighted data; percentages based on valid cases, * p≤0.05, ** p≤0.01,*** p≤0.001

[a] group fight and carrying a weapon

[b] pick pocketing/snatching, robbery/extortion, and assault

[c] burglary, bicycle/motor bike theft, car theft, and car break

A strong attachment to the school also reduces risks of violent victimization (robbery and assault), probably because it goes along with a less outgoing life-style and less time spent in the streets during late evening hours. On the other hand, children who like school are victims of theft and bullying at practically identical rates compared to pupils with weak school attachment.

Table 50*: *Attachment to school and last year prevalence of victimization (in %)

	Strong attachment	Weak attachment	
robbery/ext.	1.8	2.9	*
assault	1.6	3.4	***
theft	21.8	23.6	ns
bullying	12.1	12.9	ns

Weighted data; percentages based on valid cases, , * p≤0.05, ** p≤0.01,*** p≤0.001

4.4.2 Repeated grade

The results for this variable are very similar to what has been observed before for (not) liking school. Adolescents who, during their school career, have repeated a grade at least once, are using more often alcohol, cannabis and, particularly, hard drugs.

Table 51*: *Repeated grade and last month prevalence of substance use (in %)

	Never	Once or more	
alcohol total [a]	37.8	45.9	***
marijuana, hashish use	6.2	12.3	***
hard drugs use [b]	0.4	1.1	*

Weighted data; percentages based on valid cases, * p≤0.05, ** p≤0.01,*** p≤0.001

a beer/wine and strong spirits
b XTC/speed and LSD/heroine/cocaine use

Hard drug use: 1 cell (25%) has expected count of less than 5

Respondents who have repeated a grade at least once are admitting having committed more offences than those with a successful school career. On the other hand, the difference is really important only with respect to rare (i.e. severe) violent offences.

Table 52*: *Repeated grade and last year prevalence of aggregated offences (in %)

	Never	Once or more	
freq. violent offences [a]	12.6	16.0	*
rare violent offences [b]	2.2	4.4	***
vandalism	7.6	8.7	ns
shoplifting	9.2	8.8	ns
rare property offences [c]	4.4	6.9	**
computer hacking	5.2	5.3	ns
drug dealing	2.6	3.7	ns

Weighted data; percentages based on valid cases, * p≤0.05, ** p≤0.01,*** p≤0.001
[a] group fight and carrying a weapon
[b] pick pocketing/snatching, robbery/extortion, and assault
[c] burglary, bicycle/motor bike theft, car theft, and car break

The picture is similar with respect to victimization. Again, children who have repeated a grade at least once tend to be victimized more often, but the difference is impressive only with respect to assault. One can suppose that less successful students may go out more often in the evening.

Table 53*: *Repeated grade and last year prevalence of victimization (in %)

	Never	Once or more	
robbery/ext.	2.0	3.4	*
assault	1.9	4.1	***
theft	21.8	26.3	*
bullying	12.0	14.3	ns

Weighted data; percentages based on valid cases, , * p≤0.05, ** p≤0.01,*** p≤0.001

In sum, it seems that school attachment is far more important in connection with substance use, offending and victimization that repeating a grade. This finding matches what, using data from ISRD-1. Junger-Tas, Marshall and Ribeaud (2003) have found with respect to school failure on the European continent, namely that this variable is far less important there than in the American context. They explained this by the social significance of a poor school record on both sides of the Ocean (or the Channel), the continental educational systems offering poor students far better opportunities for professional training and careers than what American High-School drop outs may face. The findings presented here suggest that this trend may not have been reversed in the mean-time.

4.4.3 Gang membership

Adolescent groups form an important part of the social environment that juveniles face in their every-day life. In the present study, it has been recorded whether the respondent belongs to any group, whether this group occasionally engages in illicit activities, or whether it defines itself as a gang (questions 27, 29, 30, 31, 32, 33, appendix III).

Table 54*: *Gang membership and last month prevalence of substance use (in %)

	Not member or member of a group without particularities	Member group illegal activities	Member of a gang
alcohol total [a]	31.4	64.7	73.2
marijuana, hashish use	2.7	21.0	31.5
hard drugs use [b]	0.3	0.8	3.0

Weighted data; percentages based on valid cases

a beer/wine and strong spirits

b XTC/speed and LSD/heroine/cocaine use

Hard drug use: 2 cell (33.3%) have expected counts of less than 5

Alcohol: p≤0.001 between non-member and member illegal activities; p≤0.001 between non-member and member of gang; p≤0.05 between member illegal activities and member of gang

Marijuana, hashish use: p≤0.001 between non-member and member illegal activities; p≤0.001 between non-member and member of gang; p≤0.01 between member illegal activities and member of gang
Hard drugs use: p≤0.05 between non-member and member of gang

The preceding Table show to what important extent gangs shape substance use among their members, particularly in connection with hard drugs and cannabis. Although members of other groups with occasional illegal activities use substantially more often cannabis and hard drugs, the difference really becomes dramatic with gangs. Again, the difference is smaller with alcohol use given the wide-spread habit of drinking.

Table 55*: *Gang membership and last year prevalence of aggregated offences (in %)

	Not member or member of a group without particularities	Member group illegal activities	Member of a gang
freq. violent offences [a]	8.2	24.7	54.4
rare violent offences [b]	1.3	5.3	14.8
vandalism	3.9	16.6	40.2
shoplifting	5.3	19.7	36.0
rare property offences [c]	2.1	11.5	25.2
computer hacking	3.4	9.8	20.6
drug dealing	0.8	8.2	15.4

Weighted data; percentages based on valid cases

[a] group fight and carrying a weapon

[b] pick pocketing/snatching, robbery/extortion, and assault

[c] burglary, bicycle/motor bike theft, car theft, and car break

Rare violent off: 1 cell (16.7%) has expected count of less than 5
Drug dealing: 1 cell (16.7%) has expected count of less than 5

Frequent violent offences: p≤0.001 between all categories.
Rare violent offences: p≤0.001 between all categories.
Vandalism: p≤0.001 between all categories.
Shoplifting: p≤0.001 between all categories.
Rare property offences: p≤0.001 between all categories.
Computer hacking: p≤0.001 between all categories, except p≤0.01 between member illegal activities and member of gang
Drug dealing: p≤0.001 between member illegal activities and member of gang; p≤0.001 between non-member and member illegal activities

Again, the differences are most impressive. For all offences, members of a gang have far higher rates of offending than members of other groups with occasional illegal activities. Compared to juveniles without membership in a group (or a group with only conventional activities), the difference often is in the range of 1 to 10, particularly for rare violent and property offences and vandalism. Interestingly, gang members also engage far more often in illegal acts involving computers.

Table 56: Gang membership and last year prevalence of victimization (in %)

	Not member or member of a group without particularities	Member group illegal activities	Member of a gang
robbery/ext.	1.5	3.5	9.8
assault	1.8	3.4	7.9
theft	20.5	30.2	29.9
bullying	12.4	12.3	14.5

Weighted data; percentages based on valid cases

Robbery: 1 cell (16.7%) has expected count of less than 5
Assault: 1 cell (16.7%) has expected count of less than 5

Robbery/extortion: $p \leq 0.05$ between member illegal activities and member of gang; $p \leq 0.01$ between non-member and member illegal activities; $p \leq 0.001$ between non-member and member of gang
Assault: $p \leq 0.01$ between non-member and member of gang; $p \leq 0.05$ between non-member and member illegal activities; $p \leq 0.05$ between member illegal activities and member of gang
Theft: $p \leq 0.001$ between non-member and member illegal activities; $p \leq 0.05$ between non-member and member of gang

In line with what one would expect for a group with a violent, outgoing life-style spending much time in the streets during night hours, gang members are more often victims than members of other groups with occasional illegal activities and those belonging to conventional groups (or no group at all). However, the difference is by far not as strong as with offending, particularly with respect to theft and even assault. Gang members are neither disproportionately victims of bullying, thus disconfirming popular claims that extreme violence may be the result of violence suffered in other settings.

4.4.4 Neighbourhood problems

The questionnaire contained also items concerning neighbourhood characteristics (question 47, items 5, 6, 7, 8, 9, 13, appendix III). It allowed to dichotomize respondents according to whether or not they live in a neighbourhood characterized by problems of public order (delinquency, drug dealing, graffiti…). As the following Tables reveal, this seems to be a most important variable in all respects considered here.

Table 57*: *Neighbourhood problems and last month prevalence of substance use (in %)

	No	Yes	
alcohol total [a]	38.4	55.3	***
marijuana, hashish use	6.4	24.5	***
hard drugs use [b]	0.2	7.0	***

Weighted data; percentages based on valid cases, * p≤0.05, ** p≤0.01,*** p≤0.001

[a] beer/wine and strong spirits

[b] XTC/speed and LSD/heroine/cocaine use
Hard drugs use: 1 cells (25.0) has expected count of less than 5

Again, alcohol use differs relatively moderately between adolescents living in "bad" and those living in more conventional neighbourhoods. However, the differences are impressive with respect to cannabis and, particularly, hard drugs. This may be directly related to the easy access to such substances in certain problem areas in the cities.

Table 58*: *Neighbourhood problems and last year prevalence of aggregated offences (in %)

	No	Yes	
freq. violent offences [a]	11.8	42.8	***
rare violent offences [b]	2.0	15.2	***
vandalism	6.7	32.2	***
shoplifting	8.4	26.8	***
rare property offences [c]	3.8	25.6	***
computer hacking	4.8	14.7	***
drug dealing	2.1	16.7	***

Weighted data; percentages based on valid cases, * p≤0.05, ** p≤0.01,*** p≤0.001

[a] group fight and carrying a weapon

[b] pick pocketing/snatching, robbery/extortion, and assault

[c] burglary, bicycle/motor bike theft, car theft, and car break

Rare violent offences, drug dealing: 1 cell of each (25.0) has expected count of less than 5

The results of the preceding Table confirm the important role of the neighbourhood. Obviously, adolescents adjust their behaviour to what they find in the streets around their home. However, the strongest impact – next to rare violent offences – can be seen again in connection with drug dealing, an activity directly related to the characteristics of certain urban areas.

Table 59*: *Neighbourhood problems and last year prevalence of victimization (in %)

	No	Yes	
robbery/ext.	1.7	15.2	***
Assault	1.9	11.5	***
Theft	22.1	34.8	***
Bullying	12.2	18.2	*

Weighted data; percentages based on valid cases, , * p≤0.05, ** p≤0.01,*** p≤0.001

Robbery, assault: 1 cell of each (25.0) has expected count of less than 5

Juveniles living in a problematic urban environment are, not unlike adults (Wittebrood 2000; Killias 2002, 406), far more victims of personal crime than those living in more conventional areas. Interestingly, however, this observation is – to some extent – true even in connection with bullying at school. This may be due to the fact that juveniles living in problematic areas are likely to attend the neighbourhood school where the number of students with conduct problems and violent behaviour may be far higher than on a national average. A similar hypothesis has been presented already above, in connection with higher bullying experiences among children from families with more limited material resources (Table 36).

4.4.5 Neighbourhood attachment

According to some theoretical approaches (Sampson and Laub, 1997), neighbourhood attachment (rather than neighbourhood characteristics) is supposed to influence behaviour of people living in a particular area. The respondent had to respond about positive neighbourhood characteristics such as liking his neighbourhood, close-knit neighbourhood, social control (question 47, items 1, 2, 3, 4, 10, 11, 12, appendix III). The results that will be presented in this section are more mixed.

Table 60*: *Neighbourhood attachment and last month prevalence of substance use (in %)

	No	Yes	
alcohol total [a]	36.6	45.0	***
marijuana, hashish use	5.9	20.2	***
hard drugs use [b]	0.4	0.7	ns

Weighted data; percentages based on valid cases, * p≤0.05, ** p≤0.01,*** p≤0.001

[a] beer/wine and strong spirits

[b] XTC/speed and LSD/heroine/cocaine use

Given the wide-spread use of alcohol, neighbourhood attachment does not affect this variable dramatically. The difference is larger in connection with cannabis and hard drug use, although by far not as impressive as the association between these behaviours and neighbourhood characteristics (Table 55).

Table 61*: *Neighbourhood attachment and last year prevalence of aggregated offences (in %)

	No	Yes	
freq. violent offences [a]	11.9	15.9	***
rare violent offences [b]	2.3	3.4	*
vandalism	7.0	9.7	**
shoplifting	8.2	11.4	**
rare property offences [c]	4.2	6.0	*
computer hacking	4.7	6.2	ns
drug dealing	2.2	4.1	***

Weighted data; percentages based on valid cases, * p≤0.05, ** p≤0.01,*** p≤0.001

[a] group fight and carrying a weapon

[b] pick pocketing/snatching, robbery/extortion, and assault

[c] burglary, bicycle/motor bike theft, car theft, and car break

Although most differences in the preceding Table are significant, the relative difference is not particularly impressive. In other words and compared to neighbourhood characteristics, neighbourhood attachment does not affect much offending rates, even not rare violent offences. This same observation holds true for victimization where neighbourhood attachment is moderately associated with the risks of victimization.

Table 62*: *Neighbourhood attachment and last year prevalence of victimization (in %)

	No	Yes	
robbery/ext.	1.7	3.2	**
Assault	2.2	2.6	ns
Theft	20.9	26.3	***
Bullying	11.4	14.7	**

Weighted data; percentages based on valid cases, , * p≤0.05, ** p≤0.01,*** p≤0.001

In sum, neighbourhood attachment is by far not as important as neighbourhood characteristics. In this connection, the possibility should also be kept in mind that adolescents (like adults) may feel less attached to a problematic neighbourhood. For this reason, we suspect that neighbourhood attachment will not explain much in the multivariate analysis, and that certain theories on neighbourhood cohesion (Sampson 1988) and "efficacy" may have overstated their case. There might also be an interaction effect, in the sense that strong attachment to the neighbourhood may reduce delinquency if the environment is conventional, and increase it in cases where neighbourhood influences are more problematic. In sum, strong neighbourhood attachment may simply increase the neighbourhood's influence, either positive or negative.

4.4.6 Truancy

By truancy, we understand the fact that an adolescent did not attend school lessons for at least a whole day, without legitimate excuse, at least once over the last 12 months..

Table 63*: *Truancy and last month prevalence of substance use (in %)

	No	Yes	
alcohol total [a]	34.6	59.0	***
marijuana, hashish use	4.8	18.0	***
hard drugs use [b]	0.2	2.2	***

Weighted data; percentages based on valid cases, * p≤0.05, ** p≤0.01,*** p≤0.001

[a] beer/wine and strong spirits

[b] XTC/speed and LSD/heroine/cocaine use

Hard drugs use: 1 cells (25.0) has expected count of less than 5

In some way, truancy is a way of evading social control by teachers and the school, and probably related to many out-of-home activities and being outdoors. Therefore, it is not surprising that juveniles committing truancy use all substances substantially more often than other respondents. The difference is particularly strong for cannabis and even extreme for hard drugs.

Table 64*: *Truancy and last year prevalence of aggregated offences (in %)

	No	Yes	
freq. violent offences [a]	10.2	26.0	***
rare violent offences [b]	1.5	7.6	***
vandalism	5.3	19.0	***
shoplifting	6.7	20.1	***
rare property offences [c]	3.0	12.8	***
computer hacking	4.2	10.0	***
drug dealing	1.4	9.4	***

Weighted data; percentages based on valid cases, * p≤0.05, ** p≤0.01,*** p≤0.001

[a] group fight and carrying a weapon

[b] pick pocketing/snatching, robbery/extortion, and assault

[c] burglary, bicycle/motor bike theft, car theft, and car break

The situation is similar with respect to self-reported offending. Juveniles reporting truancy admit several times as many offences than respondents who never failed to attend school for at least half a day. The difference is particularly strong for rare violent offences and drug dealing.

Table 65*: *Truancy and last year prevalence of victimization (in %)

	No	Yes	
robbery/ext.	1.4	6.2	***
assault	1.5	6.0	***
theft	20.8	30.4	***
bullying	11.9	15.0	*

Weighted data; percentages based on valid cases, * p≤0.05, ** p≤0.01,*** p≤0.001

With respect to victimization, the effects of truancy are comparable in the sense that offences that usually are committed outdoors are at least four times more frequently committed against juveniles admitting truancy. On the other hand, risks of theft and bullying are more moderately related to truancy.

5. Multivariate analyses

In order to assess the impact of the several independent variables once the influence of other contributing factors is taken into account, logistic regressions were calculated for all dependant variables. All variables significantly ($p < .05$) related to the dependent variable in question have been introduced into the models. Considered were:

- grade
- sex
- migrant background
- SES
- family composition
- parental supervision
- relationship with parents
- life events
- attachment to school
- having repeated a grade
- gang membership (3 categories)
- neighbourhood problems
- neighbourhood attachment
- truancy.

Mother's or father's unemployment was not used in the multivariate analyses due to the low number of respondents reporting parental employment problems. (Switzerland's unemployment rate is, currently, below 3 percent of the workforce.) The regressions were computed first according to the method "backward LR", and according to the method "enter" in the second place. All models that follow have been conducted using the method "enter".

For variables with more than two categories, the following categories were used as reference:

- gang membership: not being member of any group or of a conventional group only vs. belonging to a group with illegal activities, respectively vs. being member of a gang;
- migrant background: being born in Switzerland (either of Swiss or foreign parents), vs. being born abroad (i.e. being a first-generation migrant);
- SES: low level of consumption vs. medium or high;
- grade: grade 7 vs. grade 8 or 9.

5.1. Frequent violent offences

In the bivariate analyses, all independent variables turned out to be significantly associated with frequent violent offences, with the exception of family composition (broken home). In the following model, all variables except broken home were introduced.

Table 66: Frequent violent offences (last year)

Frequent violent offences	B	SE	Wald	df	Sig.	Exp(B)
Sex	1.501	.135	123.928	1	.000	4.486
Migrant background	0.373	.177	4.452	1	.035	1.451
Parental supervision	.290	.140	4.317	1	.038	1.337
School attachment	.339	.117	8.434	1	.004	1.403
Member of a group with illegal activities	.987	.128	59.592	1	.000	2.683
Member of a gang	1.964	.205	91.788	1	.000	7.128
Neighbourhood problems	.901	.217	17.314	1	.000	2.462
Truancy	.618	.134	21.194	1	.000	1.856
% variance explained (Nagelkerke R Square)			25.9%			

Among the 13 variables introduced, eight turned out to be significant in the multivariate analysis. The four most important variables are gang membership, gender, being a member of a group with occasional illegal activities, and living in a problematic neighbourhood.

5.2 Rare violent offences

Four among the independent variables indicated above turned out not to be associated with rare violent offences in the bivariate analysis, namely grade, age, family composition and SES.

Table 67: Rare violent offences (last year)

Rare violent offences	B	SE	Wald	df	Sig.	Exp(B)
Sex	1.165	.292	15.972	1	.000	3.207
Parental supervision	.646	.253	6.526	1	.011	1.907
Life events	.515	.249	4.278	1	.039	1.673
Member of a group with illegal activities	1.056	.267	15.684	1	.000	2.876
Member of a gang	1.388	.351	15.647	1	.000	4.006
Neighbourhood problems	.844	.329	6.573	1	.010	2.326
Truancy	1.022	.251	16.621	1	.000	2.780
% variance explained (Nagelkerke R Square)			19.6%			

The four most important variables are gang membership, belonging to a group with occasional illegal activities, gender and truancy.

5.3 Vandalism

Two among the independent variables considered were not significantly associated with vandalism and were, therefore, eliminated from the models, namely grade and SES. All the other variables were introduced, but only six turned out to be significant in the multivariate analysis.

Table 68: Vandalism (last year)

Vandalism	B	SE	Wald	df	Sig.	Exp(B)
Sex	.616	.144	18.201	1	.000	1.851
School attachment	.347	.139	6.261	1	.012	1.415
Member of a group with illegal activities	1.295	.151	73.170	1	.000	3.651
Member of a gang	2.116	.209	102.762	1	.000	8.294
Neighbourhood problems	.836	.226	13.740	1	.000	2.307
Truancy	.885	.146	36.709	1	.000	2.423
% variance explained (Nagelkerke R Square)			21.6%			

Again, gang membership, membership in a group with occasional illegal activities, truancy and neighbourhood problems turned out to be the most important factors.

5.4 Shoplifting

Among the variables considered here, four turned out not to be significantly associated with shoplifting, namely grade, age, gender and having repeated a grade. All other variables were introduced into the model.

Table 69: Shoplifting (last year)

Shoplifting	B	SE	Wald	df	Sig.	Exp(B)
Migrant background	-.470	.242	3.785	1	.052	.625
Relationship with parents	.741	.189	15.350	1	.000	2.097
Life events	.305	.149	4.203	1	.040	1.357
School attachment	.296	.132	5.000	1	.025	1.345
Member of a group with illegal activities	1.278	.145	77.446	1	.000	3.590
Member of a gang	2.017	.207	94.731	1	.000	7.515
Truancy	.798	.146	30.042	1	.000	2.221
% variance explained (Nagelkerke R Square)			17.5%			

The four most important variables are membership in a gang or in a group with occasional illegal activities, truancy and having a difficult relationship with parents. Migrant status is only marginally significant and inversely related to shoplifting, i.e. foreign-born respondents admit less often having committed shoplifting.

5.5 Rare Property offences

Among the variables considered, only family composition has not been significantly associated with rare (i.e. serious) property offences in the bivariate analyses. All other variables have been introduced in the following model.

Table 70: Rare property offences (last year)

Rare property offences	B	SE	Wald	df	Sig.	Exp(B)
Sex	.889	.190	21.896	1	.000	2.433
Member of a group with illegal activities	1.526	.188	65.750	1	.000	4.599
Member of a gang	1.882	.255	54.430	1	.000	6.567
Neighbourhood problems	1.266	.239	28.172	1	.000	3.547
Truancy	.911	.179	26.023	1	.000	2.488
% variance explained (Nagelkerke R Square)			22.5%			

Only five variables remained significant in the multivariate analysis. The three strongest predictors were membership in a gang or in a group with occasional illegal activities as well as neighbourhood problems.

5.6 *Computer hacking*

Among the variables considered, only 4 turned out not to be significantly associated with computer hacking, namely age, having repeated a grade, neighbourhood attachment and SES.

Table 71: Computer hacking (last year)

Computer hacking	B	SE	Wald	df	Sig.	Exp(B)
Sex	1.421	.215	43.784	1	.000	4.141
Parental supervision	.653	.184	12.581	1	.000	1.922
Life events	.405	.186	4.746	1	.029	1.499
Member of a group with illegal activities	.980	.186	27.622	1	.000	2.665
Member of a gang	1.586	.256	38.523	1	.000	4.885

% variance explained (Nagelkerke R Square)	14.5%

Again, only five variables remained significant in the multivariate analysis, the three most important being gender, belong to a gang or to a group with occasional illegal activities. It is interesting to note that gender and gang membership are more important here than in many other areas of delinquency, despite the fact that computer hacking seems, at first sight at least, to be an activity at home, whereas gang membership should be important more in relation to acts committed in the streets.

5.7 Drug dealing

Five among the independent variables considered here turned out to not to be associated with drug dealing, namely age, migrant status (i.e. being born abroad), family composition, having repeated a grade and SES. All other variables were introduced into the model.

Table 72: Drug dealing (last year)

Drug dealing	B	SE	Wald	df	Sig.	Exp(B)
Grade 8	1.487	.443	11.263	1	.001	4.424
Grade 9	1.753	.438	16.022	1	.000	5.769
Sex	1.160	.279	17.359	1	.000	3.191
Life events	.495	.240	4.243	1	.039	1.640
Member of a group with illegal activities	1.897	.273	48.322	1	.000	6.664
Member of a gang	2.061	.360	32.790	1	.000	7.856
Neighbourhood problems	1.124	.313	12.892	1	.000	3.076
Truancy	1.224	.237	26.751	1	.000	3.400
% variance explained (Nagelkerke R Square)	31%					

Eight variables are significantly related to drug dealing, the strongest being – once more – membership in a gang or in a group with occasional illegal activities, followed by grades 9 and 8 (with respect to grade 7), truancy, sex, and neighbourhood problems. The high odds ratios for grades 8 and 9 (but not age) plead for an age-related contextual factor, in the sense that drug dealing may be more common in certain grades and will, therefore, be adopted by other students attending the same classes.

5.8 Synthesis

In six out of the seven logistic regressions presented here, being a member of a gang turned out to be the strongest predictor of delinquency in six cases. In all these six cases, odds ratios were the highest for gang membership. Belonging to a group with occasional illegal activities was the second strongest variable in all the seven models. Thus, group effects – i.e. belonging to a deviant rather to a conventional group (or to no group at all) – are definitively among the most important factors in juvenile delinquency. Truancy and neighbourhood problems come next, being significantly related to six, respectively five, among the seven offence categories considered here. Offending is obviously related to delinquent opportunities in the environment, as well as to evasion of parental control. However, attachment to the neighbourhood is related to delinquency in no one of the offence types considered, thus confirming our speculation expressed above. The other variables, such as attachment to school, parental supervision, migrant status and life events, are only weakly and inconsistently related to the several offence categories, the exception being gender that is related to all offence types without shoplifting and with substantial odds ratios.

For this first analysis, we can conclude that offending is, essentially, related to opportunity structures in the physical and social environment, i.e. group processes and problems of public order in the neighbourhood. The following analyses will be directed at understanding more thoroughly the role of adolescents' social and physical environment, including local area characteristics and school variables, collected through an interviewer form in Switzerland as well as in the remaining countries. Preliminary studies in Switzerland have suggested that the school and its characteristics may be an important factor (Haymoz et al. 2007), suggesting some parallel findings with what Rutter et al. (1979/1980) found in an important study concerning the functioning the schools and the success of students.

References

Aebi, M.F. (2006). *Comment mesurer la délinquance ?* Paris : Colin.

Burlet, M., Pellet, V. & Viredaz, B. (2007). "Waffentragverbot hat Gewalt reduziert: Eine Wirkung des Waffengesetzes", *Crimiscope* 36, Université de Lausanne (ESC).

Eisner, M., Manzoni, P. & Ribeaud, D. (2000). *Opfererfahrungen und selbst berichtete Gewalt bei Schülerinnen und Schülern im Kanton Zürich.* Aarau : Sauerländer.

Farrington, D.P. (1995). The development of offending and anti-social behaviour from childhood : Key findings from the Cambridge study in delinquent development. *Journal of Child Psychology and Psychiatry* 36/6, 929-964.

Felson, M. (2002). *Crime and every day life*. 3d edition, London: Sage publications.

Felson M. (2006). *Crime and Nature.*London: Sage Publications.

Haas, H., Farrington, D.P., Killias, M. & Sattar G. (2004). The Impact of Different Family Configurations on Delinquency. *British J. of Criminology* 44/4, 520-532.

Haymoz S., Herrmann L., Lucia S. & Killias M. (2007, in print). Zunehmende Jugenddelinquenz – eine Herausforderung auch für die Schule. Neue Fragen als Ergebnis von Befragungen in der Westschweiz. In: H.-C. Steinhausen, C.Bessler (Hrsg.): *Jugenddelinquenz. Interdisziplinäre Ansätze in Theorie und Praxis*. Stuttgart, Kohlhammer.

Hindelang M.J., Gottfredson M.R., Garofalo J. (1978). *Victims of Personal Crime: An Empirical Foundation for a Theory of Personal Victimization.* Ballinger (Mass.).

ISPA (1993). *Chiffres et données sur l'alcool et les autres drogues.* Lausanne, ISPA.

ISPA (2004). *Chiffres et données sur l'alcool.* Lausanne, ISPA.

Junger, M. (1990). Delinquency and Ethnicity. Deventer (NL)/Boston: Kluwer.

Junger-Tas, J., Marshall, I.H. & Ribeaud, D. (2003). *Delinquency in International Perspective: The International Self-Report Delinquency Study*. Monsey, NY, USA & The Hague, NL: Criminal Justice Press & Kugler Publications

Killias, M. (2002). *Grundriss der Kriminologie – eine europäische Perspektive.* Bern: Stämpfli.

Killias, M., Haymoz, S. & Lamon, P. (2007). *Die Kriminalität in der Schweiz im Lichte der Opferbefragungen von 1984 bis 2005*. Bern: Stämpfli (in print).

Killias, M., Villettaz P. & Rabasa, J. (1994). Self-reported juvenile delinquency in Switzerland. In J. Junger-Tas, G.J. Terlouw, M. Klein (Eds.): *Delinquent Behavior Among Young People in the Western World.* Amsterdam: Kugler, 186-211.

Lorenz Cottagnoud, S. (1996). *L'argent de poche: Un des facteurs de la délinquance juvénile?* MA dissertation. University of Lausanne, Ecole des sciences criminelles.

Lucia, S., Herrmann, L. & Killias, M. (2007). How important are interview methods and questionnaire designs in research on self-reported juvenile delinquency? An experimental comparison of Internet vs paper-and-pencil questionnaires and different definitions of the reference period. *Journal of Experimental Criminology*, (3), 39-64.

Lucia S., Herrmann, L., Dilitz, C. & Killias, M. (forthcoming). Juvenile Delinquency in Switzerland over 50 Years: An Update and an Amendment. *Europ. J. Criminal Policy and Research*.

Oberwittler D., Blank T., Köllisch T. & Naplava T. (2001). *Soziale Lebenslagen und Delinquenz von Jugendlichen. Ergebnisse der MPI-Schülerbefragungen 1999 in Freiburg und Köln*. Freiburg i.Br. : MPI.

Office Fédéral de la Statistique (2006), *Annuaire statistique de la Suisse – 2006*. Zurich, Neue Zürcher Zeitung Verlag.

Office Fédéral de la Statistique (2006), *Mémento statistique de la Suisse – 2006*. Berne, OFS.

Olweus D. (1995). *Gewalt in der Schule. Was Lehrer und Eltern wissen sollten und tun können*. Bern: Huber.

Rutter, M., Maughan, P., Mortimer, J. & Ouston, J. (1979/80). Fünfzehntausend Stunden. Schulen und ihre Wirkungen auf die Kinder. Weinheim / Basel: Beltz (1980). Original: Fifteen Thousand Hours. Secondary School and their effects on Children. London: Open Books 1979.

Sampson R.J. (1988). Local friendship ties and community attachment in mass society: A multi-level systemic model. *Amercian Sociological Review* 53, 766-779.

Sampson R.J., Laub J.H. (1997). A life-course theory of cumulative disadvantage and the stability of delinquency. In T. Thornberry (Ed.), *Developmental Theories of Crime and Delinquency*. New Brundswick (N.J.): Transaction Publishers.

UBS Wealth Management Research (2006)*, La Suisse en chiffres – 2006.* Zurich, UBS SA.

Wittebrood K. (2000). "Buurten en geweldscriminaliteit: een multilevel analyse". *Mens en Maatschappij* 75/2, 92-109.

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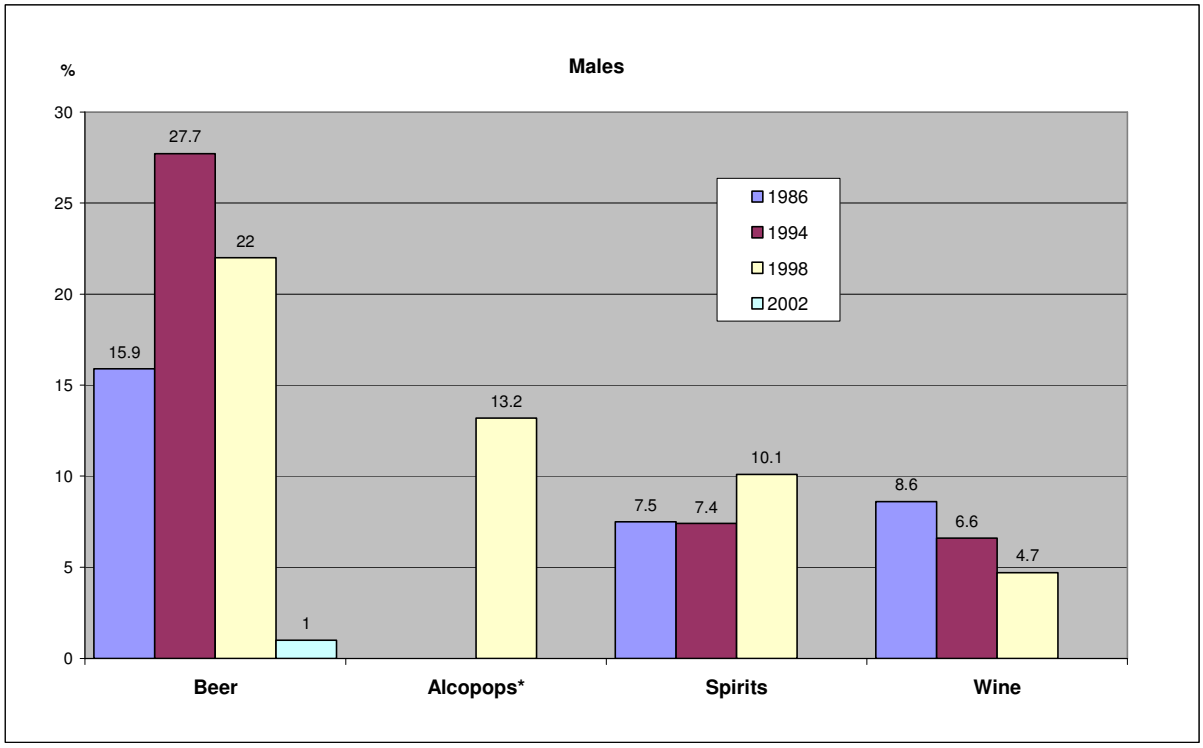
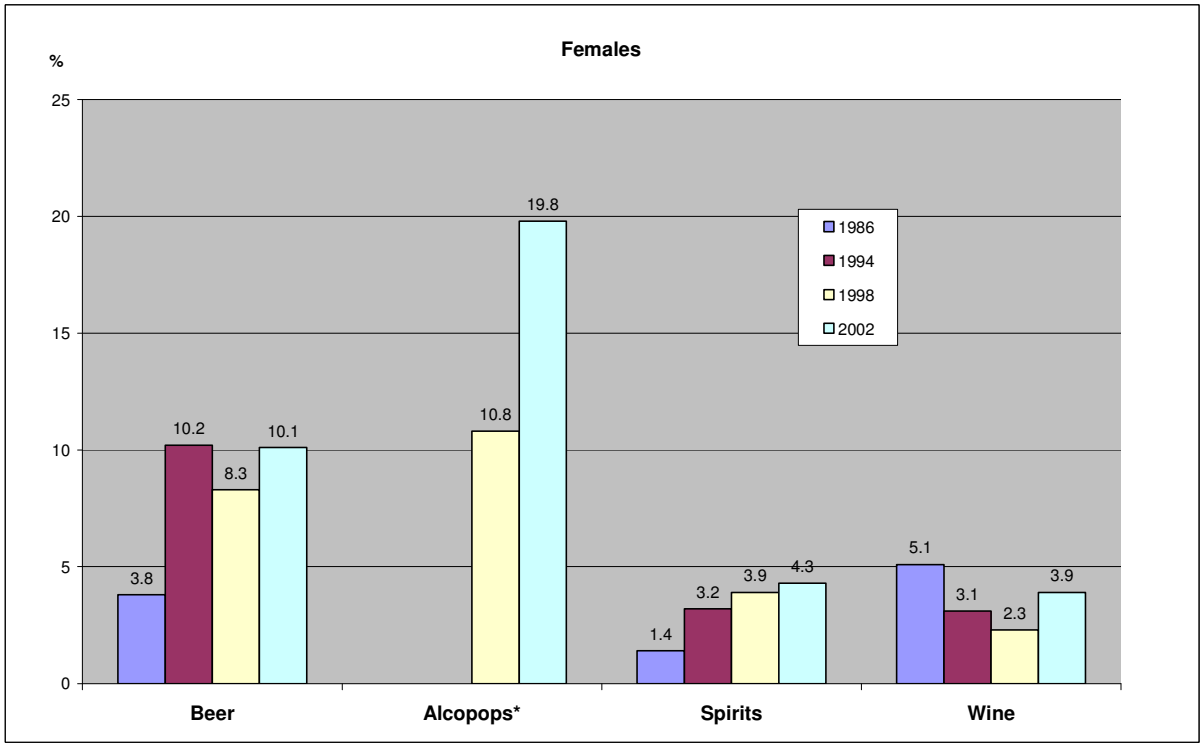
APPENDIX I

Graph 1 : Weekly alcohol consumption : evolution 1986-2002 among males from 11 to16



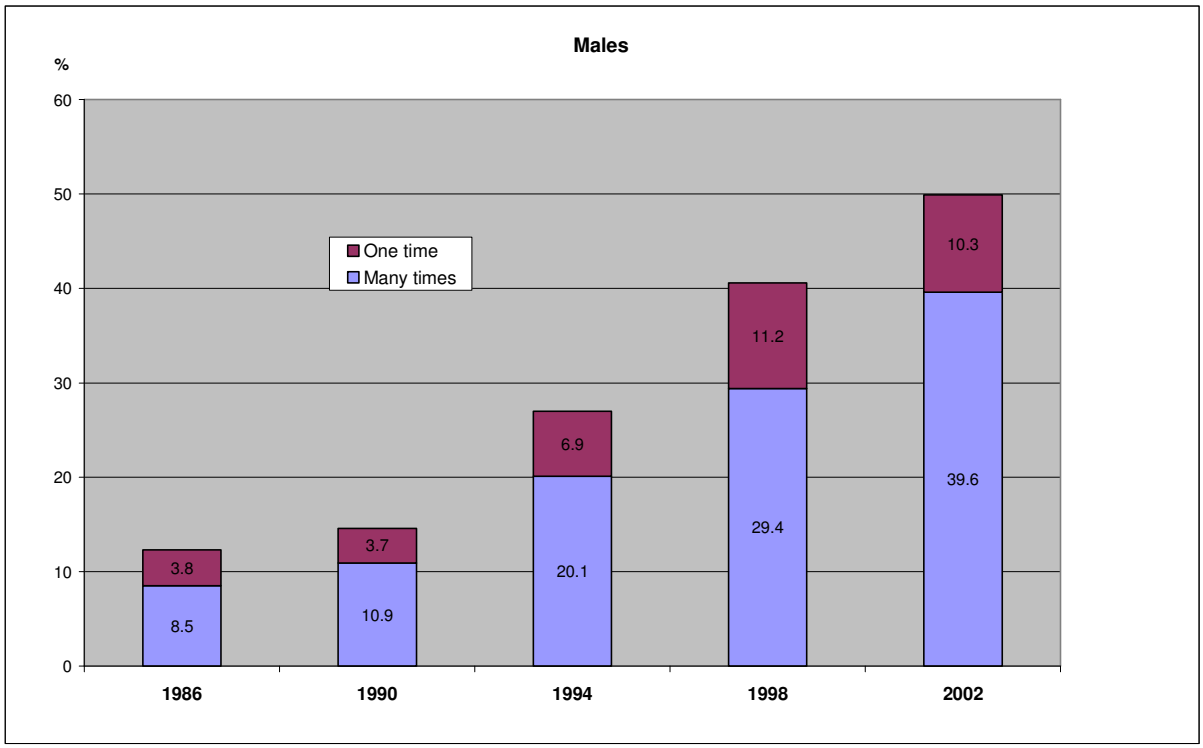
Source : ISPA 2004, study from 2003 (* data since 1998 only)

Graph 2 : Weekly alcohol consumption : evolution 1986-2002 among females from 11 to16



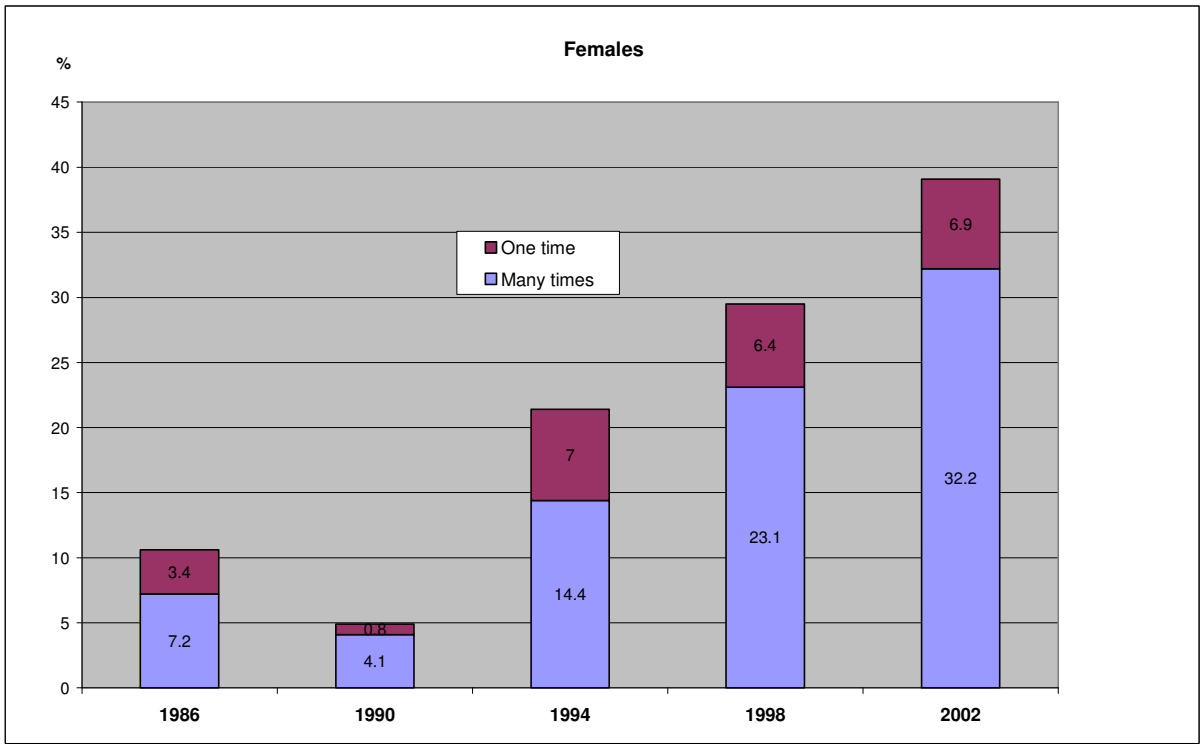
Source : ISPA 2004, study from 2003 (* data since 1998 only)

Graph 3 : Cannabis consumption : evolution 1986-2002 among males from 11 to16



Source : ISPA 2004, study from 2003

Graph 4 Cannabis consumption : evolution 1986-2002 among females from 11 to16



Source : ISPA 2004, study from 2003

APPENDIX II: Swiss questionnaire in 1992 (French language)

APPENDIX III: Swiss questionnaire in 2006 (French language)

APPENDIX IV: Groupings of the several offences in 2006

/* Frequent violent offences

- group fight (Q65)
- carrying a weapon (Q63)

/* Rare violent offences

- pick pocketing/snatching (Q62)
- robbery/extortion (Q64)
- assault (Q66)

/* Vandalism (Q54)

/* Shoplifting (Q55)

/* Rare property offences

- burglary (Q56)
- bicycle/motor bike theft (Q57)
- car theft (Q58)
- car break (Q61)

/* Computer hacking (Q60)

/* Drug dealing (Q67)

/* Hard drug use

- XTC/speed (Q52)
- LSD/heroine/cocaine (Q53)

APPENDIX V : Groupings of the several offences in order to compare the rates between 1992 and 2006

Shoplifting
In 1992, question 240
In 2006, question 55

Burglary
In 1992, question 330
In 2006, question 56

Vehicle theft
In 1992, question 280, 290
In 2006, question 57, 58

Breaking into a car
In 1992, question 300
In 2006, question 61

Pick pocketing/snatching
In 1992, question 320
In 2006, question 62

Robbery/extortion
In 1992, question 390
In 2006, question 64

Carrying a weapon
In 1992, question 380
In 2006, question 63

Group fight
In 1992, question 400
In 2006, question 65

Assault
In 1992, question 440
In 2006, question 66

Selling drugs
In 1992, question 490
In 2006, question 67