Licit and illicit drug use in Amsterdam III

Developments in drug use 1987 - 1997

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SUMMARY AND CONCLUSIONS

0.1 Introduction

This summary presents the main findings of the 1997 Amsterdam survey on drug use. The figures are based on self reported data. **Chapter 1** introduces the survey.

The study of drug use in Amsterdam 1997 is part of a series of studies on drug use in this city. Previous studies were carried out in 1987, 1990 and 1994. The survey has remained consistent, although some modifications were made through the years. In 1990 we started asking about ecstasy, in 1997 we added questions about mushrooms, performance enhancing drugs and about where respondents obtained their drugs. Only in 1997, we oversampled persons aged 12 to 18 and interview-matched the Turkish and Moroccan respondents. The surveys enable us not only to study drug use at a certain time, but also to investigate drug use trends over the period 1987-1997.

The aim of this report is to give an outline of drug use prevalence in Amsterdam in 1997 and to explore developments in patterns of drug use. The main questions in this research were:

- What patterns of drug use occur among the population of Amsterdam?
- Have patterns of drug use in Amsterdam changed in the last ten years? If yes, how?

In this final chapter we will summarize the answers to these questions, which may be relevant for drug policy and future drug research.

Chapter 2 of this report deals with the quality of the data. Attention has been paid to the sample, response and non-response, and weighting. The survey population is defined as all persons in the Municipal Population Registry of Amsterdam, recorded on January 1st of 1997, age 12 and older. This definition of the survey population is identical to the one used for the 1987, 1990, and 1994 surveys. The gross sample of 8,450 people was drawn randomly from this registry. In total 7,423 people were approached. This resulted in a response of 3,798. We oversampled the age cohort 12 to 18. We weighted data by means of post-stratification with respect to age, gender and marital status.

Respondents were interviewed face-to-face computer assisted. The questionnaire contains questions about lifestyle and the use of a wide variety of legal and illegal drugs, including mushrooms and performance enhancing drugs. The fieldwork was carried out by the market research institute NIPO.

0.2 Overview of drug use prevalence in 1997

Chapter 3 provides detailed information of the patterns of drug use that occur among the population of Amsterdam. We investigated prevalence (percentage of reported lifetime/last year/last month use of a drug), continuation (percentage of lifetime users who reported last year/last month use of a

drug), incidence (percentage of persons who started drug use in the year prior to the interview), experienced use (percentage of lifetime users who consumed 25 times or more) reported age of onset of drug use and the place of purchase of drugs.

It is obvious that tobacco and alcohol are most commonly used. Both have high prevalence rates (lifetime: 71.4 and 88.1 percent respectively), and high continuation rates. They are currently used (last month) by respectively 80 and 58 percent of lifetime users. Among the users of tobacco and alcohol, 88 percent is an experienced user. The mean age of first use is 17.5 and 18.0 for tobacco and alcohol respectively. These are the youngest ages of onset of all drugs considered in this survey.

The lifetime prevalence of sedatives and hypnotics are 22.8 and 23.7 percent respectively. Continuation rates are 29 and 28 percent (last month). The number of persons of the population that started using these drugs in the year prior to the interview is the highest incidence rate of all drugs considered, 4.3 and 3.4 percent. More than 40 percent used the drugs more often than 25 times in his or her lifetime. The group of users is relatively old. People start using sedatives and hypnotics at a mean age of 37.0 and 33.8 respectively.

Cannabis consumption rates are the highest of all illicit drugs, but are still very different from alcohol and tobacco. The lifetime prevalence is 36.3 percent. Cannabis use is temporary or intermittent for many people, its last month continuation is 22. Last month prevalence is highest for the age cohort 20 to 24 years old (18.4 percent). 44 Percent of all users consumed the drug 25 times or more. The mean age of onset is 20.3 years.

Cocaine has a lifetime prevalence of 9.3 and last month prevalence of 1.0 percent. The continuation is 10 percent (last month).

Amphetamines have a lifetime prevalence of 5.9, a last month use of 1.1 and a last month continuation of 5 percent.

Ecstasy has a lifetime prevalence of 6.9 and last month prevalence of 1.1 percent. The last month continuation of ecstasy is 15 percent. Only 18 percent of the users is experienced, this is 1.2 percent of the population. The mean age of people starting ecstasy use is 26.3. Lifetime prevalence of ecstasy use among persons aged 12 to 15 is 0.3 percent, those between 16 and 19 it is 7.5. We found the highest lifetime prevalence rate for ecstasy among the age cohort 25 to 29, with 16.2 percent. The relatively high rate is also due to the recent introduction of ecstasy, many started less than four years ago. The incidence rate is 1.3 percent, relatively low and in contrast with all the publicity about the fast spread of use of ecstasy.

The lifetime and last month prevalence of hallucinogens is 9.2 and 0.6 percent respectively. The hallucinogens include mushrooms. Last year and last month use of hallucinogens consists predominantly of mushroom use (with lifetime prevalence of 6.6 percent, last month prevalence of 0.5). The last month continuation of mushrooms is no more than 5 percent, even lower than the group of all hallucinogens. It seems that hallucinogen use is either temporary or very infrequent, as is the case with amphetamines and some of the licit opiates. The mean age of onset of hallucinogens (mushrooms included) is 23.8 years.

The group of opiates is varied and includes opium, morphine, codeine, palfium, methadone and heroin. Some of these drugs, codeine in particular, are mainly used for medical reasons. Opiates have broadly varied prevalence rates, ranging between 0.4 (palfium) and 15.8 percent (codeine) for lifetime prevalence. Heroin is used by a small group of people: 1.7 percent ever used heroin, only 0.2 percent used it last month. Codeine prevalence of 15.8 (lifetime) and 3.6 (last month) is highest of all opiates.

Of the codeine and heroine users, 36 and 41 percent are experienced users. The age of onset of opiates is high compared to the rest of the drugs, hypnotics and sedatives excluded. The mean age of first use is 28.7.

The cluster of difficult drugs (amphetamines, cocaine, ecstasy, hallucinogens excluding mushrooms, heroin) has a lifetime prevalence of 14.1 and a last month prevalence of 2.0.

The prevalence rates of performance enhancing drugs are very low, 1.4 (lifetime) and 0.3 (last month). However, for the few users we could find, last month continuation is rather high (33 percent).

'No drug use' is defined as no use of all listed drugs. Of the Amsterdam population, 6.3 percent did not use these drugs ever, 18.4 percent did not use any drug last month.

Coffee shops, relatives and friends are equally important sources of purchase for cannabis. Other illegal drugs, including ecstasy are mainly purchased at relatives and friends. Performance enhancing drugs are mainly bought from relatives and friends, but also via doctors and trainers.

0.3 Developments in drug use prevalence 1987-1997

Chapter 4 examines the developments of drug use among the population of Amsterdam for 1987, 1990, 1994 and 1997. For most drugs, prevalence rates show an increase over this ten year period. However, patterns of use -in terms of continuation, incidence, frequency of use and age of onset- in general remain stable. The increasing prevalence rates reflect the so called 'generation effect': with stable rates of incidence, the total pool of those who have lifetime experience with drugs will increase because the elderly (with zero rates of drug use) decease.

Use of alcohol is stable and the slight dip in tobacco lifetime prevalence is over. Tobacco lifetime prevalence is back to the level of 1987. The level of current tobacco use (last month prevalence) has decreased since 1987. The last month prevalence of alcohol use remained stable.

The use of both hypnotics and sedatives has increased since 1994. But, compared to 1987, prevalence rates of these substances are stable. The last month continuation of hypnotics and sedatives is 33 and 32 respectively (1997).

The percentage of persons using cannabis has been rising steadily since 1987, lifetime prevalence rose from 23 to 36.3. This reflects a computed incidence of just over 1 percent per year on average. This meets our measured incidence (with 1.1, 1.0, 1.2 and 1.1). Cannabis is the most popular illicit drug on the list. Cannabis also shows an increase in last year prevalence and last month prevalence.

Lifetime prevalence of cocaine has increased as well from 5.7 percent in 1987 to 9.3 in 1997. Last month prevalence rates remain low, developing from 0.6 percent in 1987 to 1.0 in 1997.

As could be expected, lifetime prevalence of ecstasy has increased in a conspicuous way from 1.3 percent in 1990 to 6.9 in 1997. In 1987 it was such a new drug that it was not even part of the questionnaire. Last month prevalence is low but increasing (from 0.1 percent in 1990 to 1.1 in 1997). Incidence rates rose from 0.7 in 1990 to 1.3 in 1997.

Hallucinogen prevalence rates have also increased from 3.9 percent in 1987 to 9.2 in 1997. The expansion is almost entirely due to the recent popularity of mushrooms. But, as is the case with all

illicit drugs, last month prevalence of hallucinogens is very low in 1987 and remains low till 1997. In the year prior to the interview, incidence developed from 0.6 percent in 1990 to 0.1 in 1987.

Prevalence of opiates use increased much. This is partly due to a big increase in codeine prevalence rates. Last year prevalence rates increased from 2.3 percent in 1987 to 16.0 percent in 1997. The last month continuation of opiates as a group increased from 8 percent in 1990 to 20 in 1997, the last month continuation of codeine in particular increased from 14 percent in 1990 to 30 in 1997. The explanation of the increased use of codeine is unknown to us. Heroin use is very slowly increasing, remaining at a very low level. In 1987 we found 0.0 percent last month prevalence, but in 1997 the last month rate has increased to 0.2 of the population of 12 years and older.

The number of people who report 'no drug use' stabilised between 1987 and 1997. With a last month prevalence rate of 18.4 percent for 'no drug use', rather stable since 1987, this category shows the highest last month rate after alcohol and tobacco.

0.4 Non-response

Chapter 5 focuses on our non-response survey. Among the non-response, we distinguished refusers and absentees. We found that reasons for refusal usually were 'no time or not convenient'. We concluded that the response group was slightly different from the non-response group (refusers as well as absentees) in terms of life style and the use of alcohol and cannabis. Prevalence of alcohol tends to be somewhat higher among non-response than could be estimated from the main survey. Lifetime prevalence of cannabis is lower than could be expecteded. We conclude that recomputation of the prevalence data based on the non-response survey, would lead to small but meaningless differences with our original estimates.

0.5 Conclusion

In the decade since 1987, we systematically measured in Amsterdam prevalence of use of the most popular licit and illicit drugs with identical sampling and interviewing techniques. The most essential outcomes of these four measurements in terms of prevalence of use are summarized in table 4.2 on page 46. Lifetime prevalence of use of most drugs increased, alcohol, tobacco and sedatives excluded.

However, the measurements allow the conclusion that most use of drugs is temporary and irregular. The evidence for this conclusion is based on the much lower last month prevalence we found for each of the drugs. For instance, lifetime prevalence of use of the most popular illicit drug -cannabis- increased from 23.2 percent in 1987, to 36.3 percent ten years later. But last month prevalence of use developed from 5.6 percent of the population to 8.1 percent. This is low -one fifth- compared to the last month prevalence of use of tobacco. Behind the superficial prevalence measures, we have to investigate how drugs are used, at what ages, and what proportion of users develops repeated or intensive use. For all drugs we find a stable situation. Average age of initiation (relatively high), incidence,

continuation rates for last year and last month, and proportion of users that develop into frequent current users are very stable (and low). Detailed data can be found in chapter 4. This means that increasing lifetime experience with drugs in the Amsterdam population of 12 years and older does not trigger more intensive use patterns.

The explanation for this is probably that the social relations and the culture that produce use patterns within a range of life styles did not change. This explanation allows the thesis that availability of drugs alone does not explain use patterns. The social fabric, in which drugs appear, determine how these drugs are used, how long, and for what functions.

1 Introduction

1.1 Introduction

This report presents the main findings of the 1997 Amsterdam survey on drug use. The figures are based on self reported data (almost 4,000 cases), collected in Amsterdam in the period from April 1997 to April 1998.

This study of drug use in Amsterdam 1997 is part of a series of studies on drug use in Amsterdam, funded by the Dutch Ministry of Health, Welfare and Sport (VWS). Previous studies were carried out in 1987, 1990 and 1994. Although some questions have been added through the years, this survey has remained consistent. Therefore, the surveys enable us not only to study drug use at a certain time, but also to investigate drug use trends over a period of time.

Furthermore, this study is part of a national study on drug use, also funded by the Dutch Ministry of Health, Welfare and Sports. In 1997 and 1998, the same survey instrument (questionnaire and sampling method) was used to measure drug use in the Netherlands as a whole. Hence, the next step is to compare the Amsterdam results with those of the rest of the country. This is interesting because Amsterdam is a special case. We already found that other big Dutch cities like Utrecht and Tilburg are different in as far as drug use prevalence is concerned (Langemeijer et al, 1998). We expect that less densely populated areas and large and small cities are different again. The national survey is set up in such a way that it enables us to see these differences, and also to measure differential developments in the different density areas of the Netherlands over time. The methodological set up of this national study (22,000 cases) is described elsewhere (van Til, 1997).

This report will mainly focus on the developments of prevalence of drug use in Amsterdam. The description of drug use in relation to socio-economic variables will be presented in the national report (forthcoming).

1.2 Research questions

The aim of this report is to give an outline of drug use prevalence in Amsterdam in 1997 and to explore developments in patterns of drug use.

Research questions to be answered are:

- What patterns of drug use occur among the population of Amsterdam?
- Have patterns of drug use in Amsterdam changed in the last ten years? If yes, how?

Sub questions to be answered are:

- For Amsterdam 1997: What is the reported drug use per life time, last year and last month (prevalence)? To what extent do people keep using drugs for a longer period of time (continuation)? What is the frequency and intensity of drug use?
- What changes in time are revealed? How can they be interpreted?

1.3 Method of research

The survey population is defined as all persons in the Municipal Population Registry of Amsterdam, recorded on January 1st 1997 and age 12 and older. This definition of the survey population is identical to the one used for the 1987, 1990, and 1994 surveys. As in former years, the Municipal Population Registry of Amsterdam drew the gross sample.

The research institute O&S was responsible for the fieldwork in the 1987 survey. The surveys of 1990, 1994, and 1997 have been executed by the market research institute NIPO. In the 1997 survey, almost 8,000 people were approached by letter and asked to participate in a face-to-face interview in a survey about life styles and the use of medical and other drugs. Then respondents were approached systematically by trained NIPO interviewers to avoid selective non-response. At the end, 3,798 respondents were interviewed. In former years the response was of the same order. The fieldwork started in April 1997 and lasted till April 1998. Although the major fieldwork was completed by November 1997, the remaining months were needed to interview the Turkish and Moroccan minorities in the city, with translated questionnaires, and ethnically matched interviewers. Later we will describe these procedures fully.

We paid attention both to the quality of the instrument itself, and to the consistency of the instrument in the long run, but in comparison to our earlier studies some things were changed. To improve the quality of the survey the following modifications were made:

The 1987 and 1990 surveys were paper-written questionnaires, interviewers wrote the answers down on a printed questionnaire. However, interviews can easily be organised in such a way that response can be fed directly into a portable computer. Benefits of computer assisted interviewing (CASI) are saving time and gains in terms of data and routing reliability. Before we could switch fully to computer assisted interviewing, we had to investigate the effects of the application of this different data collection method in comparison to the two earlier surveys. In the 1994 survey we applied two interview methods: the written and the computer version. The sample was randomly subdivided into two equal sized samples. One to be approached with a paper-written questionnaire, the other to be approached with a computer assisted questionnaire. Differences between the groups were small and indistinct (Sandwijk et al, 1995). Therefore, it was decided to use the computer assisted method in 1997.

In 1997, the definition of 'continuation' was modified. So far this was simply a division of last-month-prevalence and lifetime-prevalence. This measure is now corrected for starters. Respondents who started using drugs in the last year or last month are left out of the group 'continuing persons'. The chance that a respondent started using a drug in the last month was calculated by using the

variables 'date of birth' and 'age of first use'. Apart from the alcohol rates there are no significant differences between the continuation and the non-corrected continuation rates.

Another definition that is changed is the 'mean age of first use'. In earlier studies this was underestimated with half a year, because not the exact age was used, but the age of last birthday.

In 1997 we fine-adjusted a few questions about profession and education to get in line with the definitions in this areas used by Statistics Netherlands (CBS)[1]. We added a few questions about hallucinogenic drugs in order to be able to measure the prevalence of newly fashionable drugs like mushrooms or 2CB, and about where respondents obtained their drugs. Some extensions of existing measures are introduced, for instance the continuation rates by years since first use and continuation rates by age of first use.

In former years the response rate of Turkish and Moroccan persons was very low. For instance, in 1994, we had a response rate of 37 percent for the Moroccans in the sample and 33 percent for the Turkish persons (Sandwijk et al, 1995). As an experiment, in the 1997 survey we decided to use matched interviewers for Moroccan and Turkish respondents to increase their response rate. Questionnaires were translated and Turkish and Moroccan interviewers were recruited and trained. Finally Moroccan and Turkish respondents were approached by interviewers of the same ethnic group (matching). The fieldwork proceeded slowly this way. This matching procedure resulted in an improved Turkish response rate, but the Moroccan response rate got even lower. A more detailed account of response and non-response is given in chapter 2.

The group with age 12 to 18 is of special interest. Therefore, we decided to oversample this group. Drug use in this group is often measured by means of school surveys. Because we had found important problems in the representativity of Dutch national school survey data for the group 12-18 as a whole (Langemeijer, 1997), this oversampling enables us to compare our household based drug use data in this group with the school survey based data (Kuiper et al, 1993). By oversampling, we created a difference between the samples of 1987, 1990, 1994 and 1997 since we only did this in 1997. However, results can be compared because we weighted all data by age and gender in relation to the true population, as given by the registry for the year of the survey.

1.4 Definitions

The concept of 'difficult drugs' was introduced in 1990 to avoid definition problems (Sandwijk et al, 1991). A simple division into licit and illicit drugs is not sufficient due to the specific wording of the Dutch Opium act[2]. We have decided not to use the term 'hard drug' because of its many non scientific connotations. And the term 'hard drug might give the erroneous impression that we are referring to a particularly hazardous category of drugs and that soft drugs on the contrary pose (almost) no health risks at all. Dutch narcotic law makes a distinction between cannabis and other illicit drugs, such as cocaine, amphetamine, ecstasy, hallucinogens, LSD and heroin. Both categories are illicit, but priority for criminal investigation and prosecution is given to the latter. So, while still illegal, the possession of cannabis is not prosecuted as long as small amounts are involved, making acquisition of these drugs relatively easy. The position of mushrooms in the Dutch opium law is ambiguous but in practice we have a similar situation as with cannabis type drugs. At the moment (1998) the mushroom itself is legal but the active substances psylocybin and psilocin are registered as illicit drugs (Adelaars, 1997).

On the other hand, mushrooms are sold in special shops (smart shops) in a way very similar to the sale of cannabis products in so called coffee shops. The mushrooms are sold in small bags, either dried or fresh, and they are sold together with a small information leaflet on how and in what context to use them, what to expect and what to do in case of a 'bad trip'. In this study we regard mushrooms as a hallucinogen but not as a difficult drug. The reason is that just as with cannabis mushroom sales in specialised shops are tolerated under present Dutch drug policy. Their purchase therefore is not 'difficult' as with other difficult drugs (amphetamines, cocaine, ecstasy, hallucinogens like LSD, heroin).

The difficult drugs included in this study are: amphetamines, cocaine, ecstasy, all hallucinogens *excluding* mushrooms, and heroin.

New in this survey are questions regarding performance enhancing drugs, which are also used for aesthetic reasons (e.g. body building). These performance enhancing drugs are often called 'doping'. It is not the substance alone, but also the situation that determines whether a substance is considered doping or not. For example, cocaine used by a cyclist in the Tour de France is doping, cocaine used in a discotheque not. Performance enhancing drugs are an aggregate, just like difficult drugs.

The performance enhancing drugs included in this study are: anabolic androgen steroids (AAS), growth hormone, EPO (erythropoietin), thyroid gland preparation, clenbuterol, stimulants (e.g. amphetamines, cocaine, and caffeine in high doses).

1.5 Statistical notes

The tables include an indication of whether a change between two groups (e.g. 1987 and 1997) is statistically significant. Differences in prevalence and continuation rates are tested using a χ^2 test (Chi-square test). The test takes into account the sizes of the subsamples being compared. Statistical significance is reported for levels of 0.05 and lower.

Clearly, there are statistical problems involved in studying drug use due to the sometimes small number of people that use particular substances. This makes it harder to determine whether results can be generalised, i.e. whether results are valid for the population as a whole. An estimate is considered to be unreliable if the subsample group is smaller than 50. In tables we noted these estimates with a hyphen (-).

The following symbols are used in the tables:

.	data not available
-	low precision, no estimate reported
0 (0.0)	less than half of unit employed
a blank	category not applicable

1.6 Report preview

Chapter 2 is about the data quality. This includes studying the sample, response and non-response, and weighting. Chapter 3 examines drug use in Amsterdam in 1997. Chapter 4 examines trends in drug use in Amsterdam in 1987-1997. Chapter 5 focuses on the survey among non-response. Conclusions and main findings are formulated in Chapter 0.

Notes

1 CBS (Centraal Bureau voor de Statistiek) is a governmental organization responsible for registering statistical information about the Netherlands.< http://www.cbs.nl>

2 The so called 'Opium act' of 1976 regulates the status of a large number of substances. The law has a dual listing of substances it declares as 'illicit' for use. Schedule I contains all the substances drugs presenting "unacceptable risks" (including hash oil). In our definition these are the 'difficult' drugs. Schedule II was created for cannabis products like hashish and marijuana. Maximum penalties for trafficking drugs with 'unacceptable risks' were raised in 1976, and penalties for possession of cannabis for personal use in amounts up to 30 grams were lowered, and made into misdemeanors (Korf, 1995).

2 Data Quality

2.1 Introduction

As we did in our earlier drugs survey reports we will supply details about data quality. This includes results of studying the sample and the response. We will also discuss weighting and the conclusions based on our study of the non-response.

2.2 Representativeness

The survey population is defined as all persons in the Municipal Population Registry of Amsterdam, recorded on January 1st of 1997 and age 12 and older. The gross sample of 8,450 people was drawn randomly from this registry.

The relation between the registry, sample and response and the eventual differences can be seen in Table 2.1. The table shows the composition of the survey population by the demographic characteristics age group, gender, marital status and ethnicity. It also shows whether the response reflects the sample population and if differences between them are statistically significant.

The group aged 12 to 18 is oversampled. The probability that persons aged 12 to 18 end up in the sample is twice as high as for others. Because we oversampled the age cohort of 12 to 18, we automatically obtained a sample that is different from the population. This not only affects the distribution of age, but also influences the distribution of marital status, because juveniles in the age range we oversampled are usually not married. The sample and the registry distributions by ethnicity are alike, so are the distributions by gender.

Response is compared with sample figures. We use the χ^2 test to see whether the distribution of the response matches that of the sample. The χ^2 test indicates that the response by age is significantly different ($p<0.05$) from the sample, by age. Especially the groups 12 to 13, 14 to 15 and 16 to 17 turn out to have a higher response rate (5.3 percent when expected 3.9, 4.0 when expected 3.5 and 4.7 when expected 3.8). And the groups 20 to 24 and 25 to 30 show a lower response rate (6.5 percent when expected 7.6, and 11.3 when expected 12.2). There is no evidence of gender selective response. The marital status distributions in the response and sample match each other.

The χ^2 test also indicates that the response by ethnicity is significantly different ($p<0.05$) from the sample. Despite our efforts to match interviewers with the Moroccan and Turkish populations, the response is poor by people with a Moroccan background. Of the people with a Moroccan background, 23 percent responded, in 1994 this was 37 percent. We have to conclude that applying matching to increase Moroccan response is not the right technique. Our matching worked for people with a Turkish background, for they have a higher response rate as could be expected from former years. In 1994,

Table 2.1: Population according to sample and response group, by age group, gender, marital status and ethnicity, 1997

Amsterdam registry 1-1-1997			*sample*			*response*		
age	*N*	*%*	*age*	*n*	*%*	*n*	*%*	*p<0.05*
12-13	12,730	2.0	12-13	330	3.9	202	5.3	
14-15	12,594	2.0	14-15	298	3.5	151	4.0	
16-17	12,377	2.0	16-17	318	3.8	180	4.7	
18-19	13,609	2.2	18-19	246	2.9	114	3.0	
20-24	52,180	8.4	20-24	646	7.6	246	6.5	
25-29	82,195	13.2	25-29	1,031	12.2	430	11.3	
30-34	80,696	13.0	30-34	1,000	11.8	422	11.1	
35-39	65,750	10.6	35-39	894	10.6	404	10.6	
40-49	102,155	16.4	40-49	1,316	15.6	596	15.7	
50-59	68,486	11.0	50-59	860	10.2	371	9.8	
60-69	50,315	8.1	60-69	609	7.2	273	7.2	
70+	68,868	11.1	70+	902	10.7	409	10.8	
gender			*gender*					
Male	302,845	48.7	Male	4,063	48.1	1,770	46.6	
Female	319,110	51.3	Female	4,387	51.9	2,028	53.4	
marital status			*marital status*					
Unmarried	300,246	48.3	Unmarried	4,376	51.8	1,982	52.2	
Married	210,953	33.9	Married	2,627	31.1	1,234	32.5	
Divorced	70,410	11.3	Divorced	949	11.2	361	9.5	
Widowed	40,346	6.5	Widowed	498	5.9	221	5.8	
ethnicity			*ethnicity*					*p<0.05*
Netherlands	495,528	79.7	Netherlands	6,819	80.7	3,189	84.0	
Morocco	22,583	3.6	Morocco	505	6.0	121	3.2	
Turkey	11,562	1.9	Turkey	337	4.0	206	5.4	
Other	92,282	14.8	Other	789	9.3	282	7.4	
Total	621,955	100.0	Total	8,450	100.0	3,798	100.0	

Distributions are compared response versus sample with $\chi 2$, $p<0.05$ test

Source registry totals: O+S, 1997

33 percent of the Turkish people responded, this is now 61 percent (Sandwijk et al, 1995). Table 2.2 details the response of people with Moroccan and Turkish background.

With the systematic approach of the sample, we aimed at non-selective non-response. The figures above point out that we did not always succeed and (slight but significant) differences occurred. Chapter 5 further discusses the non-response.

Table 2.2: Moroccan people according to sample and response group, by age and gender

	sample		*total response*		*matched*		*non-matched*	
Moroccan	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*
12-29	286	56.6	76	62.8	44	71.0	32	65.3
30+	219	43.4	45	37.2	28	45.2	17	34.7
Male	272	53.9	59	48.8	32	51.6	27	55.1
Female	233	46.1	62	51.2	40	64.5	22	44.9
Total	505	100.0	121	100.0	62	100.0	49	100.0
Turkish								
12-29	169	50.1	107	51.9	83	48.5	24	68.6
30+	168	49.9	99	48.1	88	51.5	11	31.4
Male	188	55.8	128	62.1	106	62.0	22	62.9
Female	149	44.2	78	37.9	65	38.0	13	37.1
Total	337	100.0	206	100.0	171	100.0	35	100.0

Table 2.3: Sample, frame errors and non-response categories

sample	*n*	*%*	*valid %*
Response	3,798	44.9	52.5
Non-response	3,441	40.7	47.5
Net sample	7,239	85.7	100.0
Frame errors	675	8.0	
Non-used addresses	523	6.2	
Unknown errors	13	0.2	
Total sample	8,450	100.0	

frame errors			*non-response categories*		
Moved	294	43.6	Refusal	1,748	50.8
Unknown at address	105	15.6	Not-at-home	1,128	32.8
Vacancy	39	5.8	Illness	302	8.8
Address not found	48	7.1	Language problems	194	5.6
Deceased	18	2.7	Other non-response	69	2.0
Other frame errors	171	25.3	Total non-response	3,441	100.0
Total frame errors	675	100.0			

2.3 Response and non-response

In total 7,423 people were approached. This resulted in a response of 3,798 (a response rate of 51.2 percent of the net -or valid- sample) and a non-response of 3,441 (48.8 percent of the net sample). Although the response rate is relatively low, this does not undermine the validity of the survey. The response rate was known to us from earlier surveys. In 1987, 1990 and 1994 the response rate was 58.4, 55.0 and 50.2 percent respectively.

The size of the total sample was computed from an estimated non-response of 50 percent. To examine the eventual bias, caused by non-response, a shorter follow up survey was conducted among the non-responses at the end of the fieldwork period. The results of this survey pointed out that there is no significant difference in patterns of drug use between response and non-response. Precise results of the non-response survey are given in chapter 5.

Table 2.3 shows the sample, the frame errors and the categories of non-response. Even though the sample frame is of relatively good quality, frame errors still occur: 675 addresses were invalid. Some frame errors (like person does not live at the registered address) may be due to the time lap between the moment the gross sample was drawn and the moment the respondent was actually approached.

Of all addresses, 523 are unused because the pre-set number of respondents had already been reached.

Reasons for non-response vary from refusals to cooperation (50.8 percent of the non-responses) to not-at-home cases (approached three times), illness, language problems and other non-responses.

2.4 Data weighting

The sample from the Registry is a selection with unequal probabilities. Because we oversampled the age cohort 12 to 18 it is necessary to weight with respect to age to get a representative sample. But even after weighting for age, the response reflects not immediately the population, because of normal sampling error and non-response. We chose to correct by means of post-stratification. This method assigns a weight to each subgroup of the population. Subgroups were defined by age (12-15, 16-19, 20-24, 25-29, 30-34, 35-39, 40-49, 50-59, 60-69, 70+), gender (male, female) and marital status (unmarried, married, divorced, widow).

Important advantage of post-stratification is that the response becomes representative for the population. This result is not always achieved by simple weighting, which makes the *sample* representative for the population. Other advantages of post-stratification are the increased precision of the estimator (if the target variable varies little in the category of the variables age, gender and marital status, which is the case), and the correction of cluster-effects.

To apply post stratification we need the population and response totals by age group, gender and marital status. These are the figures presented in Table 2.1. The information that is needed of the population was derived from the municipal registry.

Weights are given by ratio of population figures, as follows

$$w_h = \frac{N_h}{N} / \frac{n_h}{n}.$$

With N (=621,955) the total Amsterdam population aged 12 years or older in 1997, N_h the subgroup with specific characteristics, n (=3,798) the net sample and n_h the net subsample with these characteristics. All assigned weights sum up to 1.

A precise comparison between drug survey years requires same treatment of data. In the 1987, 1990, and 1994 surveys there was no oversampling. Hence, for that reason it was not required to weight the data. We now want to look at developments in time and make data more comparable by means of post-stratification. To be able to do this, the 1987, 1990 and 1994 data were post-stratificated with respect to age and gender. Because we lacked information of the marital status of respondents of these years, it was not possible to do this also with respect to marital status. We used the Municipal Registry information to determine the weights. After post-stratifying all figures for the four consecutive measurements of drug use prevalence in Amsterdam are comparable.

We want to emphasise that weighting and post-stratification influence test-significance. Assigning weights decreases the reliability of the sample and thus leads less easily to significance, whereas post-stratification increases the reliability of the sample and thus leads more easily to significance. For reasons of simplicity we assume that, when data is tested with a χ^2 test, these effects balance each other out. As a matter of fact, we assume that the sample is a random one stage sample.

3 Drug Use Prevalence in 1997

3.1 Introduction

This chapter focuses on the 1997 drug use prevalence rates in Amsterdam. We will present life- time, last year and last month prevalence rates and last year and last month continuation rates. Subsequently, we will examine the incidence, frequency and intensity of drug use and the age of first use. Prevalence rates will be presented, detailed by age, gender, ethnicity and neighbourhood, and specified per drug. Finally, we will describe where respondents who report last year use of a substance, buy these substances.

3.2 Prevalence and continuation of drug use

Table 3.1 indicates the most commonly studied drug use statistics: life time prevalence, last year prevalence, last month prevalence and the continuation rates. Prevalence is determined by the reported use of a drug. Continuation is determined by the percentage of reported lifetime users that have used the drug in the last year (last year continuation), or in the last month (last month continuation). Therefore, last year and. last month continuation rates are corrected for those for whom last year and last month use is not a continuation but the start of the drug using 'career'. This means that we report the sum of continuation rates, multiplied by the probability of not-starting for those whose drug career is shorter than one year. Section 3.5 gives detailed prevalence and continuation rates per drug.

For the first time we report the use of mushrooms separately. Reason is that the relatively large increase in hallucinogen use between 1994 and 1997 (from 4.5 to 9.2 percent) is mainly due to the sudden onset of the mushroom fashion in 1995. Therefore separate reporting of mushroom use seemed informative. We will report for the first time on prevalence of the use of performance enhancing drugs.

Alcohol and tobacco are most commonly used. Both have high prevalence rates, and especially alcohol has high continuation rates.

The lifetime prevalences of sedatives and hypnotics are 22.8 and 23.7 percent respectively. They are currently used (last month) by nearly 3 out of 10 lifetime users.

Cannabis is the most prevalent illicit drug on the list of prevalence rates. More than one third of the population of Amsterdam has ever tried this drug. Cannabis has the highest continuation rates of all illicit drugs (22 percent last month continuation), but from this table it is clear that cannabis use still is very different from alcohol and tobacco use. Cannabis use is temporary for a lot of people. The 'low continuation' character of much of the drug use is even more clear for other illicit drugs.

The lifetime and last month prevalence of hallucinogens is 9.2 and 0.6 percent respectively. The hallucinogens include mushrooms. Last year and last month use of hallucinogens is mainly mushroom use. Mushrooms with a lifetime prevalence of 6.6 percent have a very low last month prevalence of 0.5 percent. The last month continuation of mushrooms is no more than 5 percent, even lower than the group of all hallucinogens. It seems that hallucinogen use is temporary and or very infrequent, as is the case with amphetamines and some of the licit opiates.

The group of opiates is varied, it includes opium, morphine, codeine, palfium, methadone and heroin. Some of these drugs, codeine in particular, are mainly used for medical reasons. Opiates have broadly varied prevalence rates, ranging between 0.4 (palfium) and 15.8 percent (codeine) for lifetime prevalence. Heroin is used by a small group of people: 1.7 percent ever used heroin, only 0.2 percent used it last month. Codeine prevalence of 15.8 (lifetime) and 3.6 (last month) dominates the opiates rates.

The cluster of difficult drugs (amphetamines, cocaine, ecstasy, hallucinogens excluding mushrooms, heroin) has a life time prevalence of 14.1 and a last month prevalence of 2.0.

The prevalence rates of performance enhancing drugs are very low, 1.4 (lifetime) and 0.3 (last month). However, for the few users we could find, last month continuation is rather high (33 percent).

Table 3.1: Prevalence and continuation of drug use, 1997 (weighted percentages)

	prevalence			*continuation*		*reported lifetime*
drug	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unweighted n*
Tobacco	71.4	46.4	41.8	65	58	2,596
Alcohol	88.1	79.6	70.9	90	80	3,252
Hypnotics	23.7	12.9	7.8	46	29	868
Sedatives	22.8	11.4	7.2	43	28	839
Cannabis	36.3	13.1	8.1	35	22	1,285
Inhalants	1.8	0.4	0.2	14	5	62
Cocaine	9.3	2.6	1.0	27	10	321
Amphetamines	5.9	0.9	0.3	14	5	204
Ecstasy	6.9	3.1	1.1	43	15	232
Hallucinogens all	9.2	2.7	0.6	24	6	324
Mushrooms	6.6	2.4	0.5	27	5	230
Hall. excl. mushrooms	6.2	1.1	0.0	15	0	214
Opiates all	21.1	16.3	4.2	59	19	769
Opium	2.0	0.2	0.0	10	2	67
Morphine	4.3	0.8	0.1	13	3	159
Codeine	15.8	7.3	3.6	43	21	582
Palfium	0.4	0.0	0.0	-	-	16
Methadone	0.8	0.3	0.2	-	-	27
Heroin	1.7	0.5	0.2	24	12	59
Perform. enh. drugs	1.4	0.6	0.3	33	17	53
Difficult drugs	14.1	4.8	2.0	34	14	491
No drugs	6.3	11.8	18.4			325

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens excl. mushrooms, heroin.
No drugs is *non* of the above drugs

'No drug use' is defined as no use of all listed drugs. Of the Amsterdam population, 6.3 percent of them did not use these drugs ever, 18.4 percent did not use any drug last month. Logically the continuation of no drug use is not calculated.

Drug use is temporary for most users. Table 3.2 shows which percentage of lifetime users continues (or has restarted) using since the year of first use.

For less than 2 years since first use, continuation of tobacco use and alcohol use is relatively low. This is probably caused by experimental use of these drugs by a lot of persons at a young age, who start to use them more regularly when they are older. We observe the same differences in continuation by years since first use for cannabis and difficult drugs.

For cannabis, continuation rates drop sharply after four years since initial use, to remain stable at about 20 percent after 10 years since initial use. This means that 80 percent of all lifetime users of cannabis have quit after 10 years since initial use. The same pattern of use is displayed for difficult drugs.

Pattern of use for hypnotics and sedatives is completely different. A lot of people start taking these substances at higher ages and keep on using them increasingly when they get older. Continuation does not drop, but rises slightly the more years have passed since initial use

3.3 Incidence of drug use

The incidence of drug use is the number of new drug users in the population, this is the number of people that started using a drug in the year prior to the interview. Table 3.3 illustrates the incidence of drug use. To put the incidence in perspective, we give the incidence rates which refer to people who ever used, and also the incidence rates which refer to the entire population. Thus, 2 percent of the persons who reported lifetime tobacco use started smoking last year, and of the population, 1.2 percent started smoking last year.

The highest incidence rate is related to the use of mushrooms. We see that 30 percent of the people who ever took mushrooms, started taking these drug the year prior to the interview.

28 Percent of the reported performance enhancing drug use started using last year.

3.4 Frequency and intensity of drug use

An experienced user of a drug is defined in this report as someone who used the drug 25 times or more during his or her lifetime. Table 3.4 shows the percentage of experienced users. The first percentage refers to people who ever used, and the second percentage refers to the entire Amsterdam population. For instance, 88 percent of the people who ever used tobacco, used tobacco 25 times or more, and of the Amsterdam population, 62.8 percent used this drug 25 times or more.

Figure 3.1 shows on how many days during the last month, alcohol, hypnotics, sedatives and cannabis were used by respondents who report last month use of the substance. Percentages are also shown in Table 3.35 (section 3.6).

7 Percent of last month's alcohol users had a drink just 'one day' during last month. Slightly more than 10 percent of people who used sedatives and hypnotics during the last month used only 'one day'. Cannabis is used 'one day' by 20 percent. On the other hand, sedatives and hypnotics are on top of the list of most frequent use. Almost 50 percent of the people who used last month, took this drug 'more than 20 days', compared to 32 and 28 percent for alcohol and cannabis respectively.

Table 3.2: Last month continuation rates, by years since first use (weighted percentages)

years since	*tobacco*		*alcohol*		*hypnotics*		*sedatives*		*cannabis*		*difficult drugs*	
first use	*%*	*unwtd n*	*%*	*unwtd n*	*%*	*unwtd n*	*%*	*unwtd n*	*%*	*unwtd n*	*%*	*unwtd n*
0-1	40	65	49	116	34	161	35	137	20	60	13	49
2-4	63	174	64	227	23	150	24	126	37	153	23	70
5-9	72	239	79	287	24	157	26	154	26	214	19	83
10-14	69	313	85	384	39	103	29	105	19	252	14	94
15-19	66	313	85	428	30	76	30	90	21	213	8	70
20+	52	1,449	83	1,671	34	176	34	193	19	386	9	119

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens excl. mushrooms, heroin.

3.5 The age of first use

Table 3.5 shows the age of first use. The age of first use is lowest for alcohol and tobacco. At the age of sixteen 50 percent of all lifetime users has started using these substances. Earlier we saw that more than one third of the population of Amsterdam has tried cannabis once or more. The median age of first use is 18 (average is 20.3). The age of onset of most drugs is between 20 and 25 years. Exceptions are the first use of hypnotics, sedatives and morphine. These drugs are taken by an older group of users, people start in their thirties.

When we look at the age of onset of each drug it is clear that experimenting with difficult drugs is concentrated in the younger age groups. The mean and median ages of first use are roughly between 16 and 25. The only exception is ecstasy, where average age of onset is 26.3 (median 25). Clearly ecstasy has the highest age of onset of all illicit drugs. Figure 3.2 shows the distribution of ages of first use for some of the drugs.

Alcohol and tobacco use is initiated at the youngest ages. Almost 80 percent used before the age of 20. Cannabis is also a drug that people start using in their late teens and twenties. More than 90 percent has tried cannabis before the age of 30. Ecstasy shows a different pattern, with almost 25 percent starting to experiment after the age of 30. This is caused by the recent availability of the drug (the introduction effect) and by the differentiated appeal of this substance. Ecstasy use has functions from disco dancing to spiritual and psychic adventures (Beck and Rosenbaum, 1994).

The differences in the timing of the onset of drug use are more clearly visible in Figures 3.3 and 3.4. In Figure 3.3, alcohol, tobacco, cannabis and also difficult drugs have very steep curves. A steep curve indicates a relatively limited spread of the distribution of ages of onset. The curve for cannabis has about the same shape as the curves for alcohol and tobacco, but starts about two years later. In Figure 3.4 we picture the differences in the timing of the onset of cannabis, cocaine, ecstasy, hallucinogens

Table 3.3: New users per population and per lifetime reported, 1997 (weighted percentages)

	new users per population		*new users per rep. life-time*	*rep. life-time*
drug	*%*	*unw n*	*%*	*unw n*
Tobacco	1.2	73	2	2,596
Alcohol	1.7	117	2	3,252
Hypnotics	4.3	161	18	868
Sedatives	3.5	137	15	839
Cannabis	1.1	60	3	1,285
Inhalants	0.2	9	11	62
Cocaine	0.6	24	6	321
Amphetamines	0.4	15	7	204
Ecstasy	1.3	50	19	232
Hallucinogens all	2.1	83	23	324
Mushrooms	2.0	77	30	230
Hall. excl. mushrooms	0.6	25	10	214
Opiates all	1.9	72	9	769
Opium	-	1	-	67
Morphine	0.6	26	14	159
Codeine	1.5	56	9	582
Palfium	-	-	-	16
Methadone	-	2	-	27
Heroin	-	2	-	59
Perform. enh. drugs	0.4	16	28	53
Difficult drugs	0.2	49	1	491

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens excl. mushrooms, heroin
No drugs is *non* of the above drugs

Table 3.4: Experienced users per lifetime reported and per population, 1997 (weighted percentages)

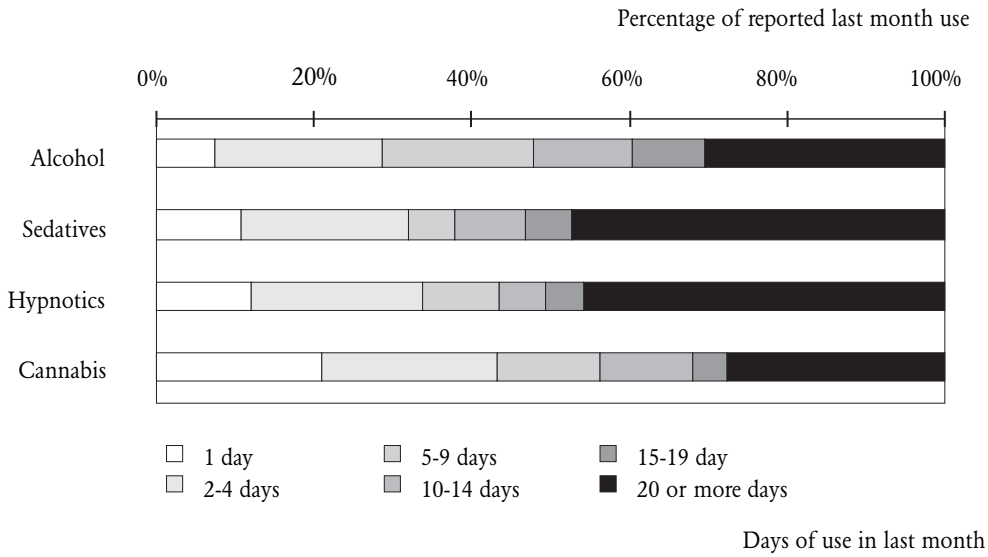
	> 25 times per rep. life-time	*> 25 times per population*		*rep. life-time*
drug	*%*	*%*	*unw n*	*unw n*
Tobacco	88	62.8	2,220	2,596
Alcohol	88	77.1	2,737	3,252
Hypnotics	41	9.7	353	868
Sedatives	46	10.4	385	839
Cannabis	44	15.8	549	1,285
Inhalants	17	0.3	10	62
Cocaine	27	2.6	87	321
Amphetamines	33	1.9	67	204
Ecstasy	18	1.2	40	232
Hallucinogens all	10	1.0	32	324
Mushrooms	6	0.4	15	230
Hall. excl. mushrooms	13	0.8	27	214
Opiates all	33	7.0	257	769
Opium	13	0.3	9	67
Morphine	13	0.6	20	159
Codeine	36	5.8	20	582
Palfium	-	0.0	1	16
Methadone	-	0.4	14	27
Heroin	41	0.7	25	59
Perform. enh. drugs	35	0.5	19	53

Difficult drugs are amphetamines, cocaine, ecstasy, hallucinogens excl. mushrooms, heroin.

and difficult drug. The cocaine, ecstasy, hallucinogens and difficult drug curves are all less steep than the cannabis curve. The ecstasy curve shows that the range of ages in which people start taking ecstasy is the largest, even larger than that of cocaine.

In Table 3.6 the continuation rates by age of first use are presented. To eliminate the effect of recent starters only those are selected who started using more than 4 years ago. For alcohol, tobacco and cannabis use there is an effect that people who start at younger ages also tend to continue using longer. Hypnotics and sedatives show a reversed pattern.

Figure 3.1: Days of use in last month, percentage of last month users, 1997 (weighted)



3.6 Prevalence by age, gender, ethnicity and neighbourhood

For all drugs, prevalence and continuation rates are presented by age and, for the most common drugs also by ethnicity and neighbourhood. Tables are given in section 3.8. One should be cautions to not draw too easily conclusions from group comparisons. Looking at the tables in section 3.8 one could get the impression that prevalence rates are largely influenced by the factors ethnic group or neighbourhood. However, it is more likely that other background-factors, such as age, are actually more important in this regard. To be able to make sound group comparisons, one has to control for background-factors like age.

Tobacco prevalence rates are presented in tables 3.9 to 3.11. Lifetime prevalence of tobacco is still low for the youngest age group. Last month prevalence is highest in the age groups 25 to 29 and 30 to 34. Continuation is increasing till the age group 20 to 24 and is then decreasing slowly with age. Men are still more often smokers than women. Both lifetime prevalence and last month prevalence are higher. Continuation of tobacco is only slightly higher for men. People with Moroccan or Surinamese backgrounds show considerably lower prevalence rates. People from Turkey show a very high tobacco continuation rate. Prevalence also differs with neighbourhood. In 'De Pijp', a neighbourhood with a concentration of students, last month prevalence is highest.

Table 3.5: Age of first use, 1997 (weighted)

	age of first use		*reported lifetime*
drug	*mean*	*median*	*unweighted n*
Tobacco	17.5	16	2,596
Alcohol	18.0	16	3,252
Hypnotics	37.0	32	868
Sedatives	33.8	30	839
Cannabis	20.3	18	1,285
Inhalants	20.1	19	62
Cocaine	24.5	23	321
Amphetamines	22.3	20	204
Ecstasy	26.3	25	232
Hallucinogens all	23.8	22	324
Mushrooms	22.7	21	230
Hall. excl. mushrooms	22.7	24	214
Opiates all	28.7	24	769
Opium	24.1	22	67
Morphine	33.4	29	159
Codeine	28.8	25	582
Palfium	-	-	16
Methadone	-	-	27
Heroin	23.6	22	59
Perform. enh. drugs	23.3	22	53
Difficult drugs	23.3	22	491

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens excl. mushrooms, heroin.

Figure 3.2: Distribution of age of first use, 1997 (weighted)

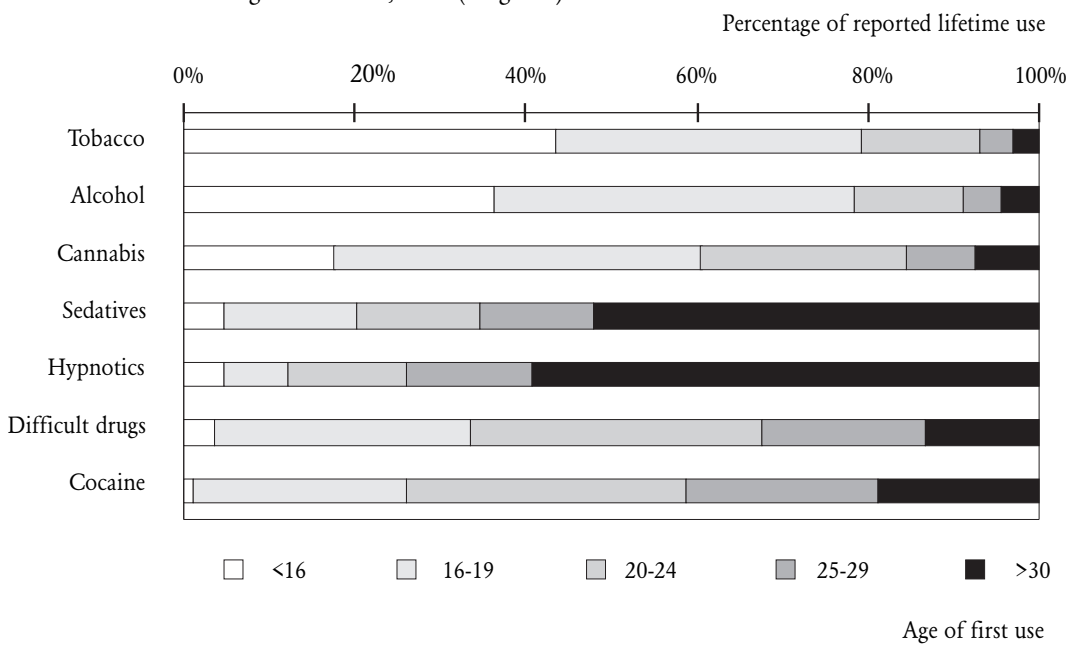


Figure 3.3: Age of first use, of tobacco, alcohol, hypnotics, sedatives and cannabis, cumulative figure, 1997 (weighted percentages)

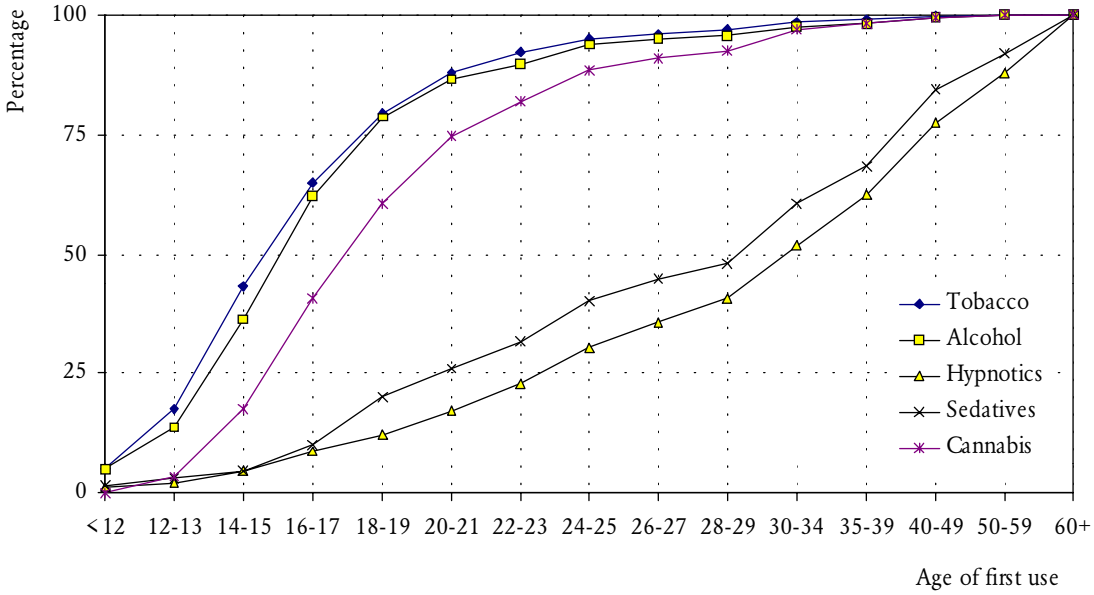
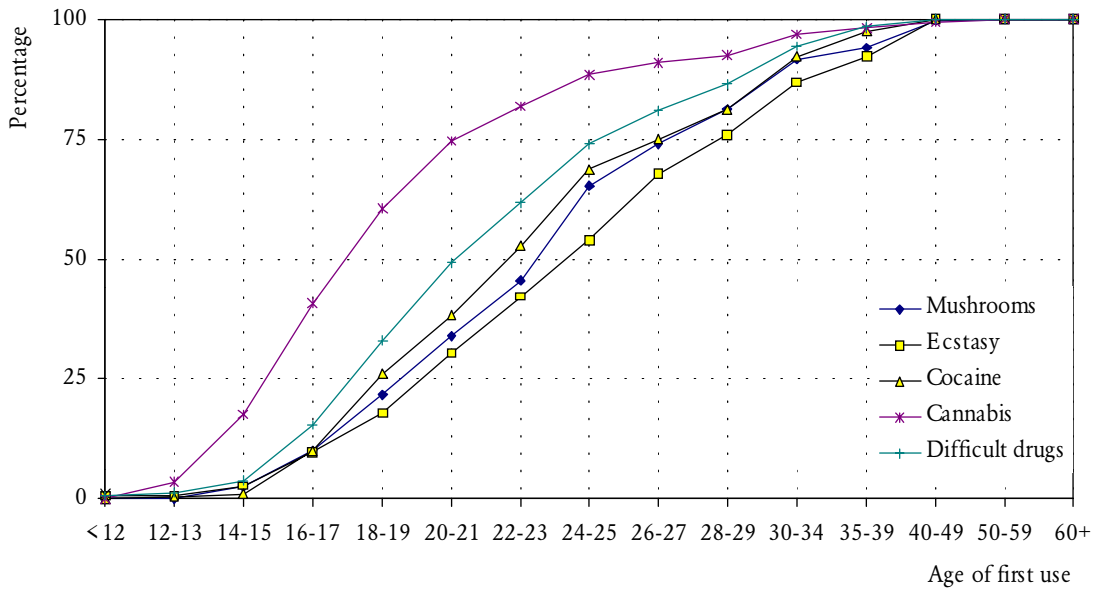


Figure 3.4: Age of first use, of mushrooms, ecstasy, cocaine, cannabis and difficult drugs, cumulative figure, 1997 (weighted percentages)



Alcohol use reaches a higher level than tobacco use (prevalence rates are shown in tables 3.12 to 3.14). The age differentiation for alcohol resembles the distribution for tobacco. Alcohol is also used less by men and less by Surinamese and Moroccans. Turkish people also have a low alcohol prevalence rate. In the centre of Amsterdam, lifetime prevalence of alcohol is almost one hundred percent. Last month prevalence is highest in the city centre as well.

Cannabis prevalence rates are shown in tables 3.21 to 3.23. Continuation of cannabis use is highest in the group of 16 to 19 year olds, and is decreasing with age. Last month prevalence is highest for the

Table 3.6: Last month contimuation by age of first use, 1997 (weighted)

age of	*tobacco*		*alcohol*		*hypnotics*		*sedatives*		*cannabis*		*difficult drugs*	
first use	*%*	*unw n*	*%*	*unw n*	*%*	*unw n*	*%*	*unw n*	*%*	*unw n*	*%*	*unw n*
<16	62	1,450	85	1,196	18	49	29	45	45	259	26	21
16-19	59	888	83	1,259	11	65	19	131	21	526	15	146
20-24	48	349	74	466	22	141	24	150	13	348	14	194
25-29	57	85	67	110	27	167	25	162	18	104	12	96
30+	48	36	65	82	39	401	40	317	7	41	12	28

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens excl. mushrooms, heroin.

group of 20 to 24 year olds, lifetime prevalence is highest for ages 30 to 34. Men experiment more with cannabis. Both prevalence and continuation rates are higher for men. Cannabis use is much less common for Surinamese and particularly for people with Moroccan or Turkish backgrounds. 'West-Europeans' and 'others' have the highest rates. This is caused mainly by the age structure of these groups, with a lot of 30 to 34 year olds and not many aged people. Cannabis use by neighbourhood shows a concentration in certain areas. In 'De Pijp', a neighbourhood with many students and other one-person-households, cannabis use is very high in relation to the other areas. This is also true for the city centre. We see high prevalence rates in areas with a concentration of outgoing lifestyles. The same picture might be true for the whole country. In our forthcoming report on the national prevalence data we will be able to see if cannabis prevalence is higher in the higher density areas of the country.

Ecstasy prevalence rates are shown in tables 3.27 to 3.29. The lifetime prevalence of ecstasy is very low in the younger age group of 12 to 15 years (0.3 percent). There are 313 respondents in this age group of whom only one reported lifetime prevalence of ecstasy. The lifetime prevalence rate of ecstasy is highest in the age group 25 to 29 (16.2 percent).

Difficult drug prevalence rates are shown in tables 3.34 to 3.36. Lifetime use of difficult drugs is highest for 30 to 34 year olds (percent), last month prevalence is highest for 20 to 24 year olds (percent). The differences between men and women are also visible with difficult drug use. Difficult drugs are not used a lot by people with a Moroccan or Turkish background. Again 'De Pijp' and the centre of Amsterdam are the main areas for difficult drug users. West-Amsterdam, where a lot of older people live, and the South-East with a high proportion of people from Surinam, show the lowest rates.

3.7 Source of purchase of drugs

For the first time in our series of household surveys we asked in 1997 all last year users of cocaine, cannabis, amphetamines, ecstasy, hallucinogens, performance enhancing drugs (doping) and mushrooms, where they purchased these substances. We report the findings of this question in two parts (Table 3.7).

In one part, we show the data for the group of respondents in the age cohort between 12 and 17 years. This group is not allowed to purchase in coffee shops. Also the smart shops usually do not allow entrance to clients under 18 years old. In this cohort drug use is rare, which means that the numbers of respondents are small. The largest group, the last year cannabis users, is still not larger than 49

persons, who provided 71 answers to the question where they bought cannabis. Clearly the coffee shop is the most important place of purchase, closely followed by relatives and friends. Of the 12 last year mushroom users in this cohort, 8 bought their mushrooms in the smart shop.

In the group of last year drug users older than 18 years, we see for all drugs that relatives and friends are either the most important source of purchase, or the second most important. The home dealer plays a very limited role, as does the street dealer. The home dealer figures only for cocaine and amphetamine users, far behind relatives and friends. For non-cannabis drugs the coffee shop plays an almost non-existent role, with less than 2 percent of all answers.

Relatives and friends are equally important sources of purchase for drugs, which in Amsterdam can also be bought in shops: cannabis and mushrooms. With regard to these drugs, we find that the shop figures in 48, respectively 57 percent of indicated cases, making it the most important place of purchase. Relatives and friends come second, for cannabis with 40 percent of all answers, and for mushrooms with 33 percent. Ecstasy is predominantly bought from friends and relatives (68 percent). This means that most people who use this drug in places of entertainment, have other sources of purchase than these places. These figures show, that if we look at all substances, relatives and friends are still the most important source of acquiring illicit drugs. The tolerated existence of shops for particular drugs creates an official retail possibility, but this does not at all make the non-official circles for these drugs unimportant. It seems that, at least in Amsterdam, the coffee shop does not offer acquisition possibilities for non-cannabis .

Only 23 persons used performance enhancing drugs in the year proceeding the interview. Therefore, the sample is too small to provide reliable estimations; we only report observations and do not give estimates (Table 3.8). Performance enhancing drugs are bought to a considerable extent via doctors and trainers (6 of 23 answers) but also here, friends and relatives are the most important source (with 12 of 23 answers).

Table 3.7: Place of purchase of last year users, by age 12 to 17, and 18 and older, 1997

	community centre, youth club, association		*delivery service*		*cafe/ pub*		*coffee-shop*		*smart-shop*		*other place of enter-tainment*		*relatives, friends, acq.*		*from a stranger on street*		*home-dealer*		
age 12 to 17	%	*unwtn*	%	*unwtn*	%	*unwtn*	%	*unwtn*	%	*unwtn*	%	*unwtn*	%	*unwtn*	%	*unwtn*	%	*unwtn*	%
Amphetamines	-	0	-	0	-	0	-	0	-	0	-	1	-	2	-	0	-	1	
Cannabis	0	0	0	0	0	0	55	39	0	0	0	0	43	30	0	0	1	1	1
Cocaine	-	0	-	0	-	0	-	0	-	0	-	1	-	3	-	0	-	1	
Ecstasy	-	0	-	0	-	0	-	0	-	0	-	2	-	5	-	0	-	1	
Hall. excl. mushrooms	-	0	-	0	-	0	-	0	-	2	-	0	-	2	-	0	-	1	
Mushrooms	-	0	-	0	-	0	-	1	-	8	-	0	-	3	-	0	-	0	
age 18 and older																			
Amphetamines	-	0	-	0	-	0	-	0	-	0	-	2	-	23	-	0	-	5	
Cannabis	1	4	1	4	2	12	47	274	0	1	2	10	40	233	1	4	3	17	3
Cocaine	0	0	7	8	6	7	2	2	0	0	9	11	56	67	4	5	16	19	(
Ecstasy	0	0	2	3	3	4	1	2	4	5	11	15	68	91	1	2	8	11	1
Hall. excl. mushrooms	-	0	-	1	-	1	-	0	-	19	-	1	-	16	-	1	-	0	
Mushrooms	-	0	2	2	-	0	1	1	56	46	4	3	33	27	0	0	0	0	4

*More than one answer was possible.

Table 3.8: Performance enhancing drugs,place of purchase of last year users, 1997

Performance enhancing drugs	*%*	*unwa n*
Doctors prescription	-	4
Trainer, sportsclub, gym	-	2
Relatives, friends, acquaintance	-	12
Other	-	5
Total answers*	-	23

* More than one answer was possible

3.8 Tables

Table 3.9: Tobacco, prevalence and continuation rates, by age and gender, 1997 (weighted percentages)

Tobacco	*prevalence*			*continuation*		*rep. lifetime*	*sample*
age/gender	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw. n*	*unw. n*
12-15	24.1	14.7	6.9	51.1	27.2	76	313
16-19	55.5	41.8	36.3	73.1	63.6	166	305
20-24	64.4	49.0	46.9	75.4	72.8	153	238
25-29	73.9	58.6	52.3	78.7	70.4	313	423
30-34	74.7	59.3	51.9	79.1	69.3	318	427
35-39	74.1	51.7	47.3	69.5	63.9	304	410
40-49	79.6	51.0	46.5	63.7	58.2	466	591
50-59	78.3	43.5	40.6	55.5	51.9	306	396
60-69	78.3	37.9	33.7	48.4	43.0	214	278
70+	66.4	25.5	23.3	38.4	35.0	280	417
Male	76.0	50.7	45.9	66.2	60.2	1,262	1,762
Female	67.0	42.3	37.9	62.8	56.4	1,334	2,036
Total	71.4	46.4	41.8	63.6	58.5	2,596	3,798

Table 3.10: Tobacco, prevalence and continuation rates, by ethnicity, 1997 (weighted percentages)

Tobacco	*prevalence*			*continuation*		*rep. lifetime*	*sample*
ethnicity	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw. n*	*unw. n*
Dutch	75.4	47.8	42.8	63.2	56.7	1,825	2,475
Surinamese	57.3	38.3	33.2	66.0	57.9	198	370
Moroccan	31.3	18.2	18.2	-	-	30	126
Turkish	68.0	55.1	53.6	79.7	77.5	128	207
Western-Europe	79.8	51.8	48.0	63.8	59.8	113	146
Other	67.0	45.9	41.1	67.4	60.9	301	474
Total	71.4	46.4	41.8	63.6	58.5	2,596	3,798

Table 3.11: Tobacco, prevalence and continuation rates, by neighbourhood, 1997 (weighted percentages)

Tobacco	*prevalence*			*continuation*		*rep. lifetime*	*sample*
neighbourhood	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw. n*	*unw. n*
Centre	77.6	53.2	47.4	68.2	60.7	302	391
North	67.4	39.0	35.7	57.4	53.0	315	491
Oud-West	75.1	54.6	48.5	72.4	64.5	542	748
West	65.6	41.1	38.0	61.5	57.5	428	695
De Pijp	79.3	60.7	54.9	76.2	69.2	122	159
South	77.1	47.6	42.2	61.6	54.6	358	474
East	72.3	43.4	39.5	60.0	54.6	307	447
South-East	60.1	36.5	32.5	60.0	53.7	222	393
Total	71.4	46.4	41.8	64.6	58.4	2,596	3,798

Table 3.12: Alcohol, prevalence and continuation rates, by age and gender, 1997 (weighted percentages)

Alcohol	*prevalence*			*continuation*		*rep. lifetime*	*sample*
age/gender	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw. n*	*unw. n*
12-15	51.5	40.1	20.4	65	31	162	313
16-19	74.1	68.0	56.4	87	73	224	305
20-24	87.5	81.6	69.9	93	80	208	238
25-29	91.9	86.6	78.8	94	86	389	423
30-34	91.3	85.8	77.6	94	85	387	427
35-39	91.7	83.4	75.1	90	82	374	410
40-49	89.8	82.3	74.9	91	83	529	591
50-59	92.6	84.6	79.1	91	85	366	396
60-69	90.9	77.8	67.9	86	75	252	278
70+	86.3	69.7	62.6	81	73	361	417
Male	90.8	83.1	76.2	91	84	1,543	1,762
Female	85.5	76.2	65.9	88	77	1,709	2,036
Total	88.1	79.6	70.9	90	80	3,252	3,798

Table 3.13: Alcohol, prevalence and continuation rates, by ethnicity, 1997 (weighted percentages)

Alcohol	*prevalence*			*continuation*		*rep. lifetime*	*sample*
ethnicity	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw. n*	*unw. n*
Dutch	94.9	87.0	79.6	91	83	2,325	2,475
Surinamese	84.4	71.7	52.9	84	62	303	370
Moroccan	20.1	11.6	9.3	-	-	18	126
Turkish	47.0	38.1	27.9	79	58	88	207
Western-Europe	92.8	84.5	78.5	90	84	135	146
Other	83.3	74.9	65.2	89	78	380	474
Total	88.1	79.6	70.9	90	80	3,252	3,798

Table 3.14: Alcohol, prevalence and continuation rates, by neighbourhood, 1997 (weighted percentages)

Alcohol	*prevalence*			*continuation*		*rep. lifetime*	*sample*
neighbourhood	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw. n*	*unw. n*
Centre	97.9	93.5	89.1	96	91	381	391
North	88.6	74.2	63.9	83	72	420	491
Oud-West	88.1	79.6	71.6	90	81	643	748
West	77.4	69.2	58.8	88	75	515	695
De Pijp	92.4	88.0	81.0	95	87	144	159
South	93.4	86.9	82.7	93	88	439	474
East	90.6	81.8	70.8	89	78	394	447
South-East	83.5	73.1	60.4	87	72	316	393
Total	88.1	79.6	70.9	90	80	3,252	3,798

Table 3.15: Hypnotics, prevalence and continuation rates, by age and gender, 1997 (weighted percentages)

Hypnotics	*prevalence*			*continuation*		*rep. lifetime*	*sample*
age/gender	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw. n*	*unw. n*
12-15	3.6	2.5	1.2	-	-	12	313
16-19	10.1	5.3	2.4	-	-	29	305
20-24	13.6	6.9	2.0	-	-	33	238
25-29	17.2	8.9	3.0	38	12	73	423
30-34	19.5	11.0	4.6	45	16	82	427
35-39	23.4	11.5	5.9	36	21	97	410
40-49	29.8	15.2	8.8	46	28	179	591
50-59	29.5	14.4	8.7	44	27	124	396
60-69	33.2	17.2	13.4	48	38	95	278
70+	35.1	24.5	21.5	66	59	144	417
Male	18.1	9.8	5.6	44	26	296	1,762
Female	29.0	15.9	9.9	47	31	572	2,036
Total	23.7	12.9	7.8	46	29	868	3,798

Table 3.16: Hypnotics, prevalence and continuation rates, by ethnicity, 1997 (weighted percentages)

Hypnotics	*prevalence*			*continuation*		*rep. lifetime*	*sample*
ethnicity	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw. n*	*unw. n*
Dutch	25.8	13.9	8.5	47	30	635	2,475
Surinamese	20.3	11.1	5.5	46	24	68	370
Moroccan	16.9	9.4	2.2	-	-	16	126
Turkish	10.1	6.5	5.0	-	-	20	207
Western-Europe	28.4	15.0	7.7	-	-	40	146
Other	20.4	11.7	7.9	48	35	89	474
Total	23.7	12.9	7.8	46	29	868	3,798

Table 3.17: Hypnotics, prevalence and continuation rates, by neighbourhood, 1997 (weighted percentages)

Hypnotics	*prevalence*			*continuation*		*rep. lifetime*	*sample*
neighbourhood	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw. n*	*unw. n*
Centre	26.2	13.5	6.7	42	23	103	391
North	24.8	12.7	7.9	43	27	113	491
Oud-West	26.7	14.3	8.9	48	29	196	748
West	17.1	9.9	6.5	49	36	114	695
De Pijp	27.9	16.0	7.7	-	-	44	159
South	29.0	14.1	8.9	40	28	134	474
East	19.9	12.0	7.3	51	31	87	447
South-East	20.8	13.2	8.6	51	35	77	393
Total	23.7	12.9	7.8	46	29	868	3,798

Table 3.18: Sedatives, prevalence and continuation rates, by age and gender, 1997 (weighted percentages)

Sedatives	*prevalence*			*continuation*		*rep. lifetime*	*sample*
age/gender	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw. n*	*unw. n*
12-15	3.6	3.0	1.1	-	-	12	313
16-19	14.2	9.5	4.2	-	-	40	305
20-24	17.2	6.9	2.8	-	-	42	238
25-29	17.0	6.6	2.6	28	11	72	423
30-34	21.6	11.0	6.2	42	23	92	427
35-39	21.9	8.9	5.0	32	17	93	410
40-49	27.7	14.8	9.6	47	32	169	591
50-59	30.6	16.4	11.3	49	35	126	396
60-69	31.8	16.1	12.4	47	37	92	278
70+	24.7	13.7	11.5	53	45	101	417
Male	15.7	8.1	5.6	44	32	259	1,762
Female	29.4	14.5	8.7	43	26	580	2,036
Total	22.8	11.4	7.2	43	28	839	3,798

Table 3.19: Sedatives, prevalence and continuation rates, by ethnicity, 1997 (weighted percentages)

Sedatives	*prevalence*			*continuation*		*rep. lifetime*	*sample*
ethnicity	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw. n*	*unw. n*
Dutch	26.3	12.2	8.0	41	28	645	2,475
Surinamese	12.8	6.9	3.6	-	-	44	370
Moroccan	13.3	9.6	5.3	-	-	13	126
Turkish	7.6	5.8	5.3	-	-	15	207
Western-Europe	26.8	13.7	7.7	-	-	39	146
Other	17.7	11.9	6.4	54	28	82	474
Total	22.8	11.4	7.2	43	28	839	3,798

Table 3.20: Sedatives, prevalence and continuation rates, by neighbourhood, 1997 (weighted percentages)

Sedatives	*prevalence*			*continuation*		*rep. lifetime*	*sample*
neighbourhood	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw. n*	*unw. n*
Centre	24.7	12.8	7.8	44	30	99	391
North	25.1	11.3	6.3	43	25	119	491
Oud-West	26.2	11.4	7.6	35	23	191	748
West	15.2	8.1	5.5	48	35	100	695
De Pijp	29.1	19.9	12.3	-	-	45	159
South	28.6	13.9	9.0	42	28	132	474
East	20.9	11.7	7.6	45	30	91	447
South-East	16.0	8.4	5.0	41	26	62	393
Total	22.8	11.4	7.2	43.1	28.3	839	3,798

Table 3.21: Cannabis, prevalence and continuation rates, by age and gender, 1997 (weighted percentages)

Cannabis	*prevalence*			*continuation*		*rep. lifetime*	*sample*
age/gender	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw. n*	*unw. n*
12-15	6.8	4.8	2.3	-	-	22	313
16-19	33.0	21.4	15.2	64	46	100	305
20-24	49.9	27.3	18.4	53	37	118	238
25-29	53.6	23.6	14.2	44	26	227	423
30-34	56.3	18.7	10.8	32	19	235	427
35-39	48.2	13.5	8.9	28	18	196	410
40-49	45.8	12.8	7.9	28	17	263	591
50-59	24.5	4.5	2.8	17	11	100	396
60-69	7.6	1.5	0.4	-	-	19	278
70+	1.1	0.0	0.0	-	-	5	417
Male	43.2	17.4	11.1	39	25	702	1,762
Female	29.7	9.0	5.3	30	18	583	2,036
Total	36.3	13.1	8.1	35	22	1,285	3,798

Table 3.22: Cannabis, prevalence and continuation rates, by ethnicity, 1997 (weighted percentages)

Cannabis	*prevalence*			*continuation*		*rep. lifetime*	*sample*
ethnicity	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw. n*	*unw. n*
Dutch	39.0	13.5	8.0	34	20	918	2,475
Surinamese	28.7	10.0	6.8	34	24	96	370
Moroccan	11.6	3.9	3.9	-	-	11	126
Turkish	11.6	3.5	2.3	-	-	22	207
Western-Europe	43.5	17.0	12.0	38	28	61	146
Other	39.9	17.4	11.8	42	30	176	474
Total	36.3	13.1	8.1	35	22	1,285	3,798

Table 3.23: Cannabis, prevalence and continuation rates, by neighbourhood, 1997 (weighted percentages)

Cannabis	*prevalence*			*continuation*		*rep. lifetime*	*sample*
neighbourhood	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw. n*	*unw. n*
Centre	59.1	20.1	14.2	34	24	225	391
North	22.9	8.0	5.6	35	24	101	491
Oud-West	44.7	18.0	10.8	39	24	316	748
West	19.3	4.7	3.3	23	17	124	695
De Pijp	57.2	26.5	17.8	46	31	88	159
South	39.4	13.1	6.8	32	17	183	474
East	39.5	15.0	8.7	37	22	164	447
South-East	23.3	7.9	4.4	32	17	84	393
Total	36.3	13.1	8.1	35	22	1,285	3,798

Table 3.24: Cocaine, prevalence and continuation rates, by age and gender, 1997 (weighted percentages)

Cocaine	*prevalence*			*continuation*		*rep. lifetime*	*sample*
age/gender	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw. n*	*unw. n*
12-15	0.0	0.0	0.0	-	-	0	313
16-19	4.4	3.3	1.2	-	-	13	305
20-24	10.1	6.4	0.8	-	-	24	238
25-29	10.9	4.3	1.4	-	-	46	423
30-34	16.8	3.2	1.3	19	7	69	427
35-39	15.9	2.3	0.8	14	5	66	410
40-49	14.0	3.5	2.3	24	15	78	591
50-59	5.3	1.1	0.2	-	-	22	396
60-69	0.8	0.0	0.0	-	-	2	278
70+	0.2	0.0	0.0	-	-	1	417
Male	11.7	3.7	1.5	31	12	181	1,762
Female	7.1	1.5	0.4	20	6	140	2,036
Total	9.3	2.6	1.0	27	10	321	3,798

Table 3.25: Cocaine, prevalence and continuation rates, by ethnicity, 1997 (weighted percentages)

Cocaine	*prevalence*			*continuation*		*rep. lifetime*	*sample*
ethnicity	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw. n*	*unw. n*
Dutch	9.7	2.7	0.9	26	8	226	2,475
Surinamese	4.5	1.4	0.8	-	-	15	370
Moroccan	0.9	0.0	0.0	-	-	1	126
Turkish	2.4	0.0	0.0	-	-	4	207
Western-Europe	14.3	4.5	2.7	-	-	18	146
Other	13.4	3.9	1.7	28	13	56	474
Total	9.3	2.6	1.0	27	10	321	3,798

Table 3.26: Cocaine, prevalence and continuation rates, by neighbourhood, 1997 (weighted percentages)

Cocaine	*prevalence*			*continuation*		*rep. lifetime*	*sample*
neighbourhood	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw. n*	*unw. n*
Centre	18.7	4.2	1.3	20	6	71	391
North	5.2	1.3	0.6	-	-	22	491
Oud-West	12.1	3.8	1.7	30	13	85	748
West	2.7	0.8	0.2	-	-	16	695
De Pijp	18.5	6.6	1.9	-	-	28	159
South	8.3	2.2	0.8	-	-	38	474
East	11.7	3.6	1.1	-	-	47	447
South-East	4.4	1.0	0.4	-	-	14	393
Total	9.3	2.6	1.0	27	10	321	3,798

Table 3.27: Ecstasy, prevalence and continuation rates, by age and gender, 1997 (weighted percentages)

Ecstasy	*prevalence*			*continuation*		*rep. lifetime*	*sample*
age/gender	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw n*	*unw n*
12-15	0.3	0.0	0.0	-	-	1	313
16-19	7.3	5.7	1.4	-	-	21	305
20-24	13.1	7.6	3.8	-	-	31	238
25-29	16.2	8.0	3.3	46	19	69	423
30-34	12.4	4.3	1.5	-	-	49	427
35-39	8.5	2.5	0.5	-	-	33	410
40-49	4.3	2.1	0.3	-	-	24	591
50-59	1.0	0.2	0.0	-	-	4	396
60-69	0.0	0.0	0.0	-	-	0	278
70+	0.0	0.0	0.0	-	-	0	417
Male	8.6	4.1	1.3	46	14	134	1,762
Female	5.2	2.2	1.0	39	17	98	2,036
Total	6.9	3.1	1.1	43	15	232	3,798

Table 3.28: Ecstasy, prevalence and continuation rates, by ethnicity, 1997 (weighted percentages)

Ecstasy	*prevalence*			*continuation*		*rep. lifetime*	*sample*
ethnicity	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw n*	*unw n*
Dutch	7.3	3.7	1.3	48	17	167	2,475
Surinamese	4.1	1.2	0.4	-	-	13	370
Moroccan	0.0	0.0	0.0	-	-	0	126
Turkish	0.4	0.0	0.0	-	-	1	207
Western-Europe	11.0	5.0	2.6	-	-	13	146
Other	9.1	2.7	0.8	-	-	37	474
Total	6.9	3.1	1.1	43	15	232	3,798

Table 3.29: Ecstasy, prevalence and continuation rates, by neighbourhood, 1997 (weighted percentages)

Ecstasy	*prevalence*			*continuation*		*rep. lifetime*	*sample*
neighbourhood	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw n*	*unw n*
Centre	13.6	5.7	2.4	38	17	50	391
North	3.2	1.8	0.8	-	-	14	491
Oud-West	8.9	4.2	2.0	46	21	60	748
West	2.5	1.3	0.3	-	-	16	695
De Pijp	19.1	8.0	0.7	-	-	27	159
South	4.4	2.8	1.4	-	-	20	474
East	8.0	3.5	0.8	-	-	32	447
South-East	3.8	0.8	0.0	-	-	13	393
Total	6.9	3.1	1.1	43	15	232	3,798

Table 3.30: Hallucinogenes all, prevalence and continuation rates, by age and gender, 1997 (weighted percentages)

Hallucinogens all		*prevalence*		*continuation*		*rep. lifetime*	*sample*
age/gender	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw n*	*unw n*
12-15	0.3	0.3	0.3	-	-	1	313
16-19	10.1	7.6	1.8	-	-	30	305
20-24	12.3	8.5	2.1	-	-	29	238
25-29	13.7	6.4	1.2	41	8	58	423
30-34	12.8	2.4	0.7	15	5	52	427
35-39	11.2	2.5	0.0	20	0	46	410
40-49	14.4	1.6	0.2	11	2	82	591
50-59	5.0	0.2	0.0	-	-	21	396
60-69	2.2	0.0	0.0	-	-	5	278
70+	0.0	0.0	0.0	-	-	0	417
Male	11.6	3.4	0.5	25	4	186	1,762
Female	6.9	2.1	0.6	22	8	138	2,036
Total	9.2	2.7	0.6	24	5	324	3,798

Table 3.31: Mushrooms, prevalence and continuation rates, by age and gender, 1997 (weighted percentages)

Mushrooms		*prevalence*		*continuation*		*rep. lifetime*	*sample*
age/gender	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw n*	*unw n*
12-15	0.3	0.3	0.3	-	-	0	313
16-19	9.5	7.0	1.5	-	-	15	305
20-24	10.6	8.5	2.1	-	-	34	238
25-29	12.9	5.9	1.2	45	9	65	423
30-34	9.6	1.8	0.7	19	8	47	427
35-39	8.1	2.0	0.0	-	-	33	410
40-49	7.5	1.0	0.2	13	3	47	591
50-59	1.5	0.2	0.0	-	-	6	396
60-69	0.7	0.0	0.0	-	-	2	278
70+	0.0	0.0	0.0	-	-	0	417
Male	8.3	2.9	0.5	35	6	154	1,762
Female	4.9	1.8	0.6	37	12	95	2,036
Total	6.6	2.4	0.5	37	8	249	3,798

Table 3.32: Hallucinogenes excl. mushrooms, prevalence and continuation, by age and gender, 1997 (weighted percentages)

Hall. excl. mushrooms	*prevalence*			*continuation*		*rep. lifetime*	*sample*
age/gender	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw n*	*unw n*
12-15	0.0	0.0	0.0	-	-	0	313
16-19	4.4	2.1	0.3	-	-	13	305
20-24	7.7	2.9	0.0	-	-	18	238
25-29	7.1	3.5	0.0	-	-	30	423
30-34	8.5	0.8	0.0	-	-	34	427
35-39	6.9	0.5	0.0	-	-	28	410
40-49	12.1	0.7	0.0	6	0	69	591
50-59	4.3	0.0	0.0	-	-	18	396
60-69	1.5	0.0	0.0	-	-	4	278
70+	0.0	0.0	0.0	-	-	0	417
Male	8.4	1.5	0.0	16	0	132	1,762
Female	4.1	0.7	0.0	11	0	82	2,036
Total	6.2	1.1	0.0	14	0	214	3,798

Table 3.33: Performance enhancing drugs, prevalence and continuation, by age and gender, 1997 (weighted percentages)

Perf. enh. drugs	*prevalence*			*continuation*		*rep. lifetime*	*sample*
age/gender	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw n*	*unw n*
12-15	0.0	0.0	0.0	-	-	0	313
16-19	3.8	2.5	1.3	-	-	10	305
20-24	2.5	2.2	0.0	-	-	6	238
25-29	1.2	0.4	0.2	-	-	5	423
30-34	1.4	0.8	0.4	-	-	6	427
35-39	3.0	0.5	0.5	-	-	12	410
40-49	1.4	0.6	0.3	-	-	7	591
50-59	1.0	0.0	0.0	-	-	3	396
60-69	0.7	0.3	0.3	-	-	2	278
70+	0.5	0.0	0.0	-	-	2	417
Male	1.9	0.8	0.3	31	17	32	1,762
Female	1.0	0.4	0.3	35	20	21	2,036
Total	1.4	0.6	0.3	33	18	53	3,798

Table 3.34: Difficult drugs, prevalence and continuation rates, by age and gender, 1997 (weighted percentages)

Difficult drugs	*prevalence*			*continuation*		*rep. lifetime*	*sample*
age/gender	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw. n*	*unw. n*
12-15	0.3	0.0	0.0	-	-	1	313
16-19	9.6	7.5	2.3	-	-	29	305
20-24	16.9	11.5	4.3	65	25	40	238
25-29	19.3	9.7	4.0	49	21	82	423
30-34	21.8	6.3	2.5	29	11	89	427
35-39	20.5	4.6	1.3	22	6	84	410
40-49	19.7	5.2	2.9	26	15	113	591
50-59	10.4	1.3	0.4	13	4	41	396
60-69	2.4	0.0	0.0	-	-	7	278
70+	1.1	0.0	0.0	-	-	5	417
Male	17.0	6.5	2.8	38	16	267	1,762
Female	11.3	3.2	1.2	27	11	224	2,036
Total	14.1	4.8	2.0	33	14	491	3,798

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens excl. mushrooms, heroin.

Table 3.35: Difficult drugs, prevalence and continuation rates, by ethnicity, 1997 (weighted percentages)

Difficult drugs	*prevalence*			*continuation*		*rep. lifetime*	*sample*
ethnicity	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw. n*	*unw. n*
Dutch	15.1	5.2	2.1	33	14	353	2,475
Surinamese	8.1	3.2	1.1	36	14	27	370
Moroccan	0.9	0.0	0.0	-	-	1	126
Turkish	3.3	0.0	0.0	-	-	6	207
Western-Europe	23.4	7.6	4.5	32	19	30	146
Other	17.2	6.1	2.2	36	13	73	474
Total	14.1	4.8	2.0	33	14	490	3,798

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens excl. mushrooms, heroin.

Table 3.36: Difficult drugs, prevalence and continuation rates, by neighbourhood, 1997 (weighted percentages)

Difficult drugs	*prevalence*			*continuation*		*rep. lifetime*	*sample*
neighbourhood	*lifetime*	*last year*	*last month*	*last year*	*last month*	*unw. n*	*unw. n*
Centre	27.4	8.6	3.7	30	14	104	391
North	8.4	2.4	1.1	28	14	36	491
Oud-West	17.3	6.9	3.4	39	19	120	748
West	5.2	1.8	0.5	-	-	32	695
De Pijp	28.7	12.5	2.6	43	9	44	159
South	13.4	3.9	1.6	27	12	63	474
East	16.5	5.2	2.4	31	15	67	447
South-East	7.0	2.2	0.4	-	-	25	393
Total	14.1	4.8	2.0	33	14	491	3,798

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens excl. mushrooms, heroin.

4 Developments in drug use prevalence and intensity of use, 1987-1997

4.1 Introduction

In this chapter we present some developments of drug use prevalence in Amsterdam. The first drug use survey was conducted in 1987[1], followed by identical measurements in 1990[2], 1994[3] and 1997. It is now possible to examine the developments in drug use prevalence in Amsterdam over the last decade. Because of oversampling of the age cohort 12 to 18 in 1997, we weighted the 1997 data for age and gender[4]. We performed this weighting procedure for the data in the other years of measurement to make the measurements comparable. Because all data presented in this chapter is weighted, small differences from earlier reports (containing non-weighted data) are inevitable.

We compared all data, and examined whether the 1987 rates differ significantly from 1997 rates (if no 1987 data was available, we used 1990 data). This was done by means of a χ^2 test. Significance levels are noted in the tables.

Data are not standardised for the demographic composition in one year of the population, as we did in the 1994 study, comparing drug use of 1987, 1990 and 1994. Reason for this standardisation of the demographic composition of the Amsterdam population was that changes in the demographic structure of Amsterdam influence measurements of drug use prevalence. An increase of the younger population for example leads to higher prevalence rates, whereas an ageing population leads to decreasing prevalence rates as well as selective migration influences prevalence rates. We decided to report all our comparative data over the last decade with non-standardised data, because we can not continue forever to standardise the population to the 1987 composition of the city, for we would neglect the developments in the population.

We will show however, in an example, how comparison between 1987 and 1997 would turn out with and without standardisation of the population composition of 1987. Table 4.1 shows what the effects are of demographic change on some prevalence rates during the last decade. Differences are not statistically significant ($p<0.05$). This means that changes in the population composition are too small to influence cannabis and alcohol prevalence rates.

Table 4.1: Prevalence rates for alcohol and cannabis,weighted for 1987 and 1997)

	weighted for 1987 population			*weighted for 1997 population*		
	lifetime	*last year*	*last month*	*lifetime*	*last year*	*last month*
Alcohol	87.2	78.5	69.3	88.1	79.6	70.9
Cannabis	35.3	12.5	7.7	36.3	13.1	8.1

Table 4.2: Prevalence of drug use, 1987-1997 (weighted percentages)

	lifetime				*p<*	*last year*				*p<*	*last month*				*p<*	*unweigh*
drug	*1987*	*1990*	*1994*	*1997*		*1987*	*1990*	*1994*	*1997*		*1987*	*1990*	*1994*	*1997*		*1987*
Tobacco	71.3	67.7	66.7	71.4		49.6	46.8	45.7	46.4	0.005	45.9	43.0	41.5	41.8	0.000	3132
Alcohol	87.5	86.0	86.4	88.1		78.7	78.0	77.8	79.6		71.1	69.1	70.3	70.9		3826
Hypnotics	20.1	18.8	19.0	23.7	0.000	11.4	9.3	9.8	12.9	0.041	8.4	6.4	6.6	7.8		873
Sedatives	22.2	20.3	19.9	22.8		10.8	9.2	9.1	11.4		7.4	6.0	5.4	7.2		970
Cannabis	23.2	25.2	29.8	36.3	0.000	9.5	10.2	11.2	13.1	0.000	5.6	6.1	7.2	8.1	0.000	995
Inhalants	1.1	1.0	1.1	1.8	0.007	0.3	0.1	0.2	0.4		0.2	0.0	0.1	0.2		47
Cocaine	5.7	5.7	7.0	9.3	0.000	1.6	1.3	1.9	2.6	0.001	0.6	0.4	0.8	1.0		245
Amphetamines	4.5	4.2	4.7	5.9	0.005	0.6	0.5	0.5	0.9		0.3	0.2	0.3	0.3		193
Ecstasy	.	1.3	3.3	6.9	0.000		0.7	1.6	3.1	0.000		0.1	0.7	1.1	0.001	.
Hallucinogens all	3.9	4.2	4.5	9.2	0.000	0.4	0.3	0.6	2.7	0.001	0.1	0.1	0.3	0.6	0.001	167
Hall. excl. mushrooms		.	.	6.2		.	.	.	1.1			.	.	0.0		
Opiates all	9.2	7.4	7.7	21.1	0.000	2.3	1.9	2.1	16.0	0.000	.	0.6	0.7	4.2	0.000	401
Codeine	.	3.6	3.4	15.8	0.000	1.4	1.2	1.2	7.2	0.000		0.5	0.3	3.6	0.000	
Heroin	.	1.1	1.4	1.7	0.025	0.3	0.1	0.3	0.5	0.007	0.0	0.0	0.1	0.2	0.014	.
Difficult drugs	8.3	8.6	10.7	14.1	0.000	2.2	2.1	3.0	4.8	0.000	0.9	0.8	1.3	2.0	0.000	359
No drugs	6.3	8.0	8.0	6.3		12.1	13.8	13.9	11.8		17.5	20	19.2	18.4		277
Total sample	4,377	4,443	4,364	3,798												

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens, heroin. Only in 1997, mushrooms are excluded.
No drugs is *non* of the above drugs
Data is tested using $\chi 2$ (1987 v.s.1997), significance level is noted in table.

4.2 Developments in drug use prevalence

Table 4.2 shows the development of the prevalence rates. Use of alcohol is stable, and the slight dip in tobacco lifetime prevalence is over. Tobacco lifetime prevalence is back to the level of 1987. The level of current tobacco use (last month prevalence) has decreased -statistically significant- since 1987. The last month prevalence of alcohol use remained stable.
The use of both hypnotics and sedatives has increased significantly since 1994. But, compared to 1987, prevalence rates of these substances are stable.

Lifetime prevalence of cannabis however increased from 23 to 36 percent. In the next section we will examine this in more detail. Cannabis is the most popular illicit drug on the list. Cannabis also shows an increase in last year prevalence and last month prevalence. As was shown in chapter 3, the onset of drug use is concentrated mainly before the age of 25. Of those who were older than 35 in the late 1960's, only few will have tried cannabis. And with the oldest of these cohorts becoming scarce and new cohorts taking their place, lifetime prevalence of cannabis in Amsterdam will increase year by year. This would be true even if the number of new drug users would be declining, because the number of new drug users would still be higher than the zero rate of drug use among deceasing elderly. This is the 'generation' effect. It applies - in different degrees - to all illicit drugs that are subject to prevalence measurement.

Lifetime prevalence of cocaine has increased slightly as well, with last month prevalence rates remaining low, developing from 0.6 percent in 1987 to 1.0 in 1997.

As could be expected, lifetime prevalence of ecstasy has increased in a conspicuous way, from 1.3 percent in 1990 to 6.9 in 1997. In 1987 it was such a new drug that it was not even part of the questionnaire. Last month prevalence is low, but increasing (from 0.1 percent in 1990 to 1.1 in 1997).

Hallucinogen prevalence rates have also increased. The expansion is almost entirely due to the recent popularity of mushrooms, which are included in the group 'hallucinogens all'. But, as is the case with all illicit drugs, last month prevalence of hallucinogens is very low in 1987 and remains low till 1997.

Opiates prevalence rates increased a lot. Figuring out how, we traced a big increase in codeine prevalence rates. Last year prevalence rates increased from 2.3 percent in 1987 to 16.0 percent in 1997. The possible explanation is that codeine preparations are now prescribed in situations where, before 1995, noscapine was prescribed. In 1995 this medicine turned out to have questionable harming side effects. The pharmaceutical industry switched to a mixture of codeine and paracetamol for minor painkilling functions[5]. Heroin use is very slowly increasing, remaining at a very low level. In 1987 we found 0.0 percent last month prevalence, but in 1997 the last month rate has increased to 0.2 of the population of 12 years and older. Because heroin use is so rare, our instrument is not very suitable to measure changes in prevalence rates of this drug (because of the small amount of observations).

The number of people who report 'no drug use' remained rather stable between 1987 and 1997. With a last month prevalence rate of 18.4 percent for 'no drug use', rather stable since 1987, this category shows the highest last month rate after alcohol and tobacco.

4.3 Developments in continuation of drug use

Table 4.3 shows the last month continuation rates. The rates could not be corrected for starters in all years, so only the non-corrected continuation is given.

The last month continuation rates for tobacco decreased from 64 percent in 1987 to 59 in 1997. Alcohol use remained at the same rate. The continuation rate of hypnotics decreased in ten years from 41 to 33 percent. Sedative use remained about stable at 32 percent.

The continuation rate of cannabis is more or less stable, from 24 percent in 1987 to 22 in 1997. This shows that increased lifetime does not affect continuation behaviour.

The continuation rate of ecstasy is not stable yet. It has increased, since 1990 and than decreased again since 1994. This might be due to the introduction effect, and the time needed for the user group

Table 4.3: Last month continuation rates, 1987-1997 (weighted percentages)

	*last month continuation**				*p<*	*unweighted n reported lifetime*			
drug	*1987*	*1990*	*1994*	*1997*		*1987*	*1990*	*1994*	*1997*
Tobacco	64.3	63.5	62.2	58.6	0.000	3,132	3,008	2,829	2,596
Alcohol	81.3	80.3	81.4	80.5		3,826	3,818	3,746	3,252
Hypnotics	41.5	33.9	34.6	33.0		873	847	844	868
Sedatives	33.2	29.5	27.4	31.8		970	912	876	839
Cannabis	24.3	24.2	24.0	22.4		995	1,096	1,272	1,285
Inhalants	16.0	4.7	11.0	10.5		47	42	47	62
Cocaine	10.5	7.1	11.2	10.3		245	245	297	321
Amphetamines	6.8	5.6	6.5	5.4		193	183	203	204
Ecstasy	.	8.9	21.6	16.3		.	56	137	232
Hallucinogens all	2.8	1.8	6.7	6.0		167	182	192	324
Hall. excl. mushrooms	.	.	.	-		.	.	.	214
Opiates all	.	8.0	9.0	20.0	0.000	401	325	337	769
Codeine	.	14.0	9.0	30.0	0.007	.	160	151	582
Heroin	.	2.1	4.8	14.0		.	48	57	59
Difficult drugs	11.1	8.8	12.2	14.9		359	372	463	537

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens, heroin. Only in 1997, mushrooms excl.
Data tested using $\chi 2$ (1987 or 1990 v.s. 1997), sign. level noted if $p < 0.05$.
*Not corrected for starters.

to establish some culturally based patterns of use. As we expected in view of the increased fashion statement of mushrooms, the continuation of hallucinogens increased but is still low. The number of recent heroin users increased. Some caution with these figures is legitimate. The computation of the heroin continuation rate is based on a very small group of last month users. We need a longer period of measurement than ten years to be able to interpret such small scaled developments.

4.4 Developments in incidence of drug use

Table 4.4 presents the percentage of new users per population. More people started using hypnotics and sedatives in the year prior to the interview than in all the years before. The same holds for ecstasy. It seems that at the moment, ecstasy is (still) a more fashionable drug than others like cocaine and amphetamines. There is also an increase in the number of people who started to use hallucinogens, this is mainly due to the starting use of mushrooms. More people started using inhalants, but again, this is such a small group of users, that this instrument is not suitable to measure real changes.

Table 4.5 presents the percentage of new users per lifetime user. This table indicates which part of the users is new. It is noteworthy that none of the developments are statistically significant ($p<0.05$).

Table 4.4: New users per population, 1987-1997 (weighted percentages)

	new users per population				*p<*	*unweighted n reported lifetime*			
drug	*1987*	*1990*	*1994*	*1997*		*1987*	*1990*	*1994*	*1997*
Tobacco	0.9	0.9	1.0	1.2		3,132	3,008	2,829	2,596
Alcohol	1.5	1.8	1.4	1.7		3,826	3,818	3,746	3,252
Hypnotics	2.5	2.2	2.3	4.3	0.001	873	847	844	868
Sedatives	3.2	2.3	2.3	3.5		970	912	876	839
Cannabis	1.1	1.0	1.2	1.1		995	1,096	1,272	1,285
Inhalants	.	.	0.2	0.2		47	42	47	62
Cocaine	0.3	0.2	0.3	0.6		245	245	297	321
Amphetamines	0.1	0.2	0.2	0.4		193	183	203	204
Ecstasy	.	0.7	0.8	1.3	0.010	.	56	137	232
Hallucinogens all	.	0.1	0.3	0.6	0.001	167	182	192	324
Hall. excl. mushrooms	.	.	.	0.6		.	.	.	214
Heroin	.	0.1	0.2	0.1		.	48	57	59

Data tested using $\chi 2$ (1987 or 1990 v.s. 1997), sign. level noted if $p< 0.05$.

Table 4.5: New users per reported lifetime use, 1987-1997 (weighted percentages)

	new users per reported lifetime use				*p<*	*unweighted n reported lifetime*			
drug	*1987*	*1990*	*1994*	*1997*		*1987*	*1990*	*1994*	*1997*
Tobacco	1.2	1.3	1.5	1.7		3,132	3,008	2,829	2,596
Alcohol	1.8	2.1	1.6	1.9		3,826	3,818	3,746	3,252
Hypnotics	12.4	11.8	12.2	18.2		873	847		868
Sedatives	14.2	11.2	11.7	15.2		970	912	876	839
Cannabis	4.7	4.0	4.0	3.0		995	1,096	1,272	1,285
Inhalants	.	4.9	4.2	12.9		47	42	47	62
Cocaine	5.6	2.8	4.6	6.5		245	245	297	321
Amphetamines	3.1	4.8	4.4	6.3		193	183	203	204
Ecstasy	.	55.2	23.1	18.8		.	56	137	232
Hallucinogens all	.	2.7	7.1	23.2		167	182	192	324
Hall. excl. mushrooms	.	.	.	10.2		.	.	.	214
Heroin	.	3.8	11.9	3.0		.	48	57	59

Data tested using $\chi 2$ (1987 or 1990 v.s. 1997), sign. level noted if $p< 0.05$.

4.5 Developments in frequency and intensity of drug use

In this section the development in the frequency and intensity of use is examined. In section 4.2 we showed that the lifetime prevalence of cannabis use has increased. Our other prevalence measurements showed increase as well. But there is cause to examine the effect of increased use on the patterns of use. Does the current acceptance of cannabis in society also lead to more intensive use or earlier onset[6]?

In 1987, 23 percent of all cannabis users were also last month users. Of this minority, 23 percent used cannabis daily, or almost daily (on 20 or more days during the last month). In 1997, these figures are almost unchanged: 22 percent of all cannabis users are also last month users, and the proportion of those who consumed cannabis on 20 or more days per month is, as in 1987, 23 percent. So the proportion of daily users among last month users is not growing. About two percent of the Amsterdam population is using cannabis almost every day.

Table 4.6 shows what proportion of lifetime users of a substance reaches our definition of 'experienced user' (25 times or more during lifetime). We began to ask a question relating to experience in 1990. Generally, no trend is visible. The main exception is ecstasy. In 1990 only 7 percent of all lifetime users had an experience of 25 times or more. This has risen to 18 in 1997. The proportion of cannabis users that reaches our level of 'experienced' is remarkably stable at 44 percent of all lifetime users.

Table 4.6:Experienced users per reported lifetime use, 1987-1997 (weighted percentages)

	> 25 times per reported life-time			*reported life-time unwe n*		
drug	*1990*	*1994*	*1997*	*1990*	*1994*	*1997*
Tobacco	92	88	88	3,008	2,829	2,596
Alcohol	90	86	88	3,818	3,746	3,252
Hypnotics	51	46	41	847	844	868
Sedatives	47	41	46	912	876	839
Cannabis	47	44	44	1,096	1,272	1,285
Inhalants	16	20	17	42	47	62
Cocaine	24	30	27	245	297	321
Amphetamines	35	28	33	183	203	204
Ecstasy	7	17	18	56	137	232
Hallucinogens all	20	15	10	182	192	324
Hall. excl mushrooms	.	.	13	.	.	214
Heroin	36	41	41	48	57	66

Cannabis details.

We found, that lifetime prevalence of cannabis use is increasing during the last decade, but that the consumption pattern, in as far as measurable in this survey, does not seem to change. The average

initiation age for cannabis remains stable at 20 years, the proportion of all users who become 'experienced' users remains the same at 43 percent, the last month continuation rate for cannabis is stable at 24 percent, the proportion of last month users who use on 20 days or more (last month frequency of use rate), also remains the same (23 percent of all last month users). This means that within the group of lifetime users of cannabis, consumption behaviour is extremely stable. The expectation that increased social acceptance of cannabis use and an increased number of persons in the population who have tried cannabis, would also cause higher rates of continuation and intensive use over time, can not be confirmed with the measurements we made in our surveys.

4.6 Developments in age of first use

Table 4.7 shows the developments in the age of first use. Or actually, the lack of development, because the age of initiation is stable for almost all drugs. We supply the average age of initiation and the median age. The median age is the age category at which 50 percent of the lifetime users has tried the drug.

Tobacco has the lowest mean and median ages of first use, followed by alcohol. Hypnotics and sedatives show some changes. There is some increase in lifetime prevalence, and a slight downward trend in age of first use. Cannabis, the most important of the illicit drugs, has a very stable mean age of initiation of 20 and a median age of 18. The position of ecstasy is a little different than most would expect with all the publicity on drug use by young people at house parties. The mean age of initiation is quite stable at 26, the median age is 25.

For most drugs the average age of onset is very stable. This is partly caused by the fact that each year

Table 4.7: Age of first use, 1987-1997 (weighted)

	mean				*median*			
drug	*1987*	*1990*	*1994*	*1997*	*1987*	*1990*	*1994*	*1997*
Tobacco	17.6	17.7	17.6	17.5	16	16	16	16
Alcohol	18.3	18.3	18.1	18.0	17	17	16	16
Hypnotics	40.0	39.3	38.3	37.0	37	36	35	32
Sedatives	36.0	35.2	33.9	33.8	32	30	30	30
Cannabis	20.2	20.3	20.2	20.3	18	18	18	18
Inhalants	.	19.4	20.0	20.1	.	19	19	19
Cocaine	24.5	24.7	25.2	24.5	23	23	24	23
Amphetamines	22.3	21.1	22.7	22.3	20	20	20	20
Ecstasy	.	27.1	26.1	26.3	.	25	25	25
Hallucinogens all	.	22.1	22.2	23.8	.	20	21	22
Hall. excl. mushrooms	.	.	.	22.7	.	.	.	24
Heroin	.	23.1	23.5	23.6	.	20	23	22
Difficult drugs	23.3	22.8	23.7	23.3	21	20	22	22

Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens, heroin. Only in 1997, mushrooms excl.

relatively few new users are added to the group of life time users. So their influence on the overall figures is relatively small. This influence is even getting smaller, the larger the 'stock' of life- time users becomes. However, if an important upward or downward trend in age of initiation would take place, we are sure that our measurements (once every three years) would reflect this.

4.7 Tables

There are a few other ways to look at the development of drug use in more detail. We will concentrate on the development of prevalence rates per age group. The question we would like to pose is how lifetime prevalence developed since 1987, per age group. The development in prevalence and continuation rates by age and also gender are given for tobacco (table 4.8), alcohol (table 4.9), cannabis (table 4.10), ecstasy (table 4.11) and difficult drugs (table 4.12).

One should be aware that changes in an age category might be caused by a change in the sample as a whole. For some age groups this change is significant (tested χ^2 , $p<0.05$), for others not.

Notes

1 Sandwijk J.P., Westerterp I., Musterd S., *Het gebruik van legale en illegale drugs in Amsterdam*, Amsterdam: Instituut voor Sociale Geografie, 1988.

2 Sandwijk J.P., Cohen P.D.A., Musterd S., *Licit and illicit drug use in Amsterdam*, Amsterdam: Department of Human Geography, University of Amsterdam, 1991.

3 Sandwijk J.P., Cohen P.D.A., Musterd S., Langemeijer M.P.S., *Licit and illicit drug use in Amsterdam II*, Amsterdam: CEDRO, 1995.

4 The 1997 data is also post-stratificated by marital status.

5 Personal communication from dr Wittop Koning, pharmacist in Amsterdam

6 According to NIPO, a market research agency that performs an ongoing panel study on the behaviour of the Dutch population in relation to taboos, the proportion of the population in the Netherlands that considers cannabis use as unacceptable has decreased from 71 percent in 1986 to 46 percent in 1998 (NIPO Amsterdam, Telepanel, 1998).

Table 4.8: Tobacco, prevalence and continuation, 1987-1997 (weighted percentages)

Tobacco	*lifetime*				*p <*	*last year*				*p <*	*last month*				*p <*	*l*
age/gender	*1987*	*1990*	*1994*	*1997*		*1987*	*1990*	*1994*	*1997*		*1987*	*1990*	*1994*	*1997*		*1987*
12-15	22.6	15.5	19.4	24.1		12.5	8.1	14.1	14.7		8.5	5.0	9.4	6.9		3
16-19	53.4	46.8	54.2	55.5		41.0	36.7	43.0	41.8		35.9	31.7	39.7	36.3		6
20-24	72.3	63.6	64.5	64.4	0.018	58.4	53.9	55.4	49.0	0.009	53.4	48.6	47.2	46.9		7
25-29	74.1	70.9	66.8	73.9		59.9	55.9	53.2	58.6		54.7	51.1	48.3	52.3		7
30-34	77.4	72.9	67.1	74.7	0.039	58.4	58.9	47.8	59.3		55.0	54.2	42.9	51.9		7
35-39	80.3	75.9	75.2	74.1		62.8	55.7	56.3	51.7	0.002	57.6	51.5	50.9	47.3	0.004	7
40-49	77.7	77.4	75.8	79.6		55.5	52.0	53.1	51.0		53.1	48.8	49.1	46.5	0.026	6
50-59	79.8	75.6	70.4	78.3	0.009	50.2	52.0	41.8	43.5	0.047	47.8	49.2	39.1	40.6	0.027	6
60-69	74.6	60.5	72.1	78.3		38.4	30.1	36.0	37.9		36.4	33.0	34.0	33.7		4
70+	62.8	61.7	59.8	66.4		31.6	25.2	26.3	25.5	0.045	29.0	23.2	23.9	23.3		4
Men	79.0	73.8	72.6	76.0	0.023	56.5	53.1	50.6	50.7	0.000	52.2	49.0	45.8	45.9	0.000	6
Women	64.2	61.9	60.7	67.0		43.1	40.9	40.6	42.3		40.0	37.4	36.6	37.9		6
Total	71.3	67.7	66.5	71.4		49.5	46.8	45.5	46.4	0.005	45.9	43.0	41.1	41.8	0.000	6

Data tested using $\chi 2$ (1987-1997), significance level noted if $p < 0.05$.
*Not corrected for starters.

Table 4.9: Alcohol, prevalence and continuation, 1987-1997 (weighted percentages)

Alcohol	*lifetime*				*p <*	*last year*				*p <*	*last month*				*p <*	
age/gender	*1987*	*1990*	*1994*	*1997*		*1987*	*1990*	*1994*	*1997*		*1987*	*1990*	*1994*	*1997*		*1987*
12-15	52.5	49.4	38.8	51.6		38.1	34.8	28.8	40.3		13.6	8.1	14.4	20.1		2(
16-19	77.4	79.4	76.0	74.2		70.9	72.0	68.2	67.9		56.8	54.3	52.0	58.8		7:
20-24	89.2	87.4	90.9	87.5		83.3	82.9	85.6	81.5		77.6	74.6	78.6	69.9	0.017	8:
25-29	92.7	90.2	90.3	91.8		86.9	84.6	85.0	86.7		81.0	75.5	77.7	78.7		8:
30-34	90.3	88.0	89.4	91.3		86.2	83.5	84.4	85.8		79.3	74.9	78.6	77.7		8(
35-39	92.5	87.5	91.3	91.8		85.8	83.7	83.4	83.8		81.0	75.9	75.0	75.1	0.044	8(
40-49	90.6	90.1	90.0	89.7		83.8	84.7	82.3	82.2		77.3	77.8	75.7	74.8		8:
50-59	88.7	87.2	87.1	92.6		79.0	78.7	77.9	84.7	0.04	72.2	71.7	70.9	79.2	0.021	8:
60-69	89.4	87.3	87.1	90.9		74.8	75.2	72.7	77.9		67.2	66.7	65.6	67.9		7:
70+	82.8	83.8	82.0	86.2		67.6	65.2	64.4	69.6		60.2	55.7	56.7	62.6		7:
Men	90.5	89.2	88.8	90.8		82.8	82.3	81.3	83.1		76.7	75.3	75.3	76.2		8:
Women	84.4	83.0	83.7	85.5		74.6	73.9	73.7	76.2		65.6	62.4	64.4	65.9		7(
Total	87.3	86.0	86.2	88.1		78.5	77.9	77.4	79.6		71.0	68.6	69.7	70.9		8:

Data tested using $\chi 2$ (1987-1997), significance level noted if $p < 0.05$.
*Not corrected for starters.

Table 4.10: Cannabis, prevalence and continuation, 1987-1997 (weighted percentages)

Cannabis	*lifetime*				*p <*	*last year*				*p <*	*last month*				*p <*	
age/gender	*1987*	*1990*	*1994*	*1997*		*1987*	*1990*	*1994*	*1997*		*1987*	*1990*	*1994*	*1997*		*1987*
12-15	4.6	2.6	4.5	6.8		3.0	2.6	4.5	4.8		0.6	1.9	3.0	2.3		
16-19	25.5	23.2	31.5	33.0		17.8	17.7	22.0	21.4		11.6	11.1	14.1	15.2		4
20-24	38.6	36.8	46.3	49.9	0.002	23.9	21.0	26.2	27.3		13.5	10.9	15.1	18.4		3
25-29	41.6	42.2	44.4	53.6	0.000	17.6	19.1	18.4	23.6	0.017	11.0	11.6	12.1	14.2		2
30-34	47.0	44.3	42.8	56.3	0.006	13.2	15.5	14.8	18.7	0.026	8.8	9.6	10.2	10.8		1
35-39	36.5	44.0	46.5	48.2	0.001	12.6	13.7	15.8	13.5		6.2	9.6	9.6	8.9	0.023	1
40-49	19.2	27.3	35.4	45.8	0.000	5.9	7.2	8.5	12.8	0.000	3.4	3.9	5.6	7.9		1
50-59	8.1	8.0	16.2	24.5	0.000	1.3	1.7	2.0	4.5	0.007	0.6	0.9	1.4	2.8		
60-69	1.3	2.4	2.8	7.6	0.000	0.0	0.7	0.2	1.5	0.051	0.0	0.7	0.2	0.4		
70+	0.2	1.1	0.8	1.1		0.0	0.2	0.0	0.0		0.0	0.2	0.0	0.0		
Men	28.2	30.6	35.0	43.2	0.000	12.7	13.7	16.2	17.4	0.000	7.8	8.6	10.7	11.1	0.001	2
Women	18.5	20.2	24.9	29.7	0.000	6.7	6.9	6.5	9.0	0.006	3.6	3.8	3.8	5.3	0.011	2
Total	23.2	25.2	29.8	36.3	0.000	9.5	10.2	11.2	13.1	0.000	5.6	6.1	7.2	8.1	0.000	2

Data tested using $\chi 2$ (1987-1997), significance level noted if $p < 0.05$.
*Not corrected for starters.

Table 4.11: Ecstasy, prevalence and continuation, 1990-1997 (weighted percentages)

Ecstasy	*lifetime*				*p <*	*last year*				*p <*	*last month*				*p <*
age/gender	*1987*	*1990*	*1994*	*1997*		*1987*	*1990*	*1994*	*1997*		*1987*	*1990*	*1994*	*1997*		*1987*
12-15		0	0	0			0.0	0	0.0			0.0	0.0	0.0		
16-19		1.8	5	7.5	0.014		1.4	3.4	5.7	0.041		0.5	1.7	1.3		
20-24		2.9	7.1	13.2	0.000		1.4	5.7	7.5	0.000		0.6	3.0	3.8	0.003	
25-29		3.1	7.2	16.2	0.000		2.0	2.7	8.0	0.000		0.2	1.0	3.2	0	
30-34		1.6	4.7	12.4	0.000		0.8	1.8	4.3	0.001		0.0	0.7	1.4	0.021	
35-39		1.7	3.7	8.5	0.000		1.0	1.4	2.5			0.0	0.5	0.5		
40-49		1.1	2.5	4.3	0.001		0.3	0.6	2.1	0.008		0.0	0.3	0.3		
50-59		0	0	1			0.0	0	0.2			0.0	0.0	0.0		
60-69		0	0.3	0			0.0	0	0.0			0.0	0.0	0.0		
70+		0	0	0			0.0	0	0.0			0.0	0.0	0.0		
Men		1.8	4.4	8.6			1.1	2.2	4.1			0.2	1.1	1.2		
Women		0.9	2.2	5.2			0.4	0.9	2.2			.	0.4	1.0		
Total		1.3	3.3	6.9	0.000		0.7	1.5	3.1	0.000		0.1	0.7	1.1	0.001	

Data tested using $\chi 2$ (1990-1997), significance level noted if $p < 0.05$.
*Not corrected for starters.

Table 4.12: Difficult drugs, prevalence and continuation, 1987-1997 (weighted percentages)

Difficult drugs	*lifetime*				*p <*	*last year*				*p <*	*last month*				*p <*	*l*
age/gender	*1987*	*1990*	*1994*	*1997*		*1987*	*1990*	*1994*	*1997*		*1987*	*1990*	*1994*	*1997*		*1987*
12-15	1.1	0.0	0.6	0.6		0.0	0.0	0.6	0.0		0.0	0.0	0.0	0.0		
16-19	3.0	3.7	6.7	13.2	0.000	2.1	3.2	4.5	10.7	0.001	1.3	1.4	1.7	3.2		4
20-24	8.1	7.0	11.1	19.4	0.000	3.5	3.5	7.3	14.4	0.000	1.2	1.6	4.1	5.6	0.000	1
25-29	16.9	13.0	13.2	21.7		5.7	4.8	4.8	10.6	0.005	2.3	1.6	1.8	5.0	0.03	1
30-34	19.6	17.7	16.4	22.0		4.7	3.1	4.0	6.9		1.3	1.0	1.8	2.8		
35-39	14.5	19.5	20.5	21.4	0.013	1.7	2.7	4.8	5.2	0.012	1.2	1.0	1.1	1.2		
40-49	8.6	10.9	16.0	20.9	0.000	1.4	1.3	2.1	5.5	0.000	1.1	0.3	1.0	2.9	0.047	1
50-59	3.7	2.9	6.0	10.5	0.000	0.2	0.4	0.7	1.2		0.2	0.2	0.2	0.5		
60-69	0.9	0.7	2.2	3.2	0.031	0.4	0.2	0.3	0.0		0.0	0.2	0.3	0.0		
70+	2.0	0.9	0.8	1.2		0.0	0.2	0.2	0.0		0.0	0.0	0.2	0.0		
Men	10.8	11.8	13.0	18.3	0.000	3.1	2.6	4.2	7.2	0.000	1.4	1.1	1.7	3.2	0.000	1
Women	6.0	5.5	8.6	12.4	0.000	1.4	1.6	2.0	4.0	0.000	0.5	0.5	0.9	1.4	0.002	
Total	8.3	8.6	10.7	15.3	0.000	2.2	2.1	3.0	5.6	0.000	0.9	0.8	1.3	2.3	0.000	1

Data tested using $\chi 2$ (1987-1997), significance level noted if $p < 0.05$.
Difficult drugs are cocaine, amphetamines, ecstasy, hallucinogens, heroin. Only in 1997, mushrooms excluded.
*Not corrected for starters.

5 Non-response

5.1 Introduction

In our previous surveys we reached a response rate of about 50 percent or just above. This means that of every two selected persons in a random sample, about one person will ultimately participate in the survey. By taking this non-response into account, one computes the size of the total sample to be large enough to allow for the non-response.

It is important to examine eventual differences in drug use prevalence between the response group (the ones that participate in the survey) and the non-response group (the ones that do not participate, for whatever reason). The non-response mainly consists of persons who refused to participate (refusers) and those who could not be contacted because they were not at home (absentees). Together they cover 83.6 percent of the non-response. To measure drug use prevalence rates among the non-response, we approached non-respondents a second time. A strategy was developed to obtain the most relevant information from these respondents. In accordance with earlier years, we asked why they did not want to participate in the main survey, and we asked some information about the use of drugs. The questionnaire for non-respondents was reduced to a short two-page list. With the information we were able to characterise the non-response group and find out if their use of cannabis and of alcohol is so different from the response that overall prevalence rates have to be recomputed.

5.2 Design of the non-response survey

We aimed at questioning 150 absentees (randomly selected from the pool of absentees) and 150 refusers (randomly selected from the pool of 'soft refusers'). At re-approach experienced interviewers used a standard text emphasising the right of every person to refuse participation. A reward of 20 Guilders[1] was offered to those who had refused and were now willing to cooperate. The persons were interviewed by phone if possible, and otherwise interviewed in a face to face situation. The persons who could not be reached by phone, were approached by mail and asked if and how they wanted to be interviewed. The combination of strategies to approach the non-response resulted in a response rate of 35.9 percent. This shows the relative efficiency of our design.

Table 5.1 shows the specified responses for absentees and refusers. The absentees sample totalled 269 persons, of which 48.3 percent was again unwilling to cooperate, whereas 4.1 percent were frame errors. The responses from the corrected absentees sample constitutes a 50.4 percent response. The refusers sample totalled 523 persons. We expected this group to be less willing to participate; 129 persons refused immediately and 189 persons were willing to participate partially (answering only the question on why response was refused). Six persons appeared to be frame errors. The 148 responses from the corrected refusers sample constitute 28.3 percent of the total sample of refusers.

Table 5.1: Sample and non-response categories for absentees and refusers, 1997

absentees (not-at-home)				*refusers*			
sample	*n*	*%*		*sample*	*n*	*%*	
Frame errors	11	4.1		Frame errors	6	1.1	
Non-used addresses	0	0.0		Non-used addresses	0	0.0	
Response	130	48.3		Response	148	28.3	
Non-response	128	47.6		Non-response	369	70.6	
Total sample	269	100.0		Total sample	523	100.0	
non-response categorie	*n*	*%*	*valid %*	*non-response categorie*	*n*	*%*	*valid %*
Total refusal	101	78.9	39.1	Total refusal	129	35.0	14.6
Partial refusal	0	0.0	0.0	Partial refusal	189	51.2	21.4
Not-at-home	27	21.1	10.5	Not-at-home	51	13.8	5.8
Non-response	128	100.0	49.6	Non-response	369	100.0	41.7
Response	130		50.4	Response	148		16.7
Total valid addresses	258		100.0	Total valid addresses	517		100.0

Table 5.2: Reasons for non-participation in main survey, 1997

reasons	*n*	*%*
No, do not want to answer this question	3	2.0
Did not refuse in first place	9	6.0
No time/not convenient	34	22.8
Questionnaire too long	1	0.7
Reasons of privacy	3	2.0
Never participate in studies	0	0.0
Goal of research is useless	0	0.0
Do not use any drugs	1	0.7
Illness, handicap	1	0.7
Language problems	1	0.7
Research is waste of money	0	0.0
Can not remember reason	16	10.7
Can not remember refusal	36	24.2
Not interested	12	8.1
Other	29	19.5
No answer	2	1.3
Total	148	100.0

Refusers and not absentees were asked why they did not want to participate the first time. Reasons are presented in Table 5.2 for those who answered the full non-response questionnaire. Note that reasons are general and not specifically related to the topic of the survey.

5.3 Characteristics of non-response

We noticed considerable differences in the demographic composition of the response and the non-response populations (section 2.3). Here, we examine what differences occur among the non-response. The demographic characteristics of absentees and refusers are compared in Table 5.3. We compared absentees with refusers using the $\chi^2_{.05}$ test. We find that only the age distributions differ statistically significantly ($p<0.03$). Refusers are more middle aged. Young people (age 12 to 19) and older people (age 50 and over), are less often absentees.

Table 5.3: Absentees, refusers, non-response and response, by age, gender and marital status, 1997 (weighted percentages)

	absentees	*refusers*		*non-response*	*norm. response*
age/gender/marital	*%*	*%*	*age/gender/marital*	*%*	*%*
12-15	3.1	6.8	12-15	5.0	9.3
16-19	2.3	8.1	16-19	5.4	7.7
20-24	8.5	8.8	20-24	8.6	6.5
25-29	14.6	10.8	25-29	12.6	11.3
30-34	11.5	8.8	30-34	10.1	11.1
35-39	15.4	10.8	35-39	12.9	10.6
40-49	24.6	17.6	40-49	20.9	15.7
50-59	8.5	8.8	50-59	8.6	9.8
60-69	6.9	9.5	60-69	8.3	7.2
70+	4.6	10.1	70+	7.6	10.8
Male	51.5	43.2	Male	47.1	46.6
Female	48.5	56.8	Female	52.9	53.4
Unmarried	56.2	50.7	Unmarried	53.2	52.2
Married	29.2	33.8	Married	31.7	32.5
Divorced	10.8	10.1	Divorced	10.4	9.5
Widowed	3.8	5.4	Widowed	4.7	5.8
Total	130	148	Total	278	3,798

We compared the non-response personal characteristics to the response. We asked non-response (refusers and absentees) about their social behaviour, family type, education and income. Results are shown in Table 5.4.

The most important question to ask is if non-responders have higher drug use prevalence rates than responders. Non-response higher prevalence rates are not implausible if non-response would be due to a more 'outgoing' life style. In earlier research outgoing behaviour is found to be linked with higher drug prevalence rates (Sandwijk et al, 1995). Do absentees and refusers go out more often? And if they

Table 5.4: Absentees, refusers, non-response and response, by lifestyle characteristics, 1997 (weighted percentages)

	absentees	*refusals*		*non-response*	*norm. response*
	%	*%*		*%*	*%*
evenings per week at home	*p<0.05*	*p<0.05*	*evenings per week at home*	*p<0.05*	
5-7	43.5	51.6	5-7	48.0	58.1
3-4	42.7	37.3	3-4	39.7	30.3
1-2	12.1	9.2	1-2	10.5	11.3
going out	*p<0.05*		*going out*	*p<0.05*	
Never	8.1	21.7	Never	15.6	23.9
Rarely	9.8	25.0	Rarely	18.2	16.6
Occasionally/regularly pictures	4.1	6.6	Occasionally/regularly pictures	5.5	4.1
Occasionally/regularly eat out	26.0	15.1	Occasionally/regularly eat out	20.0	20.5
Occasionally/regularly go out	3.3	3.3	Occasionally/regularly go out	3.3	3.5
Occasionally/regularly 2 of 3	38.2	20.4	Occasionally/regularly 2 of 3	28.4	20.9
Occasionally/regularly all	10.6	7.9	Occasionally/regularly all	9.1	10.5
type of household	*p<0.05*		*type of household*	*p<0.05*	
Couple	31.7	28.9	Couple	30.2	27.0
Couple with kids	19.5	30.3	Couple with kids	25.5	29.7
Single	43.1	28.9	Single	35.3	30.6
Single parent with kids	4.1	11.2	Single parent with kids	8.0	8.6
Other	0.8	0.7	Other	0.7	4.0
level of education	*p<0.05*	*p<0.05*	*level of education*	*p<0.05*	
Elementary	4.8	17.1	Elementary	11.6	16.3
Vocational (low)	12.1	21.1	Vocational (low)	17.0	12.8
Secondary (low)	15.3	7.9	Secondary (low)	11.2	12.5
Vocational (middle)	13.7	15.8	Vocational (middle)	14.9	10.9
Secondary (middle/high)	11.3	9.2	Secondary (middle/high)	10.1	17.2
Vocational (high)/university	37.9	27.6	Vocational (high)/university	32.2	25.6
labour market position	*p<0.05*	*p<0.05*	*labour market position*	*p<0.05*	
Paid worker	71.5	51.0	Paid worker	60.1	48.6
Housewife/houseman	11.4	17.0	Housewife/houseman	14.5	14.6
On benefits	0.0	1.3	On benefits	0.7	1.4
Student	2.4	14.4	Student	1.1	14.5
Retired	3.6	14.4	Retired	12.3	12.2
Other	0.3	2.0	Other	1.4	8.3
income	*p<0.05*	*p<0.05*	*income*	*p<0.05*	
Less than fl 750	0.00	2.5	Less than fl 750	1.2	1.92
750-1250	2.22	6.3	750-1250	4.1	3.68
1250-1500	2.22	2.5	1250-1500	2.3	9.71
1500-2000	5.56	11.4	1500-2000	8.2	13.72
2000-2500	11.11	13.9	2000-2500	12.3	12.18
2500-3000	16.67	10.1	2500-3000	13.5	12.49
3000-4000	17.78	20.3	3000-4000	18.7	16.14
4000-5000	23.33	15.2	4000-5000	19.3	11.84
More than 5000	21.11	20.3	More than 5000	20.5	18.33
Total	130	148	Total	278	3798

Distributions are compared to normal response using $\chi 2$, significance level noted if $p < 0.05$.

Category no answer/do not know is left out.

go out more often, does this result in higher prevalence rates of alcohol and cannabis use?

Table 5.4 shows that absentees spend fewer evenings at home than 'normal' respondents, but this is not true for refusers. Refusers show the same outgoing behaviour as the normal response group. Absentees in general are single and or have no kids, but refusers show the same household type distribution as the normal response group. The education level of refusers and absentees is different from the level of normal response. Especially refusers tend to be a little better educated. We note a significantly different distribution in the labour market position. 71.5 percent of the absentees turned out to be paid workers compared to 51.0 percent refusers and 48.6 percent of the normal response. The labour market position is related to earnings, so the non-respondents have a higher income.

We compared the prevalence rates of alcohol and cannabis use of absentees and refusers with the normal response group. Results are given below in Table 5.5. Once again, we used the $\chi^2_{.05}$ test, this time to test whether the prevalence rates of the non-response (also given by absentees and refusers) differ from the normal response.

Table 5.5: Prevalence of alcohol and cannabis, by absentees, refusers, non-response and response, 1997 (weighted percentages)

	absentees		*refusals*			*non-response*		*normal response*	
alcohol	*%*	*p <*	*%*	*p <*	*alcohol*	*%*	*p <*	*%*	*p <*
lifetime prevalence	95.9	0.05	92.2		lifetime prevalence	94.2		88.1	0.01
Last year prevalence	91.1	0.01	84.3		Last year prevalence	87.6		79.5	0.01
Last month prevalence	87.0	0.001	71.9		Last month prevalence	78.9		70.9	0.01
cannabis					*cannabis*				
lifetime prevalence	30.1		23.7	0.01	lifetime prevalence	26.4		36.3	0.01
Last year prevalence	14.6		6.6	0.05	Last year prevalence	10.1		13.1	
Last month prevalence	8.9		4.6		Last month prevalence	6.5		8.1	

Data is tested using $\chi 2$ (versus normal response), significance level noted in table if $p < 0.05$.

Table 5.5 presents the prevalence rates of alcohol and cannabis use, by total non-response, and by absentees and refusers. Prevalence of alcohol tends to be somewhat higher among non-response than could be estimated from the main survey. Differences are statistically significant ($p<0.01$).

Lifetime prevalence of cannabis is lower than could be estimated (statistically significant, $p<0.01$). But between the last year and last month prevalence of non-response and normal response, we found small and statistically non-significant differences. As we found in the 1994 measurement, the prevalence rates of cannabis - the most important illicit substance - are lower in the non-response than in the normal response. This means that if we would compute a cannabis prevalence rate for the total sample, based on the results of both response and our non-response survey, we would find a somewhat lower overall estimate. But because of the difficulty of the non-response survey and the low response rates we realised in it, we see no legitimate reason to deviate from our original estimates as presented in chapter 3.

Notes

1 On April 1, 1998, 20 Dutch Guilders is equivalent to 9.59 US Dollars (source: Olsen and Associates, Zurich). <http:/www.oanda.com/>

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List of tables and figures

APPENDIX A QUESTIONNAIRE

QUESTIONNAIRE MAIN SURVEY

INTRODUCTION

You have received a letter explaining the purpose of this interview: your lifestyle and use of medical and other drugs. We asked about 20.000 people in the Netherlands to participate in this study. The answers to the questions will be processed anonymously.

(When respondent is not alone:) In the interest of this investigation, I would like to ask you if I could speak to you alone, without any other people to influence your answers? Can we sit somewhere apart, i.e. out of hearing distance of other people?

(When this is not possible:) You can key the answers into the computer yourself. If necessary I will help you if there is something you donít understand.

01	*INTERVIEWER*		
	Is the situation fit to	- no, in writing	[1]
	continue orally or better in writing?	- yes, orally	[2]

LEISURE

First of all, I would like to know something about your activities in your leisure time.

02	How many evenings a week do you usually spend at home?	- all evenings at home	[1]
		- 5 to 6 evenings at home	[2]
		- 3 to 4 evenings at home	[3]
		- 1 to 2 evenings at home	[4]
		- less than 1 evening at home	[5]
		- no answer	[9]
03	How many times did you go to pubs, discos, dance halls, etc. *during the past four weeks?*	- not a single time	[1]
		- once	[2]
		- 2 to 3 times	[3]
		- 4 to 9 times	[4]
		- 10 times or more	[5]
		- don't know	[6]
		- no answer	[9]
04	How many times did you go to restaurants or other dining places, *during the past four weeks?*	- not a single time	[1]
		- once	[2]
		- 2 to 3 times	[3]
		- 4 to 9 times	[4]
		- 10 times or more	[5]
		- don't know	[6]
		- no answer	[9]
05	How many times did you go to the cinema or art centre *during the past eight weeks?*	- not a single time	[1]
		- once	[2]
		- 2 to 3 times	[3]
		- 4 to 9 times	[4]
		- 10 times or more	[5]
		- don't know	[6]
		- no answer	[9]
06	How many times did you go to theatre, ballet, opera, etc. *during the past eight weeks?*	- not a single time	[1]
		- once	[2]
		- 2 to 3 times	[3]
		- 4 to 9 times	[4]
		- 10 times or more	[5]
		- don't know	[6]
		- no answer	[9]

07	Did you pursue any sports, by yourself or within a club? For example athletics, cycling, football or tennis.	- no - yes - no answer	[1] [2] [9]

We would like to know of several types of sports, if you have pursued those, and in which period you were engaged in these sports activities.

08	Have you ever done weight training and if so, when?	- no - yes, longer than one year ago - yes, in the past year - no answer	[1] [2] [3] [9]
09	Have you ever done fitness and if so, when?	- no - yes, longer than one year ago - yes, in the past year - no answer	[1] [2] [3] [9]
10	Have you ever done body building and if so, when?	- no - yes, longer than one year ago - yes, in the past year - no answer	[1] [2] [3] [9]
11	Have you ever done aerobics, callanetics or steps and if so, when?	- no - yes, longer than one year ago - yes, in the past year - no answer	[1] [2] [3] [9]
12	How frequently do you meet relatives friends or acquaintances? *INTERVIEWER: Give card.*	- never - daily - 2 to 3 times a week - at least once a week - at least once a month - less frequently - very irregularly - not applicable - no answer	[1] [2] [3] [4] [5] [6] [7] [8] [9]

TOBACCO

And now for something different. I would like to know something about your habits regarding smoking, drinking, and the use of pharmaceutical and other drugs.

13	Did you ever smoke cigarettes, [shag], cigars or pipes? *INT.: this question also applies to other forms of tobacco such as chewing tobacco and snuff*	- no - yes - no answer	[1] [2] [9]	**20** **14** **20**
14	Did you do so 25 times or more?	- no, less - yes, 25 times or more - don't know - no answer	[1] [2] [3] [9]	
15	At what age did you first smoke tobacco?	- age - don't know - no answer	[..] [97] [99]	
16	Did you smoke cigarettes, [shag], cigars or pipes in the past 12 months?	- no - yes - no answer	[1] [2] [9]	**17** **18** **17**
17	At what age did you quit smoking?	- age - don't know - no answer	[..] [97] [99]	**19** **19** **18**
18	And in the past 30 days?	- no - yes - no answer	[1] [2] [9]	
19	How many cigarettes do you normally smoke per day? *INT.: if the respondent does not smoke cigarettes but cigars or pipes, how many cigars or pipes do you normally smoke per day?*	- number - don't know - no answer	[..] [97] [99]	

ALCOHOL

Now a few questions on alcoholic drinks such as beer, wine, gin, liquor etc.

20	Did you ever drink an alcoholic beverage?	- no - yes - no answer	[1] [2] [9]	**30** **21** **30**

21	Did you do so 25 times or more?	- no, less	[1]	
		- yes, 25 times or more	[2]	
		- don't know	[3]	
		- no answer	[9]	
22	At what age did you drink alcohol for the first time?	- age	[..]	
		- don't know	[97]	
		- no answer	[99]	
23	Did you drink alcohol over the past 12 months?	- no	[1]	**24**
		- yes	[2]	**25**
		- no answer	[9]	**24**
24	At what age did you last drink alcohol? (Round up/down to nearest age)	- age	[..]	**30**
		- don't know	[97]	**30**
		- no answer	[99]	**30**
25	Did you drink *6 or more* alcoholic beverages in one day during the past 6 months?	- no	[1]	**27**
		- yes	[2]	**26**
		- no answer	[9]	**27**
26	How often did you drink 6 or more alcoholic beverages in one day?	- daily	[1]	
		- more than 4 times a week	[2]	
		- 3 to 4 times a week	[3]	
		- 1 to 2 times a week	[4]	
	INT.: Present card.	- 1 to 3 times a month	[5]	
		- 3 to 5 times past 6 months	[6]	
		- 1 to 2 times past 6 months	[7]	
		- don't know	[8]	
		- no answer	[9]	
27	Did you drink alcohol over the past 30 days?	- no	[1]	**29**
		- yes	[2]	**28**
		- no answer	[3]	**29**
28	On how many days did you drink alcohol during the past 30 days?	- number	[..]	
		- don't know	[97]	
		- no answer	[99]	
29	On average, how many glasses of alcohol per day did you drink recently? (In case you don't drink every day, please estimate your weekly consumption and divide that by seven.)	- glasses	[..]	
		- don't know	[97]	
		- no answer	[99]	

HYPNOTICS

Now a few questions about hypnotics

30	As you probably know, there are a lot of pharmaceutical drugs available to facilitate sleeping. Have you ever used any of these on prescription by a medical doctor or on your own initiative? *INT.: We don't mean things like a glass of warm milk, a walk, or aspirin); homeopathic drugs do count.*	- no	[1]	**37**
		- yes	[2]	**31**
		- no answer	[9]	**37**
31	Did you do so 25 times or more?	- no, less	[1]	
		- yes, 25 times or more	[2]	
		- don't know	[3]	
		- no answer	[9]	
32	At what age did you use hypnotics for the first time?	- age	[..]	
		- don't know	[97]	
		- no answer	[99]	
33	Have you used hypnotics over the past 12 months?	- no	[1]	**34**
		- yes	[2]	**35**
		- no answer	[9]	**35**
34	At what age did you last use hypnotics?	- age	[..]	**37**
		- don't know	[97]	**37**
		- no answer	[99]	**37**
35	Have you used hypnotics over the past 30 days?	- no	[1]	**37**
		- yes	[2]	**36**
		- no answer	[9]	**37**

36 Can you tell me which hypnotic(s) you have used over the past 30 days? Please tell me names or brands. And will you tell me if you took them on prescription by a medical doctor or on your own initiative?

INT.: Write down literally! When respondents hesitate or say they don't know, ask them to have a look at the bottle or package (in case it's still there).

name hypnotic	doctors prescr.	own init.	both	d.k.	n.a.
..... [..]	[1]	[2]	[3]	[4]	[5]
..... [..]	[1]	[2]	[3]	[4]	[5]
..... [..]	[1]	[2]	[3]	[4]	[5]
..... [..]	[1]	[2]	[3]	[4]	[5]

SEDATIVES

37	Other pharmaceutical drugs are sedatives, to calm you down. Have you ever used any of these, on prescription by a medical doctor or on your own initiative?	- no	[1]	**44**
		- yes	[2]	**38**
		- no answer	[9]	**44**

INT.: We don't mean yoga or other relaxing activities; homeopathic drugs do count.

38	Did you do so 25 times or more?	- no, less	[1]	
		- yes, 25 times or more	[2]	
		- don't know	[3]	
		- no answer	[9]	
39	At what age did you first use sedatives?	- age	[..]	
		- don't know	[97]	
		- no answer	[99]	
40	Have you used sedatives over the past 12 months?	- no	[1]	**41**
		- yes	[2]	**42**
		- no answer	[3]	**41**
41	At what age did you last use sedatives?	- age	[..]	**44**
		- don't know	[97]	**44**
		- no answer	[99]	**44**
42	And over the past 30 days?	- no	[1]	**44**
		- yes	[2]	**43**
		- no answer	[3]	**44**

43 If so, can you please tell me which sedative(s) you have used over the past 30 days? Please tell me names or brands. And will you tell me if you took them on prescription by a medical doctor or on your own initiative?

INTERVIEWER: Write down literally! When respondents hesitate or say they don't know, ask them to have a look at the bottle or package (in case it's still there).

name sedative	doctors prescr.	own init.	both	d.k.	n.a.
..... [..]	[1]	[2]	[3]	[4]	[5]
..... [..]	[1]	[2]	[3]	[4]	[5]
..... [..]	[1]	[2]	[3]	[4]	[5]
..... [..]	[1]	[2]	[3]	[4]	[5]

DOPING

There are substances on the market that are used by people who want to improve their sports performance or by people who, through taking these substances, hope to get a strong and muscular body.

44	Have you ever tried any of these substances?	- no	[1]	**57**
		- yes	[2]	**45**
		- no answer	[9]	**57**
45	Which of these substances did you use? (you can give more than one answer)	- anabolic-androgens steroids (AAS), usually referred to as anabolic steroids	[1]	
	INT: show card	- growth hormone (hHG)	[2]	
		- EPO (erythropoietin)	[3]	
		- thyroid medication	[4]	
		- clenbuterol	[5]	
		- stimulants (for example amphetamine (speed), cocaine, ephedrine, caffeine in high dosage)	[6]	
		- other	[7]	
		- donít know	[8]	
		- no answer	[9]	

46	Did you take these substances in the form of a cure?	- no - yes - no answer	[1] [2] [9]	**48** **47** **48**
47	How many cures of these substances did you take?	- number - no answer	[..] [9]	
48	Did you take these kinds of substances on individual occasions, meaning not in the of a cure?	- no - yes - no answer	[1] [2] [9]	**50** **49** **49**
49	Have you used these substances 25 times or more? *(INT: only use on individual occasions; not when respondent has followed a cure)*	- no, less than 25 times - yes, 25 times or more - don't know how often - no answer	[1] [2] [3] [9]	
50	How old were you when you first used a substance to improve your performances in sports or to try and get a stronger and more muscular body?	- age - don't know - no answer	[..] [777] [999]	
51	Did you use these kinds of substances in the last 12 months?	- no - yes - no answer	[1] [2] [9]	**52** **53** **52**
52	How old were you when you used these kinds of substances for the last time?	- age - don't know - no answer	[..] [77] [99]	
	(INT: for last year users and more recent)			
53	Where did you get the substance/substances that you used? *INT: resp. can give more than one answer*	- doctors prescription - trainer/sports club/gym - friends, acquaintances, relatives - other - no answer	[1] [2] [3] [4] [9]	
	(INT: for last year users and more recent)			
54	Can you tell which substance (substances) you used in the last twelve months? Do you know the name of the substance(s)? *(INT: write down names literally. If respondent* does not know the name of the substance or seems to hesitate, ask if he/she can show you and check *the name)*	- substance 1 - substance 2 - substance 3 - substance 4	[..] [..] [..] [..]	
	(INT: for last year users and more recent)			
55	For what reason did you take these subs. You can give a maximum of three answers *INT: show card*	- to become stronger - to become faster - to become slimmer - for more endurance - to become more aggressive - to improve body shape - to become bigger - to cope with injuries - to cope with fatigue - to concentrate - to increase muscle development - to look better - other - don't know / no answer	[01] [02] [03] [04] [05] [06] [07] [08] [09] [10] [11] [12] [13] [14]	
56	Did you use these kinds of substances in the last 30 days?	- no - yes - no answer	[1] [2] [9]	

CANNABIS

Now a few questions about the use of cannabis

57	Have you ever used cannabis (hash, marijuana or weed)?	- no - yes - no answer	[1] [2] [9]	**68** **58** **68**
58	Have you used it 25 times or more?	- no, less - yes, 25 times or more - don't know - no answer	[1] [2] [3] [9]	
59	At what age did you first use cannabis? (hash, marijuana, weed)	- age - don't know - no answer	[..] [97] [99]	
60	Have you used cannabis over the past 12 months? (hash, marijuana, weed)	- no - yes - no answer	[1] [2] [3]	**61** **62** **61**

61	At what age did you last use cannabis?	- age - don't know - no answer	[..] [97] [99]	**65** **65** **65**
62	Where did you get the cannabis that you used? (you can give more than one answer)	- relatives, friends, acquaintance - coffeeshop - cafe/pub - other place of entertainment - bought on the street from a stranger - community centre, youth club, association - home dealer - delivery service - smartshop - other - don't know/will not say	[01] [02] [03] [04] [05] [06] [07] [08] [09] [77] [99]	
63	Have you used cannabis over the past 30 days? (hash, marijuana, weed)	- no - yes, - no answer	[1] [2] [3]	**65** **64** **65**
64	In the last 30 days, on how many days did you use cannabis?	- number - don't know - no answer	[..] [97] [99]	
65	Has one of your parents ever used cannabis?	- no - yes - don't know - not applicable (has no parents) - no answer	[1] [2] [3] [4] [5]	
66	Has one of your siblings ever used cannabis?	- no - yes - don't know - not applicable (has no siblings) - no answer	[1] [2] [3] [4] [5]	
67	Has one of your children ever used cannabis?	- no - yes - don't know - not applicable (has no children) - no answer	[1] [2] [3] [4] [5]	

COCAINE

Now a few questions on the use of cocaine

68	Have you ever used cocaine?	- no - yes - no answer	[1] [2] [3]	**77** **69** **77**
69	Have you used it 25 times or more?	- no, less - yes, 25 times or more - don't know - no answer	[1] [2] [3] [4]	
70	At what age did you first use cocaine?	- age - don't know - no answer	[..] [97] [99]	
71	Have you used cocaine over the past 12 months?	- no - yes - no answer	[1] [2] [3]	**72** **73** **73**
72	At what age did you last use cocaine?	- age - don't know - no answer	[..] [97] [99]	**76** **76** **76**
73	Where did you get the cocaine that you used (you can give more than one answer)	- relatives, friends, acquaintance - coffeeshop - cafe/pub - other place of entertainment - on the street from a stranger - community centre, youth club, association - home dealer - delivery service - smartshop - other - don't know/will not say	[01] [02] [03] [04] [05] [06] [07] [08] [09] [77] [99]	
74	Have you used cocaine over the past 30 days?	- no - yes, - no answer	[1] [2] [3]	**76** **75** **75**

75	In the last 30 days, on how many days did you use cocaine	- number - don't know - no answer	[..] [97] [99]	
76	Did you ever take cocaine in the form of crack or freebase?	- yes - no - no answer	[1] [2] [9]	

AMPHETAMINES

77	Have you ever used amphetamines? (stimulants, pep, speed , etc.)	- no - yes - no answer	[1] [2] [3]	**86** **78** **86**
78	Have you used it 25 times or more?	- no, less - yes, 25 times or more - don't know - no answer	[1] [2] [3] [4]	**79** **80** **80** **80**
79	How often did you use amphetamines?	- number - don't know - no answer	[..] [97] [99]	
80	At what age did you first use amphetamines?	- age - don't know - no answer	[..] [97] [99]	
81	Have you used amphetamines over the past 12 months?	- no - yes - no answer	[1] [2] [3]	**82** **83** **82**
82	At what age did you last use amphetamines?	- age - don't know - no answer	[..] [97] [99]	**86** **86** **86**
83	Where did you get the amphetamine that you used? (you can give more than one answer)	- relatives, friends, acquaintance - coffeeshop - cafe/pub - other place of entertainment - on the street from a stranger - community centre, youth club, association - home dealer - delivery service - smartshop - other - don't know/will not say	[01] [02] [03] [04] [05] [06] [07] [08] [09] [77] [99]	
84	Have you used amphetamines over the past 30 days?	- no - yes - no answer	[1] [2] [9]	
85	In the last 30 days, on how many days did you use amphetamines?	- days - don't know - no answer	[..] [97] [99]	

ECSTASY

Now a few questions about ecstasy follow.

86	Have you ever used ecstasy (XTC, MDMA, E)?	- no - yes - no answer	[1] [2] [3]	**94** **87** **94**
87	Have you used it 25 times or more?	- no, less - yes, 25 times or more - don't know - no answer	[1] [2] [3] [4]	
88	At what age did you first use ecstasy?	- age - don't know - no answer	[..] [97] [99]	
89	Have you used ecstasy over the past 12 months?	- no - yes - no answer	[1] [2] [3]	**90** **91** **91**

90	At what age did you last use ecstasy?	- age	[..]	**94**
		- don't know	[97]	**94**
		- no answer	[99]	**94**
91	Where did you get the ecstasy that you used? (you can give more than one answer)	- relatives, friends, acquaintance	[01]	
		- coffeeshop	[02]	
		- cafe/pub	[03]	
		- other place of entertainment	[04]	
		- on the street from a stranger	[05]	
		- community centre, youth club, association	[06]	
		- home dealer	[07]	
		- delivery service	[08]	
		- smartshop	[09]	
		- other	[77]	
		- don't know/will not say	[99]	
92	Have you used ecstasy over the past 30 days?	- no	[1]	
		- yes	[2]	
		- no answer	[9]	
93	In the last 30 days, on how many days did you use ecstasy	- days	[..]	
		- don't know	[97]	
		- no answer	[99]	

HALLUCINOGENS

94	Have you ever used LSD?	- no	[1]	**115**
		- yes	[2]	**95**
		- no answer	[3]	**115**
95	Have you ever used mescaline?	- no	[1]	
		- yes	[2]	
		- no answer	[3]	
96	Have you ever used psilocybin?	- no	[1]	
		- yes	[2]	
		- no answer	[3]	
97	Have you ever used 2CB?	- no	[1]	
		- yes	[2]	
		- no answer	[3]	
98	Have you ever used ayahuasca?	- no	[1]	
		- yes	[2]	
		- no answer	[3]	
99	Have you ever used any other substance that causes hallucinations?	- no	[1]	
		- yes	[2]	
		- no answer	[3]	
100	Have you used [any hall.] 25 times or more? (in total)	- no, less	[1]	
		- yes, 25 times or more	[2]	
		- don't know	[3]	
		- no answer	[4]	
101	At what age did you first use hallucinogens? (in total)	- age	[..]	
		- don't know	[97]	
		- no answer	[99]	
102	Have you used hallucinogens over the past 12 months? (in total)	- no	[1]	**103**
		- yes	[2]	**104**
		- no answer	[3]	**103**
103	At what age did you last use hallucinogens? (in total)	- age	[..]	
		- don't know	[97]	
		- no answer	[99]	
104	Where did you get these substances? [list of hallucinogens] (you can give more than one answer)	- relatives, friends, acquaintance	[01]	
		- coffeeshop	[02]	
		- cafe/pub	[03]	
		- other place of entertainment	[04]	
		- on the street from a stranger	[05]	
		- community centre, youth club, association	[06]	
		- home dealer	[07]	
		- delivery service	[08]	
		- smartshop	[09]	
		- other	[77]	
		- don't know/will not say	[99]	
105	Have you used hallucinogens over the past 30 days?	- no	[1]	**107**
		- yes	[2]	**106**
		- no answer	[9]	**107**
106	In the last 30 days, on how many days did you use hallucinogens	- days	[..]	
		- don't know	[97]	
		- no answer	[99]	

Some mushrooms too, contain substances that can make you hallucinate or induce a 'trip'.

107	Have you ever used this kind of mushrooms	- no - yes - no answer	[1] [2] [3]	**115** **108** **115**
108	Have you used it 25 times or more?	- no, less - yes, 25 times or more - don't know - no answer	[1] [2] [3] [4]	
109	At what age did you first use mushrooms?	- age - don't know - no answer	[..] [97] [99]	
110	Have you used mushrooms over the past 12 months?	- no - yes - no answer	[1] [2] [3]	**111** **112** **112**
111	At what age did you last use mushrooms?	- age - don't know - no answer	[..] [97] [99]	**115** **115** **115**
112	Where did you get the mushrooms? (you can give more than one answer)	- relatives, friends, acquaintance - coffeeshop - cafe/pub - other place of entertainment - on the street from a stranger - community centre, youth club, association - home dealer - delivery service - smartshop - other - don't know/will not say	[01] [02] [03] [04] [05] [06] [07] [08] [09] [77] [99]	
113	Have you used mushrooms over the past 30 days?	- no - yes - no answer	[1] [2] [9]	**115** **114** **114**
114	In the last 30 days, on how many days did you use mushrooms	- days - don't know - no answer	[..] [97] [99]	

INHALANTS

115	Have you ever used inhalants (like glue or tri, to get high)?	- no - yes - no answer	[1] [2] [3]	**123** **116** **123**
116	Have you used it 25 times or more?	- no, less - yes, 25 times or more - don't know - no answer	[1] [2] [3] [4]	
117	At what age did you first use inhalants?	- age - don't know - no answer	[..] [97] [99]	
118	Have you used inhalants over the past 12 months?	- no - yes - no answer	[1] [2] [3]	**119** **120** **120**
119	At what age did you last use inhalants?	- age - don't know - no answer	[..] [97] [99]	**123** **123** **123**
120	Where did you get the inhalants that you used? (you can give more than one answer)	- relatives, friends, acquaintance - coffeeshop - cafe/pub - other place of entertainment - on the street from a stranger - community centre, youth club, association - home dealer - delivery service - smartshop - other - don't know/will not say	[01] [02] [03] [04] [05] [06] [07] [08] [09] [77] [99]	
121	Have you used inhalants over the past 30 days?	- no - yes - no answer	[1] [2] [9]	**123** **122** **123**
122	In the last 30 days, on how many days did you use inhalants?	- days - don't know - no answer	[..] [97] [99]	

OPIATES, HEROIN, CODEINE, PALFIUM, METHADONE, OTHER OPIATES.

123	Have you ever used opiates, like the ones mentioned on this card?	- no - yes - no answer	[1] [2] [3]	**156** **124** **156**
124	Can you please indicate which one of these you ever used?	- opium - morphine - heroin - codeine - palfium - methadone - other opiates - don't know - no answer	[1] [2] [3] [4] [5] [6] [7] [8] [9]	
125	Have you used opium 25 times or more?	- no, less - yes, 25 times or more - no answer	[1] [2] [9]	
126	At what age did you first use opium? (in total)	- age - don't know - no answer	[..] [97] [99]	
127	At what age did you last use opium? (in total)	- age - don't know - no answer	[..] [97] [99]	
128	Was that the last time on doctors prescription, on own initiative or both? (in total)	- on prescription - own initiative - both - no answer	[1] [2] [3] [9]	
129	Have you used morphine 25 times or more?	- no, less - yes, 25 times or more - no answer	[1] [2] [9]	
130	At what age did you first use morphine? (in total)	- age - don't know - no answer	[..] [97] [99]	
131	At what age did you last use morphine? (in total)	- age - don't know - no answer	[..] [97] [99]	
132	Was that the last time on doctors prescription, on own initiative or both? (in total)	- on prescription - own initiative - both - no answer	[1] [2] [3] [9]	
133	Have you used heroin 25 times or more?	- no, less - yes, 25 times or more - no answer	[1] [2] [9]	**134** **135** **135**
134	How many times?	- number - no answer	[..] [99]	
135	At what age did you first use heroin? (in total)	- age - don't know - no answer	[..] [97] [99]	
136	At what age did you last use heroin? (in total)	- age - don't know - no answer	[..] [97] [99]	
137	Was that the last time on doctors prescription, on own initiative or both? (in total)	- on prescription - own initiative - both - no answer	[1] [2] [3] [9]	
138	Have you used codeine 25 times or more?	- no, less - yes, 25 times or more - no answer	[1] [2] [9]	
139	At what age did you first use codeine? (in total)	- age - don't know - no answer	[..] [97] [99]	
140	At what age did you last use codeine? (in total)	- age - don't know - no answer	[..] [97] [99]	
141	Was that the last time on doctors prescription, on own initiative or both? (in total)	- on prescription - own initiative - both - no answer	[1] [2] [3] [9]	

142	Have you used palfium 25 times or more?	- no, less	[1]
		- yes, 25 times or more	[2]
		- no answer	[9]
143	At what age did you first use palfium? (in total)	- age	[..]
		- don't know	[97]
		- no answer	[99]
144	At what age did you last use palfium? (in total)	- age	[..]
		- don't know	[97]
		- no answer	[99]
145	Was that the last time on doctors prescription, on own initiative or both? (in total)	- on prescription	[1]
		- own initiative	[2]
		- both	[3]
		- no answer	[9]
146	Have you used methadone 25 times or more?	- no, less	[1]
		- yes, 25 times or more	[2]
		- no answer	[9]
147	At what age did you first use methadone? (in total)	- age	[..]
		- don't know	[97]
		- no answer	[99]
148	At what age did you last use methadone? (in total)	- age	[..]
		- don't know	[97]
		- no answer	[99]
149	Was that the last time on doctors prescription, on own initiative or both? (in total)	- on prescription	[1]
		- own initiative	[2]
		- both	[3]
		- no answer	[9]
150	Have you used any other opiates 25 times or more?	- no, less	[1]
		- yes, 25 times or more	[2]
		- no answer	[9]
151	At what age did you first use any other opiates? (in total)	- age	[..]
		- don't know	[97]
		- no answer	[99]
152	At what age did you last use any other opiates? (in total)	- age	[..]
		- don't know	[97]
		- no answer	[99]
153	Was that the last time on doctors prescription, on own initiative or both? (in total)	- on prescription	[1]
		- own initiative	[2]
		- both	[3]
		- no answer	[9]
154	Have you used any other opiates over the past 30 days?	- opium	[1]
		- morphine	[2]
		- heroin	[3]
		- codeine	[4]
		- palfium	[5]
		- methadone	[6]
		- other opiates	[7]
155	In the last 30 days, on how many days did you use any other opiates?	- days	[..]
		- don't know	[97]
		- no answer	[99]

other drugs

156	We talked about a lot of different kinds of drugs. Are there any other drugs you used, which are not mentioned above? What are these? (max. 3 drugs)	- no	[01]
		- yes	[02]
		- other drug 1	[..]
		- other drug 2	[..]
		- other drug 3	[..]
157	Have you ever injected a pharmaceutical or other drug? (more answers possible)	- no	[02]
		- hypnotics	[03]
		- sedatives	[04]
		- heroin	[05]
		- methadone	[06]
		- opium	[07]
		- codeine	[08]
		- palfium	[09]
		- morphine	[10]
		- hallucinogens	[11]
		- stimulants	[12]
		- other	[13]

ASSISTANCE

And now some questions about assistance.

158	Have you ever had contact with an institution for drug treatment (CAD, Jellinek, GG&GD, etc.)?	- no - yes - no answer	[1] [2] [9]	**161** **159** **161**
159	When did you last have contact with such an institution? Over the past 30 days, over the past 12 months or longer ago?	- more than a year ago - last year - last month - no answer	[1] [2] [3] [9]	
160	For what drug?	- alcohol - hypnotics or sedatives - stimulants - cannabis - cocaine - amphetamines - ecstasy - hallucinogens - heroin - other opiates - other - no answer	[02] [03] [04] [05] [06] [07] [08] [09] [10] [11] [12] [13]	

GENERAL INFORMATION

Now, to complete a few questions for our statistics.

161	Since what year do you live in Amsterdam?	- year - don't know - no answer	[..] [98] [99]
162	What is your nationality? *(INT:Note! Some persons have dual-nationality More answers are possible)*	- Dutch - Turkish - Moroccan - Surinamese - German - British (= Great Britain & Northern Ireland) - Belgian - other - no answer	[1] [2] [3] [4] [5] [6] [7] [8] [9]
163	In which country were you born?	- The Netherlands - Surinam - Dutch Antilles/Aruba - Indonesia - Turkey - Morocco - Germany - United Kingdom (GB+N. Ireland) - Belgium - other - no answer	[01] [02] [03] [04] [05] [06] [07] [08] [09] [10] [11]
164	In which country was your mother born?	- The Netherlands - Surinam - Dutch Antilles/Aruba - Indonesia - Turkey - Morocco - Germany - United Kingdom (GB+N. Ireland) - Belgium - other - no answer	[01] [02] [03] [04] [05] [06] [07] [08] [09] [10] [11]

165 In which country was your father born?

- The Netherlands [01]
- Surinam [02]
- Dutch Antilles/Aruba [03]
- Indonesia [04]
- Turkey [05]
- Morocco [06]
- Germany [07]
- United Kingdom (GB+N. Ireland) [08]
- Belgium [09]
- other [10]
- no answer [11]

166 Including yourself, how many persons are part of the household to which you belong?
(INT: kids that live outside the home are not counted)

- one person [1] **170**
- two persons [2] **167**
- three persons [3] **167**
- four persons [4] **167**
- five or more persons [5] **167**
- no answer [9] **167**

167 What is the composition of the household to which you belong?
(INT: depart from household core (kid = also step child, foster child, etc.)
(INT: The core of the household is the steady partners, or in 1 parent homes the parent. In other households the core is the adult(s) in the household.)

- (married) couple [1]
- (married) couple with children [2]
- (married) couple with children, plus others [3]
- (married) couple without children, plus others [4]
- 1 parent with child/children [5]
- 1 parent with child/children, plus others [6]
- core of household is not couple/ fixed partners of 1 parent [7]
- no answer [9]

168 What is your position in this household?

- one of (married) couple [1]
- head of 1 par. household (parent) [2]
- live-in child/stepchild/ foster child [3]
- someone else within household [4]
- no answer [9]

169 What does apply to you?
Are you?
(INT:show card)
(INT: What is meant here is the relationship between the respondent and the 'core' of the household (i.e. the (married) couple, the parent (in a single parent household) or the other adults (in alternative forms of households)

- father/mother [1]
- father /mother-in-law [2]
- brother / sister [3]
- brother/sister-in-law [4]
- son /daughter-in-law [5]
- grandchild [6]
- other: in-law family [7]
- other: non (in-law) family [8]
- no answer [9]

170 *INT: Respondent's gender is:*

- male [1]
- female [2]

171 What is your age?

- age [..]
- don't know [97]
- no answer [99]

172 Do you consider yourself in the first place:
(only one answer)

- employed with paid job [1]
- homemaker (M/F) [2]
- employed non-paid [3]
- studying at school or elsewhere [4]
- old-age pensioned or early retiree [5]
- none of those [6]
- no answer [9]

173 Do you consider yourself as unemployed or unfit for labour?
(more answers possible)

- yes, unemployed [1] **174**
- yes, unfit for work [2] **174**
- no [3] **176**
- no answer [4] **176**

174 Do you receive social security benefits because of unemployment or unfitness for labour?

- yes [1]
- no [2]

175 What is the duration of your present period of unemployed or unfitness for work?

- less than 6 months [1]
- 6-12 months [2]
- 1-2 years [3]
- longer than 2 years [4]
- no answer [9]

176 Apart from recreation, with what do you spend most of your time? (only one answer)
- paid work [1]
- home work inside the house [2]
- education/study [3]
- unpaid work [4]
- something else [5]
- no answer [9]

177 Do you have a paid job? (1 hour or short period also counts)
- yes [1]
- no [2]
- no answer [9]

178 How many hours do you work in an average week, non-paid hours not counted? *(INT: eventually estimate average working week, for instance in the case of shift work)*
- hours [..]
- no answer [97]
- don't know [99]

179 Are you an employee?
- yes [1]
- no [2]
- no answer [9]

180 Are you employed in the business or practice of:
- your own [1]
- your partner [2]
- parents or in-laws [3]
- none of these [4]
- no answer [9]

181 What is your profession?
- profession [..]

(INT.: Also ask if respondent is unemployed. Profession is one's former occupation, what one studied for, or the position one is seeking. Also ask if the respondent does not have a job. The profession then is the occupation previously held, what one studied for, or the position one is seeking.)

182 Are you enrolled in a course/education at a school or other institute of learning? *(INT.: in case of more than one, indicate what was followed longest)*
- no [1] **187**
- yes [2] **183**
- no answer [9] **187**

183 What sort of education are you enrolled in? *(INT.: what was followed longest)* *(INT.: Show card)*
- elementary school [01]
- low level vocational school (LBO,VBO, LTS, LEAO, huishoudsch.) [02]
- medium level high school, years 1 - 3 (MAVO) [03]
- medium level high school, year 4 [04]
- high level high school, years 1 - 3 (HAVO, VWO, Atheneum, Gymnasium) [05]
- high level high school, years 4 and higher (HAVO, VWO, Atheneum, Gymnasium) [06]
- medium level vocational school (e.g. MEAO, MTS, INAS) [07]
- high level vocational school (HTS, HEAO, Soc. Academie, etc.) [08]
- university, phase 1 (including propaedeuse) [09]
- university, phase 2 (doctoral) [10]
- university, other post-doctoral [11]
- other [12]
- no answer [13]

184 Are you enrolled full time or part time?
- full time [1]
- part time [2]
- no answer [9]

185 Have you played truant in the last 2 months, or missed lessons without valid reasons?
- yes [1]
- no [2]
- no answer [9]

186 How many hours did you play truant during the last 2 weeks, or missed lessons without valid reason?
- hours [..]
- no answer [97]
- don't know [99]

INT: Next two questions are only applicable if respondent is child/step child/foster child or grandchild in household.

We would like to know, what the head of your household does. If you live with two parents this is your father, otherwise your mother.

187 Is the head of your household employed?

- yes [1] **188**
- no, homemaker [2] **188**
- no, unemployed [3] **188**
- no, unfit to work or prolonged illness [4] **188**
- no, retired or retired early [5] **188**
- no parents in the household [6] **189**
- other [7] **188**
- no answer [9] **189**

188 What profession does the head of household have ? - profession [..]
(INT.: Ask also if respondent is unemployed.
Profession is one's former occupation, what one *studied for, or the position one is seeking.)*

189 What is the highest level of education you completed?
(INT: Education must be completed)
(INT.: Show card)

- elementary school [01]
- low level vocational school [02]
(LBO,VBO, LTS, LEAO, huishoudsch.)
- medium level high school, years 1 - 3 (MAVO) [03]
- medium level high school, year 4 [04]
- high level high school, years 1 - 3 (HAVO, VWO, Atheneum, Gymnasium) [05]
- high level high school, years 4 and higher (HAVO, VWO, Atheneum, Gymnasium) [06]
- medium level vocational school (e.g. MEAO, MTS, INAS) [07]
- high level vocational school (HTS, HEAO, Soc. Academie, etc.) [08]
- university, phase 1 (including propaedeuse) [09]
- university, phase 2 (doctoral) [10]
- university, other post-doctoral [11]
- other [12]
- no answer [13]

190 I now give you a card with income classes. Could you indicate, which class applies to your own monthly net income?
(INT.: Hand over card)

- less than Fl. 750 [01]
- Fl. 750 to Fl. 1250 [02]
- Fl. 1250 to Fl. 1500 [03]
- Fl. 1500 to Fl. 2000 [04]
- Fl. 2000 to Fl. 2500 [05]
- Fl. 2500 to Fl. 3000 [06]
- Fl. 3000 to Fl. 4000 [07]
- Fl. 4000 to Fl. 5000 [08]
- over Fl. 5000 [09]
- don't know [77]
- no answer [99]

191 Could you indicate which class applies to the monthly net income of your complete household, all members together?
(INT.: Hand over card)

- less than Fl. 750 [01]
- Fl. 750 to Fl. 1250 [02]
- Fl. 1250 to Fl. 1500 [03]
- Fl. 1500 to Fl. 2000 [04]
- Fl. 2000 to Fl. 2500 [05]
- Fl. 2500 to Fl. 3000 [06]
- Fl. 3000 to Fl. 4000 [07]
- Fl. 4000 to Fl. 5000 [08]
- over Fl. 5000 [09]
- don't know [77]
- no answer [99]

192 Do you see any topics that were not yet raised? If so, which ones?

- no [1]
- yes [2]

193 Soon, the University of Amsterdam will conduct research on the use of heroin and amphetamines. People that use these substances are to be interviewed about the use of these substances only. Earlier in this questionnaire you indicated that you have used heroin or amphetamines. May we contact you in the future to be interviewed about this?

- yes [1] **194**
- no [2] **195**

194 *INT.; hand over the form about the follow up project*

- respondent fills out form [1]
- respondent does not fill out form [2]

195 It may be that we will contact you to check if you are satisfied with the way this interview was conducted. Could we write down your telephone number for this purpose?
(Enq.: You may add:)
NIPO guarantees total confidentiality.
Your telephone number will only be used by NIPO employees for check-ups on my work.

- does not want to give phone number [1]
- has no telephone [2]
- gives phone number [3]

(INT.: Please thank respondent for her/his cooperation and fill in evaluation questions.)

EVALUATION QUESTIONS

196 Respondent showed:

- much cooperation [1]
- normal cooperation [2]
- little cooperation [3]
- no judgement [4]

197 Interviewer was:

- alone with respondent [1]
- others present, not disturbing [2]
- others present, disturbing [3]
- other disturbances [4]

198 Language of interview:

- Dutch [1]
- English [2]
- Turkish [3]
- Moroccan [4]
- other [5]

APPENDIX B NON-RESPONSE QUESTIONNAIRE

QUESTIONNAIRE NON-RESPONSE SURVEY

Index

INTRODUCTION

01 *INTERVIEWER*
Is the respondent an absentee or a refuser?
- absentee [1]
- refuser [2]

02 *INTERVIEWER*
Is the interview in writing or by telephone?
- in writing [1]
- by telephone [2]

You have received an invitation of the University of Amsterdam to participate in a survey about lifestyle and the use of medical and other drugs. We would like to pose some questions in reference to this survey. The answers to the questions will be processed anonymously.

03 *INTERVIEWER*
Willing to cooperate?
- yes, wants to cooperate [1]
- no, does not want to cooperate [2] **end**

INT: Next four (refuse) questions are only applicable if respondent is refuser.

REFUSE

Thank you for your cooperation. Now, I would like to know something about your activities in your leisure time.

04 Can you please indicate why you were not willing to cooperate?
- no [1]
- did not refuse in first place [2]
- no time/not convenient [3]
- reasons of privacy [4]
- never participate in studies [5]
- goal of research is useless [6]
- do not use any drugs [7]
- illness, handicap [8]
- language problems [9]
- research is waste of money [10]
- can not remember reason [11]
- can not remember refusal [12]
- not interested [13]
- other [14]
- no answer [99]

05 Can you please indicate under which circumstances you would cooperate in a survey like this?
- if the interview takes little time [1]
- if anon./privacy guaranteed [2]
- other [9]
- don't know [97]
- not applicable [97]
- no answer [99]

06 How many minutes at the maximum?
- minutes [..]

It would be very helpful, if you would answer some additional questions. It is very important for us. You are totally free to do so, and it will not take more than 5 minutes.

07 Can we ask you some more questions?
- yes, want to cooperate [1]
- no, do not want to cooperate [2] **end**

LEISURE

Thank you for your cooperation. Now, I would like to know something about your activities in your leisure time.

02 How many evenings a week do you usually spend at home?
- all evenings at home [1]
- 5 to 6 evenings at home [2]
- 3 to 4 evenings at home [3]
- 1 to 2 evenings at home [4]
- less than 1 evening at home [5]
- no answer [9]

03 How many times did you go to pubs, discos, dance halls, etc. *during the past four weeks*?
- not a single time [1]
- once [2]
- 2 to 3 times [3]
- 4 to 9 times [4]
- 10 times or more [5]
- don't know [6]
- no answer [9]

04 How many times did you go to restaurants or other dining places, *during the past four weeks?*
- not a single time [1]
- once [2]
- 2 to 3 times [3]
- 4 to 9 times [4]
- 10 times or more [5]
- don't know [6]
- no answer [9]

05 How many times did you go to the cinema or art centre *during the past eight weeks?*
- not a single time [1]
- once [2]
- 2 to 3 times [3]
- 4 to 9 times [4]
- 10 times or more [5]
- don't know [6]
- no answer [9]

06 How many times did you go to theatre, ballet, opera, etc. *during the past eight weeks?*
- not a single time [1]
- once [2]
- 2 to 3 times [3]
- 4 to 9 times [4]
- 10 times or more [5]
- don't know [6]
- no answer [7]

ALCOHOL

Now a few questions on alcoholic drinks such as beer, wine, gin, liquor etc.

07 Did you ever drink an alcoholic beverage?
- no [1]
- yes [2]
- no answer [9]

→ **09**

08 When did you drink alcohol for the last time?
- less than 4 weeks ago [1]
- less than 1 year ago [2]
- longer than 1 year ago [3]
- no answer [9]

CANNABIS

Now a few questions about the use of cannabis

09 Have you ever used cannabis (hash, marijuana or weed)?
- no [1]
- yes [2]
- no answer [9]

→ **11**

10 When did you use cannabis for the last time?
- less than 4 weeks ago [1]
- less than 1 year ago [2]
- longer than 1 year ago [3]
- no answer [9]

GENERAL INFORMATION

11 What is the composition of the household to which you belong?
(INT: depart from household core (kid = also stepchild, foster child, etc.) (INT: The core of the household is the steady partners, or in 1 parent families the parent. In other households the core is the adult(s) in the household.)
- (married) couple [1]
- (married) couple with children [2]
- (married) couple with children, plus others [3]
- (married) couple without children, plus others [4]
- 1 parent with child/children [5]
- 1 parent with child/children, plus others [6]
- core of household is not couple/steady partners or 1 parent [7]
- no answer [9]

12 What is your position in this household?
- one of (married) couple [1]
- head of 1 par. household (parent) [2]
- living in child/stepchild/ foster child [3]
- someone else within household [4]
- no answer [9]

13 What does apply to you? Are you?
(INT: What is meant here is the relationship between the respondent and the 'core' of the household (i.e. the (married) couple, the parent (in a single parent household) or the other adults (in alternative forms of households)
- father/mother [1]
- father /mother-in-law [2]
- brother / sister [3]
- brother/sister-in-law [4]
- son /daughter-in-law [5]
- grandchild [6]
- other: in-law family [7]
- other: non (in-law) family [8]
- no answer [9]

14 Do you consider yourself in the first place: (only one answer)
- employed with paid job [1]
- homemaker (M/F) [2]
- employed unpaid [3]
- studying at school or elsewhere [4]
- old-age pensioned or early retiree [5]
- none of those [6]
- no answer [9]
- no answer [9]

15 Are you enrolled in a course/education at a school or other institute of learning?
(INT.: in case of more than one, indicate what takes longest)
- no [1]
- yes [2]
- no answer [9]

16 What is the highest level of your completed you completed?
(INT: Education must be completed)
- elementary school [01]
- low level vocational school (LBO,VBO, LTS, LEAO, huishoudsch.) [02]
- medium level high school, years 1 - 3 (MAVO) [03]
- medium level high school, year 4 [04]
- high level high school, years 1 - 3 (HAVO, VWO, Atheneum, Gymnasium) [05]
- high level high school, years 4 and higher (HAVO, VWO, Atheneum, Gymnasium) [06]
- medium level vocational school (e.g. MEAO, MTS, INAS) [07]
- high level vocational school (HTS, HEAO, Soc. Academie, etc.) [08]
- university, phase 1 (including propaedeuse) [09]
- university, phase 2 (doctoral) [10]
- university, other post-doctoral [11]
- other [12]

17 Could you indicate which class applies to the monthly net income of your complete household, all members together?
- less than Fl. 750 [01]
- Fl. 750 to Fl. 1250 [02]
- Fl. 1250 to Fl. 1500 [03]
- Fl. 1500 to Fl. 2000 [04]
- Fl. 2000 to Fl. 2500 [05]
- Fl. 2500 to Fl. 3000 [06]
- Fl. 3000 to Fl. 4000 [07]
- Fl. 4000 to Fl. 5000 [08]
- over Fl. 5000 [09]
- don't know [77]
- no answer [99]

(INT.: Please thank respondent for her/his cooperation)