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Surveying student drug misuse: a six-country pilot study

Co-operation Group to Combat Drug Abuse and Illicit Trafficking in Drugs (Pompidou Group)

Surveying student drug misuse: a six-country pilot study

by L. D. Johnston, F. Driessen and A. Kokkevi

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Enquêtes sur l'abus de drogues en milieu scolaire: une étude pilote dans six pays

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1.0 HISTORY AND RATIONALE OF THE PROJECT

1.1 Historical context

The need for more systematic information on substance abuse in most national populations has been recognized for some time, as has the desirability of gathering that information in the most comparable form possible, so that results can be compared and integrated across national boundaries and for entire regions (United Nations Division of Narcotic Drugs 1987; Johnston, 1989). Toward this end, both the United Nations Division of Narcotic Drugs (1980) and the World Health Organization (Smart et. al., 1980) have put forward standard survey instruments which are compatible with one another in terms of drug classifications, definitions, and standard prevalence intervals. Since the UN and WHO survey instruments were developed with a particular emphasis on applicability in developing countries, more detailed versions, building on the same classifications and definitions, are probably more appropriate in developed countries.

Several countries already have ongoing series of drug use surveys of representative samples of secondary school students in large segments of their population—including Australia (at the state level), Canada (at the provincial level), Sweden (at the national level), and the United States (at the national level). And prior to the initiation of this project, several other countries had completed at least one large school survey of school children which had the potential to serve as the first in a series: these include France (at the department level), Greece (at the national level), and Malaysia (at the national level). Ecuador, Jamaica, Peru, Thailand, the Philippines, and other countries have since initiated such student surveys at the national level; most of these studies, particularly the newer ones, have used core questionnaire segments which are compatible with the UN and WHO standard instruments, which in turn were developed to be compatible with the Canadian and United States school surveys. There is thus emerging at the world level a considerable amount of compatibility in this important area of epidemiological research on drug use and drug use trends. These newly developed data systems will, in addition to informing the sponsoring national governments, provide considerably more empirical data upon which annual reports to the UN of the signatory countries to the international drug conventions can be based.

It is in this larger context that a subgroup of collaborating investigators was formed within the Pompidou Expert Committee on Drug Epidemiology to develop a standardized school survey instrument which could be tested across a broad set of different cultural settings, primarily within Western Europe, to determine the feasibility, reliability, validity, and general usefulness, of the instrument within these populations. This report describes the nature of that undertaking and its outcome in six of the eight participating countries.

1.2 Rationale for the project

1.2.1 The use of surveys

Various populations have been the subject of fruitful study as nations have tried to develop an understanding and quantification of the epidemic of illicit drug use which has spread worldwide during the past two decades. Sample surveys of general populations, or major segments thereof, have been an important part of this evolving area of epidemiological research, since they provide perhaps the best and most efficient method for determining the extent to which various drugs have penetrated the populations and, over time, the extent to which that penetration is changing. They also provide an opportunity to examine individual characteristics and key conditions in the social environment which may contribute to changes in use—relevant demographic and social characteristics of the individual, in addition to attitudes, beliefs, knowledge, norms, exposure, and access, just to mention a few.

Generally speaking, sample surveys are not the best way to study heavy users, in part because most surveys do not cover some highly at-risk subpopulations (dropouts, homeless, institutionalized) and in part because relatively few heavy users are likely to fall into probability samples since there are generally low proportions of such users in the population to begin with. Other methods are more appropriate both for studying, and monitoring the size of, such heavy user populations; and a number of them have been reviewed recently by a multi-city study subgroup of the Pompidou Expert Committee on Drug Epidemiology (Cooperation Group to Combat Drug Abuse and Illicit Trafficking in Drugs, 1987).

1.2.2 The focus on students

The student population is of particular importance to survey for several reasons. First, it contains the segment of the country's youth who will become the future national leadership in government, industry, education, the professions, and so on. Second, it is usually young people in late adolescence and early adulthood who are at greatest risk of beginning and/loontinuing to use illicit drugs. Finally, from a strictly practical point of view, surveys of students can be conducted economically, thus yielding a high benefit to cost ratio for the research resources invested. This is because students are already clustered in institutions where access to them can usually be gained with low cost and little difficulty, and where the data can be gathered in large groups by a single survey administrator through the use of self-administered questionnaire protocols. These cost efficiencies also mean that student surveys are the type of survey most likely to be repeated regularly so that trends can be monitored and the impact of prevention policies assessed. A number of countries already have such series underway, as was mentioned earlier.

For these reasons the subgroup of the Pompidou Expert Committee on Drug Epidemiology, interested in the development of comparable survey methods, chose the student population survey as its most promising initial project. Because relatively few countries had begun student surveys, the committee recognized that few were already strongly committed in their choice of measures and methods, thus, a particularly good opportunity existed to bring about some standardization before such work evolved in a less coordinated fashion.

1.2.3 Longer-term goals

It was the hope of the school survey subgroup that, if the methods and measures used in this collaborative study provided reasonably valid and useful information across a wide range of countries, they would serve as the basis for any new series of student surveys launched by member states of the Council of Europe. In addition to increasing the likelihood that any such evolving series would use more effective methods and valid instruments, this activity should increase the compatibility of data resulting from such research efforts in the various member states, thus making the comparison and integration of results far more achievable. Clearly this would be useful in the assessment of prevailing trends in various parts of the continent: less obvious, perhaps, is that it would also be useful in assessing the degree to which various individual and environmental conditions, or "risk factors", are common across countries. Further, the importance of epidemiological survey data to the design of prevention programs cannot be overemphasized. To the degree that patterns of use and risk factors are found to be similar, it would seem probable that the prevention approaches found to be effective in one country would be transferable to another.

1.3 Participating countries and investigators

The work of the school survey subgroup has now spanned some years, and participants from a number of countries have actively taken part in this effort. Those involved in the actual collection of data in eight participating countries are as follows:

Belgium - Dr. G. Reginster-Haneuse:

- Dr. Jo Casselman

France - M^{mc} Marie Choquet

- Mme Sylvie Ledoux

Greece - Dr. Anna Kokkevi

Italy - Prof. Agusto Palmonari

- Dr. Chiara Berti

N'lands – Mr. Frans Driessen

- Dr. H. Nico Plomp

Portugal - Mrs. Luisa Machado Rodriguez

Sweden - Dr. Björn Hibell

- Ms. Barbro Andersson

U.S.A. - Dr. Lloyd Johnston

- Ms. Lana Harrison

At this writing data in a standardized form have been provided by the investigators from six of the above countries. This report is based on the available data from the six countries which are included in part

B in a standard table form for each country. Later submissions of findings from the remaining two countries might be integrated at a later time.

1.3.1 Individual country reports

Detailed reports of the procedures followed and results obtained from each country have been submitted to, and published by, the Council of Europe. These reports and their accompanying tables followed a standard outline by mutual agreement, and they served as the primary sources of information upon which the present summary report is based. The full references for the country reports are provided in Appendix III.

1.4 Collaborative activities

The school survey subgroup worked collaboratively to design a common questionnaire core for use by all participants, plus a set of optional measurement segments for use by those investigators with an interest in a particular set of variables. They also agreed upon a common reporting and analysis format for those core measures, so that the results of the various studies could be compared and integrated. Particular emphasis was given to methodological issues.

Because no central source of funding was available from the Council of Europe to support the research projects in the various countries, the responsibility to secure the necessary resources fell to each investigator. Clearly this made the collaborative task more difficult and resulted in the data being collected over several years rather than simultaneously. At times it also meant that the drug use portion of the survey was subordinated to other purposes and interests resulting in less comparability across countries than had been planned originally. These restrictions on comparability of absolute rates having been taken into consideration, the current report is focusing mainly on overall tendencies demonstrating the methodological assets of this collaborative work and the feasibility of planning studies which can provide directly comparable data across countries.

2.0 STANDARD PROCEDURES AND THE PROCEDURES ACTUALLY FOLLOWED IN THE SIX COUNTRIES

In all six countries investigators followed the general guidelines for standard procedures worked-out and proposed by the school survey subgroup regarding sampling characteristics, format and content of the instrument, modes of administration, analysis and presentation of results. However some adaptations to the needs of researchers and target population took place in the individual countries.

The standardized procedures elaborated by the Pompidou school survey subgroup will be briefly presented here and the deviations of each country from the standardized procedures will be noted.

2.1 Nature of the sample

Because the goals of the current research were methodological, it was not necessary that the samples of respondents be representative of each nation, or even of a particular town or city. The objective was to get a sample which was more or less typical of the population of each country so that the significance of any major cultural differences for the outcomes of such a survey procedure might be assessed.

2.1.1 Suggested standard sample characteristics

Size: A minimum of 500 students located in at least four schools.

Representativeness: Sampled schools should represent as well as possible the different types of schools in the given country for the target age-range. It was also suggested for validation purposes to include in the sample, if possible, schools judged a priori to have high or low prevalence rates of drug use among their students. (See criterion group comparisons in "Methodological Results" section).

Age: Approximate range from 13 to 18.

2.1.2 Actual sample characteristics in the six countries

As shown in Table 2.1 the number of schools surveyed in all six countries was above the suggested minimum of four schools and the numbers of students were well above 500.

2.1.3 Representativeness of the samples

Although samples are not nationally representative, in three out of the six countries (France, Greece, and U.S.A.) they were selected to be representative of a city or region. For Sweden evidence is given of a fairly close approximation to the national survey results (see Swedish report). Portugal's and The Netherlands' samples of schools were drawn to be a varied, but not necessarily representative, sample of all schools of the cities of Lisbon and Amsterdam, respectively. In the U.S.A., the rates of use in the one city surveyed are reported to be fairly typical for the country, judging from comparisons with the existing national survey results.

The age range of students surveyed was 11-19 years for France and The Netherlands, 12-18 years for Portugal and the U.S.A., 12-15 years for Sweden, and 13-18 years for Greece.

A selection of schools defined a priori as "high risk" and "low risk" was made only in two countries, Greece and the U.S.A.

			Table 2.1 Cha	Table 2.1 Characteristics of the student Surveys in the Six Countries	dent Surveys in the	Six Countries			
Country	Year of Survey	Location of sample	Representativeness	No. of schools	No. of students	Absenteeism %	Approximate age range	Implementing Agency	Funding Agency
France	1988	Semi-rural (Chaumont et Langres)	Total population surveyed	24	3311	. 9	11-19	INSERM	Ministère de la solidarité
Greece	1988	Metropolitan (Athens)	Representative	18	1961	5	13-19	Department of Psychiatry	Ministry of Youth and Sport
Netherlands	1987	Metropolitan (Amsterdam)	City wide Non-representative [»]	5		13	11-19	Free Univ/ Bur. Driessen	Foundation for Prevention Medecine
Portugal	1988 888 888	Metropolitan (Lisbon)	Representative	12	1987		12-18	GEPD/GRCCD	GEPD/GPCCD
Sweden	1988	7 towns of different sizes in dif. parts of Sweden (Stockholm included)	Approximates national sample	∞ :	1598	7	12-15	CAN	Swedish Alcohol Research Foundation
USA	1986	Medium size city (Midwestem)	Total population surveyed	6	2657	13	12-18	Michigan University	Univ. Michigan and City School system

Ages most commonly included is the grade levels sampled Por the selected schools only

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2.2 Instrument

After a series of discussions and revisions, a standard questionnaire "Student Survey Questionnaire on Drug Use" was elaborated and proposed by the school survey subgroup. The questionnaire follows the standards on format and content proposed by international organizations such as WHO (Smart et al., 1980) and UNDND (1980) and is closely comparable to the ones used in the national school surveys in the U.S.A. (Johnston et al., 1989) and in Greece (Kokkevi et al., 1983). (See Appendix I.)

2.2.1 Suggested standard instrument

The questionnaire is self-administered, anonymous, and comprised entirely of close-ended questions. It is composed of "core" and "optional" segments. These segments are given verbatim in Appendix I of this report.

Core Questions: The core segment comprises a sequence of drug-using questions (on lifetime, 12-month, and 30-day prevalence), starting from licit drugs and gradually progressing to the most illicit ones. The following twelve categories of substances were included:

- (a) Cigarettes
- (b) Alcohol (also separately for beer, wine and spirits)
- (c) Tranquillizers (medically supervised, and not medically supervised)
- (d) Sedatives (medically supervised, and not medically supervised)
- (e) Stimulants (medically supervised, and not medically supervised)
- (f) Opioids other than heroin (medically supervised, and not medically supervised)
- (g) Cannabis
- (h) Hallucinogens
- (i) Cocaine
- (j) Heroin
- (k) Inhalants
- (l) "Other"

Core items were also included in the questionnaire for the following sets of variables:

- (a) Age of first use
- (b) Perceived availability of drugs
- (c) Willingness to be honest
- (d) Background and demographic variables

Optional Questions: Optional question sets included in the questionnaire deal with:

- (a) Drunkenness
- (b) Proportion of close friends using drugs
- (c) Personal disapproval of drug use
- (d) Perceived harmfulness of drugs

There also were a number of nondrug-related variables suggested because of their likely association with drug use, including:

- (e) Evenings per week spent out of the home
- (f) Leisure-time activities
- (g) Hours worked per week
- (h) Stability of place of residence
- (i) School absenteeism
- (j) Academic performance

A short instruction containing the purpose of the study was printed on the cover of the questionnaire.

The standard procedure called for a translation of the questionnaire, which was originally written in English, to the relevant country language, and then a back translation into English by a separate translator. Differences were to be reviewed and worked out by the investigator and the translators. Special attention was to be given to the definitions of the drug classes in the relevant questions, that is to the development of

a complete and accurate set of generic and/or brand and/or "street" names of the drugs. Drugs deemed virtually nonexistent in a given population could be omitted.

2.2.2 Questionnaires as used in the six countries

Tables 2.2.a and 2.2.b show which of the core and optional questions were included in the survey of each of the six countries. As it can be seen in Table 2.2.a, investigators from all six countries followed the guidelines fairly closely, in most cases having included all or nearly all core questions proposed in the standard questionnaire. As may be seen in Table 2.2.b, three out of the six countries (Greece, Sweden, and U.S.A.) also included nearly all of the optional questions proposed. The remaining three countries (France, the Netherlands, and Portugal) included some of the optional questions or questions of similar content but in a revised form, not always permitting the answers to be compared directly. Back translation of the questionnaire to English took place for the Greek, Netherlands, and Swedish versions, and none was necessary for the U.S., of course.

2.3. Field procedures

The procedures used for dealing with respondents, and gathering data from them, are commonly referred to as "field procedures." Because of their importance in helping to assure the cooperation of respondents, and the validity of their answers, it was proposed that a standard set of field procedures be adopted.

2.3.1 Standard procedures proposed

The questionnaire was to be administered in the classroom during a regular class period. It was not to be administered by teachers or other school personnel, since their involvement was deemed likely to increase student concerns about confidentiality. Whether teachers should at least remain present in the classroom (presumably sitting at their desks and not circulating) in order to maintain discipline was left to the option of each researcher. Those administering the questionnaires were to make a brief introduction of the scope of the survey to the students before they began.

2.3.2 Procedures followed by the six countries

In France, Greece, the Netherlands and the U.S.A., the administration of the questionnaire was conducted by people other than the teaching staff. (Of those, only the U.S.A. had the teacher present in the classroom.) In Portugal and Sweden, however, the teachers themselves administered the questionnaires in the classroom.

2.4 Analyses

Once fairly comparable data were collected for a number of countries, it was important that they be analyzed in much the same way from country to country.

2.4.1 Suggested standard analyses

The analysis suggested for the core questions of the questionnaire included primarily descriptive statistics (frequencies of response of the total sample for all the drug related variables and frequencies of response by sex and age in several of the variables). A standard outline for 17 tables defining categories of response, and breaks by sex and age, was developed by a subcommittee (F. Driessen, A. Kokkevi, and L. Johnston) to facilitate the comparison of results among the countries. (See Tables in country reports for a full listing of the 17 tables.)

2.4.2 Standard analyses conducted in the six countries

To the extent that they had the relevant data, all the six countries followed the analysis format of the standard tables. The nature of many of these analyses will become obvious in the next section of this report.

	Sweden USA	Yes Yes Yes	Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	No Yes Yes	No Yes No Yes	Yes Yes Yes	Yes Yes No No No No No No
veys	Portugal S	Yes Yes	Lifetime use only Yes No No	Lifetime use only Lifetime use only	% % %	Lifetime use only Lifetime use only	No No Yes Lifetime use only Yes No Yes ex cocaine	No Yes	Yes Yes Yes Yes
Table 2.2.a Core questions in the Six Country Surveys	Netherlands	Yes	Ye Ye Ye	Yes	Yes	Ys	7 X X X X X X X X X X X X X X X X X X X	Yes Yes	Yes Yes Yes No
Table 2.2.a Core questiv	Greece	Yes	Yes Yes ex. lifetime Yes Yes	Yes Yes	Ys	Yes	Yes Yes Yes No Yes No Yes ex hallucin	and inhalants Yes ex alcohol Yes	Yes Yes No Yes No
	France	Yes Yes	Yes' Present use only No Yes	12 past month use only 12 past month use only	12 past month use only 12 past month use only	12 past month use only Yes	No N	Yes Yes	Yes Yes No No
		Drug use Cigurettes Ever smoked Last 30 days	Alcohol Any beverage Specific beverage (beer, wine, spirits) Last two weeks heavy consumption Drunkeness	Tranquillisers Prescribed use Non-prescribed use	Sedatives Prescribed use Non-prescribed use	Stimulants Prescribed use Non-prescribed use	Opioids other than heroin Prescribed use Non-prescribed use Marinuanalhashish Hallucinogens Cocaine Heroin Age of first use	Drug related variables Perceived availability Willingness to be honest	Background and demographic variables Sex Age Grade level in school Father's education level Urbanicity

• Frequency of use categories not identical to the proposed ones (see report from France, Appendix II)

Revised questions for prescribed and unprescribed use of tranquillisers, sedatives and prescribed use of amphetamines (see report from France, Appendix II)

· Secondary priority question

3.0 METHODOLOGICAL RESULTS

As stated earlier, the primary purpose of this collaborative research undertaking was to determine the extent to which a common instrument and set of survey methods could be used effectively across a broad array of national, and therefore cultural, settings. In this section we consider (a) the evidence which was systematically gathered to determine the feasibility of applying the agreed-upon procedures and measures in the various countries; (b) the evidence that the self-report measures of drug use are reliable—that is, replicable; and (c) the evidence that the data they produce are indeed relatively accurate or valid measures of the actual drug-using behaviors of the populations under study—namely, secondary school students.

3.1 Feasibility

At the most general level, there is the question of whether problems will be encountered with schools, teachers, parents, or students in administering the types of survey procedures agreed upon by the working group. Do students cooperate? Is there enough time in a single class period to complete the questionnaire? Do the students appear able to understand the questions and the answer formats used? These were the types of questions that investigators were requested to address in their country reports.

3.1.1 School and teacher co-operation

There were no reports of serious problems in gaining the co-operation of schools to participate in the surveys described here, although it must be remembered that for national surveys some proportion of schools are likely to decline participation when they have local autonomy over such issues. In the United States national school surveys, for example, about 20% of the 135 randomly selected schools usually decline to participate each year, and they are replaced with schools that match them as closely as possible on key demographic characteristics.

Teacher co-operation also was generally good in all countries. Procedures varied as to whether the teachers remained in the classroom during the administration. In The Netherlands the teachers did not remain in the classroom, but the investigators concluded that in future surveys they should be asked to remain, since the researchers found it difficult to maintain order in the lower grades without the teachers present. In Sweden teachers administered the questionnaire without any research personnel present. They mailed the completed questionnaires, which had been placed in sealed envelopes by the students, back to the central research site. (As will be discussed further below, the stated willingness of the Swedish school children to admit using drugs was fairly good, even under these circumstances, but might have been improved had their teachers not been so centrally involved.) In Portugal, too, teachers conducted the administration; in this case the pupils reported the highest level of willingness to be honest in reporting their drug use. Nevertheless, it is the recommendation of the group that research personnel from outside the school be used to oversee data collections whenever possible, both to assure actual confidentiality for the respondents, and to provide the convincing appearance of confidentiality to the respondents.

3.1.2 Student co-operation

For the most part, student co-operation with the survey administrations was found to be excellent, as evidenced by the negligible refusal rates in all countries and the generally low number of questionnaires which were judged "not answered seriously" when investigators reviewed them after the fact. (This rate was 0.9% of the questionnaires in Sweden, 1.1% in Greece, and 1.8% in the U.S.A.) As was mentioned earlier, there was some problem in the Netherlands in maintaining decorum without the teachers present, particularly in the lower grades; and in the United States analyses aimed at locating respondents who were highly inconsistent, or were exaggerating their drug use, found the most such cases were also in the youngest age group (12 to 13 years old), particularly among boys. Still, such cases amounted to a very small fraction of the total sample. (In Greece, such problems were actually most common among older male students.) In general, both the comments from those administering the questionnaires and the analyses of the resulting data suggest a high level of student co-operation across all countries. The Dutch and American experiences suggest that, when there is a problem getting students to take the task seriously, it is usually found among younger male students.

3.1.3 Time required to complete the questionnaire

Countries varied considerably in the amount of additional questionnaire material they added to the "core segment" contained in all questionnaires by mutual agreement. Virtually all investigators added some additional material, some taken from the Pompidou questionnaire "optional segments" and some from other sources. France, for example, included a great deal of supplementary material with the result that the questionnaire took one to two hours to complete. Those countries which had only a modestly expanded core section were able to complete the questionnaires within a class period with little problem. In the Netherlands, 97% of all students finished within a 45-minute class period. In Greece and the U.S. virtually all students finished in 30 to 45 minutes. The same appears to be true in Sweden and Portugal (40 to 50 minutes).

Even with a moderate expansion in content, the questionnaire appears to be of proper length for completion within a single class period by adolescents as young as 13 or 14 across a range of countries. (It should be noted that the participating countries have generally high literacy rates.) While longer time periods obviously could be made available for questionnaire administration (and were in France), there are some clear practical advantages to staying within a standard time interval in the school's schedule. The shorter administration time makes co-operation from school administrators, teachers, and students more likely.

3.1.4 Student comprehension

Clearly, it is essential for respondents to understand the questions in order for them to provide meaningful information in their answers. Put another way, adequate comprehension is a necessary condition for validity. One of our objectives, then, was to ascertain comprehension both by direct discussion with students and by examining missing data rates, levels of inconsistency in the data, etc. Since the school samples in each country contained youngsters of varying ages and academic ability, it was also possible to look at comprehension among the younger students and students in schools where there is less emphasis on intellectual training - like vocational schools - where such problems could reasonably be expected to be greatest.

All investigative teams indicated that they found high levels of comprehension among the students surveyed. As will be discussed further below, quite low missing data rates were reported for the most critical illicit drug use variables and for the questionnaires generally. Rates of logical inconsistencies among the three prevalence periods—lifetime, last 12 months, and last 30 days — are another indicator of comprehension (also discussed in detail below). These also provide strong reassurance about comprehension. Thus, based on the commentary of those administering the questionnaires, the high completion rates, low missing data rates, and high consistency rates, we conclude that student comprehension was very good—even among the younger age groups and vocational students. It does not follow, of course, that the same would be true in all countries, regardless of the reading levels of the students or their general familiarity of the drug phenomena about which they are being asked. Nevertheless, across a wide range of cultural settings, student comprehension of the core questionnaire was consistently high. In The Netherlands survey students were explicitly instructed to mark any questions they did not understand, and only four students out of 632 marked a total of four questions.

3.2 Reliability

Reliability refers to the ability of a measure to replicate its own results, assuming no change in the underlying phenomenon; and it is a necessary condition for validity.

One method for determining the reliability of questions is to determine how consistently the same questions, or different approaches to the same questions, are answered within a single questionnaire administration. Among the most important measures in the Pompidou questionnaire are those determining lifetime prevalence for the various drugs. A later set of questions about the age at which each of the drugs was first used makes it possible to check on the consistency with which any lifetime use is admitted, since the age-at-first-use questions contain an answer category which says "never used." (Note that only the prevalence, not the frequency, of lifetime use is measured in the later questions; thus the variable which can be checked for consistent answering is a use/no-use dichotomy.)

The participating investigators from each country were asked to provide, for each drug, the percentage of each age group who did not give consistent answers for lifetime prevalence on the two types of questions (i.e., the one asking about the frequency of use in lifetime and the one asking about age at first use). Obviously a respondent can be consistently untruthful both times, but we believe that the large number of drugs covered, the physical separation of the questions, and the completely different format of the two questions reduces the likelihood of that. In any case, consistency or reliability is a necessary condition for validity to exist; therefore, it is important to establish that there is at a minimum, good consistency. Other approaches to ascertain honesty will be discussed below.

Table 3.1 shows the proportion of each age group in each country sample giving inconsistent answers for the various drugs. Note that for the illicitly used drugs, there tend to be very low rates of inconsistency, particularly on the questions which refer to just one drug which is widely known to the population, such as marijuana/hashish, cocaine, LSD, or heroin. Over 97% of all age groups in all countries reporting were consistent for each of these drugs. There is somewhat less consistency to be found on the questions which refer to *classes* of drugs, which required more elaborate definitions to be given with the prevalence questions, and which definitions were not repeated in the age-of-first-use questions. These include stimulants, sedatives, tranquillizers, inhalants, and opiate-type drugs other than heroin. For these drugs from 90% to 100% of all age groups gave consistent responses except in the United States, where the rate fell as low as 85% in one case.

The rate of inconsistency tends to rise with the overall prevalence level, which in large part explains why the United States, which has the highest prevalence rates, also has the highest rates of inconsistency on these drugs. However, Table 14 in both the United States and Greece country reports shows that most of this inconsistency is of the type where use of the drug was reported on the lifetime prevalence question, but was not reported in the age-at-first-use question. It thus seems likely that the inconsistency is due to respondents forgetting the full definition of the category by the time they arrived at the age-at-first-use question. Clearly there is no evidence of concealment on the lifetime prevalence question.

Overall, then, it would seem that a high level of consistency is to be found for the self-reports of illicit drug use. To the extent that there is inconsistency, much of it can be explained by the fact that the questions being matched were not fully comparable.

In the cases of alcohol and cigarettes, we judge the mismatches in question wording between pairs of questions to be more serious. For example, the lifetime prevalence question on alcohol says, "The next questions are about alcoholic beverages - including beer, wine, and hard liquor. On how many occasions have you had alcoholic beverages to drink in your lifetime?" The later age-at-first-use question asks, "When if ever did you first try an alcoholic beverage - more than just a few sips?" Respondents who had drunk only beer might report it on the first question but forget that beer should be included under "alcoholic beverages" in answering the second question. Also, those who have only had a few sips of an alcoholic beverage might claim use on the first question but deny use on the second, as instructed. Both situations would show up as apparent inconsistencies. Thus the higher rates of inconsistency on the lifetime prevalence of alcohol, in addition to occurring due to much higher prevalence rates on this drug, are due in part to a poorer match between the two questions. (The particularly high rates in Sweden may relate to the more complex classification of beers.) In the case of alcohol, in every country the rate of inconsistency went up with decreasing age - mostly because more of them failed to mention use in the later question, which lacked the full definition. This may indicate that younger children forget what is included under alcoholic beverages; but of perhaps greater importance, probably more of them have had only "a few sips" to date (which they were told to omit from consideration in the second question).

For cigarettes the inconsistency rate for lifetime prevalence is generally higher than for the illicit drugs, due in large part to the high prevalence rate for cigarettes, but lower than for alcohol due to the better match between the pairs of questions. Consistent answers are provided by 91% to 98% of the respondents in all age groups in the five country reports on the cigarette smoking question.

Finally, it might be mentioned that in the United States national student survey, drug use measures which are very close to those used in the Pompidou questionnaire were checked for reliability using a totally different approach (which uses measures taken at three different points in time separated by two year

intervals); and the measures were found to have high rates of reliability in the student population in that country (O'Malley, Bachman, and Johnston, 1983).

3.3 Validity

Validity refers to the degree to which a particular measure (e.g., question or set of questions) accurately measures some actual phenomenon onlypothetical construct. As we have just demonstrated, the self-report measures of drug use appear to have a high level of reliability in all participating countries (to the extent that we were able to test reliability appropriately) and thus have one characteristic necessary for a measure to be valid. Nevertheless, they could be reliable but consistently invalid measures if a number of drug users were consistently untruthful about their behavior or if respondents consistently forgot or misclassified certain past events. Thus, it is important to check for evidence of validity or invalidity—particularly in the drug-use measures—in as many other ways as possible.

Since there is no known, fully-valid measure of drug use—particularly measures of drug use over longer time intervals than a few hours or days—it was necessary to use inferential evidence of a number of types to assess the validity of the Pompidou measures. In this section we will examine internal consistency among logically related questions; assess the missing data rates on the drug questions in light of the instruction to respondents to skip any questions they could not answer honestly; examine the results from questions which asked respondents directly if they would answer honestly if they had used illicit drugs; and compare the results for schools specified in advance as having higher or lower drug use (criterion group comparisons). Besides this we will discuss briefly the construct validity of these questions—that is the extent to which they show expected relationships with other variables with which they are known, or hypothesized, to be related.

3.3.1 Logical consistency

Closely related to reliability is the consistency among variables which are logically connected. In this case, the three questions about frequency of use in each of three overlapping time periods (lifetime, last 12 months, and last 30 days) provided an opportunity to check the degree to which respondents were answering these questions in a logically consistent manner. The data available from all six countries (see Table 16 of the various country reports) show that as a percentage of all respondents, the proportion giving logically consistent answers across the three time periods is very high—above 97.5% for all illicitly used drugs in all countries, and usually above 99%. (Tabular data are not shown here due to the low variability.) Of course, for many of these drugs consistency is made easier by the large proportion of people who do not use; but even in the case of alcohol, where the prevalence rates are quite high in all countries, consistency is high. For The Netherlands, Portugal, Sweden, and the U.S.A. 95% to 100% of all respondents in all age groups for each alcohol question gave consistent responses. In Greece the consistency rate ran from 91% to 97%. (Data were not available for France.)

¹ To be logically consistent, the frequency of use reported in past 30 days must be equal to, or less than, the frequency reported in the past 12 months, which in turn must be equal to, or less than, the frequency reported in lifetime.

	Table 3.1 Rates of Inconsistent Answering Between Lifetime Prevalence Questions and Age of First Use Questions Entries are percentage of all respondents giving inconsistent answers	istent Answerin entage of all res	g Between spondents g	Lifetime Prev iving inconsi	valence Quest stent answers	ions and Age o	f First Use Q	uestions				
	Department of France	Athens Greece	ece sua	Ams	Amsterdam Netherlands	12 schools in Lisbon Portugal	ools Portugal	8 schools in Sweden	ols den	Sni	Small city in USA]
Age:	<15 15-16 >16	91< 91-51 51>	16 >16	<15 1	<15 15-16 >16	<15 15-	15-16 >16	12-13	14.15	12-13 14-15		17-18
Hiicit use												
Marijuana/Hashish	9.0			8.		0.1 0.9	9 2.3	0.1	0.4	2.7		2.4
Cocaine	0.2 0.6 0.2	0.8	1.2 2.8	1.5		1	1	0.0	0.2	1.3		0.4
LSD C]	1	***	0.7* 0.0*	1	. 1	0.0	0.2	1.1		7
Other Psychedelics	1			1		1		0.1	9.0	0.8		2.3
Heroin	0,2 0,5 0,2		1.5 2.3	::		_	5 0.3	0.1	0.7	0.3		9.0
Stirnulants	0.7	1.6 3	.2 5.3	8.	0.7 2.3	0.7 1.8		0.0	0.2	3.3		6.2
Sedatives	1			3.6		1	1	1.0	2.8	2.6		3.1
Tranquillisers	1		4.5 7.4	8.1		1.1 2.7	7 3.5	1,5	2.7	3,4		6.7
Inhalants	1.1 0.9 0.9			2.5		1	1	6.0	<u></u>	13.1		5.7
Other Narcotics		1	1	2.9		1	1	ł	ı	9.8	11.8	15.4
Alcohol												
Any alcohol	1	38.7 24.3	.3 15.8	19.7	15.9 5.2	1	1	46.6	31.8	30.1	18.3	7.6
Ever drunk	1					1	1	4.6	2.4	5.4	7.0	3.8
Cigarettes		***************************************										
Smoke 1st cigarette	1	3.5 3	3.4 3.2	4.8	2.6 2.3	5.0 7.8	0.9	8.5	5.0	4.8	3.9	4.4
									•			

· Questions asks about any hallucinogen, not distinguishing LSD from others.

Three of the countries (Netherlands, Sweden, and U.S.A.) also provided inconsistency rates as a percent of "users"—that is, as a percent of the respondents reporting any use of each drug on any of the three questions. As Table 3.2 shows, even stated in this much more conservative manner, the inconsistency rates are generally quite low. (Note that the very low prevalence rates in The Netherlands and Sweden mean that a single case can cause this statistic to jump-e.g., one inconsistent case out of three yields an inconsistency rate of 33%.)

Because of its high prevalence rates, combined with a large sample, the U.S.A. study may provide the most reliable evidence of inconsistency being age-linked. It shows very low inconsistency rates in the oldest age group, higher ones in the middle group, and the highest rates of inconsistency among the youngest adolescents. (These inconsistencies for different drugs are not independent, of course; the same person may account for several.) As has been mentioned earlier, closer examination of the American data suggests that the youngest children, particularly the males, were more prone to making light of the task and intentionally providing bad data. All of these "bad cases" were eliminated once data cleaning conventions were adopted and applied to the data set. (The results reported in Table 3.2 are based on raw data, before such data cleaning took place.)

Overall, then, the consistency rates for the triplets of self-report questions tend to be very high (with the exception of the youngest age group in the U.S.A.). This high level of internal consistency provides one more type of reassurance about the quality of these data.

3.3.2 Assessing missing data as evidence of concealment

Prior to the section of the questionnaire dealing with the respondents' own illicit drug use, standard instruction to the respondents stressed the importance of answering accurately and asked them to skip questions they felt they could not answer honestly. The missing data rates on the drug use questions, then, should provide some indication of respondents unwillingness to report use. To the extent the missing data rates in the drug use section tend to exceed those in adjacent, nonsensitive sections of the questionnaire, we would have some evidence of probable concealment.

The results show that for all of the countries the missing data rates in the drug section ran very close to, or below, the average missing data rates for the nondrug sections. In Lisbon, for example, these rates averaged 2.7% and 3.0%, respectively. In the Amsterdam sample the missing data rates for the illicitly used drugs averaged well under 1%, the highest being 1.3% for marijuana. In Sweden, the rates ranged from 0.9% to 2.5%, and averaged around 1.4%, which was normal for other portions of the questionnaire. (In this case the highest rates were for sedatives and tranquillisers, likely reflecting the students lower familiarity with those drugs.) In Greece the average missing data rate in the drug use section was 2.3% versus 2.0% in the rest of the questionnaire. In France the missing data rates averaged under 2% for illicitly used drugs, again around average for the questionnaire. In the U.S.A. sample, missing data ranged from 1.1% to 2.2% in the drug use section, which was about average for that point in the questionnaire.

Overall, then, the evidence from the missing data rates is quite reassuring on the issue of possible concealment of these illicit behaviors. Even if the unrealistic assumption were made that all such missing data cases were users of the drug, recoding them as users would have very little effect on the prevalence rates for those drugs, since it would add only around 1-2% to the relevant prevalence statistics.

3.3.3 Reported willingness to answer honestly

Another, somewhat more straightforward, approach used to measure the tendency of young people in each population to conceal their illicit use of drugs was to ask them directly, "If you had ever used marijuana or hashish, do you think you would have said so in this questionnaire?" The answer alternatives were "No," "Not Sure," "Yes," and "I already have." Similar questions were then asked for the use of stimulants without a doctor's orders, and for the use of heroin. It was assumed that these three drug-using behaviors differ in their level of social disapproval, with marijuana being the least disapproved and heroin the most.

The logic of asking these questions is that there should be rather little motivation for students to lie on them-particularly on an anonymous questionnaire—since saying they would not be willing to admit use is neither an admission of use nor a punishable or strongly disapproved behavior. Thus the motivation to

	Table 3.2 Intern Percer	Internal inconsistency among the three questions on frequency of use, among users Percent of all users showing an inconsistency	three questions on freque	ncy of use, among users	-				
	Department of France	Athens Greece	Amsterdam Netherlands	12 schools in Lisbon Portugal	8 schools in Sweden		Sma in l	Small city in USA	
Age:	<15 15-16 >16	<15 15-16 >16	<15 15-16 >16	<15 15-16 >16	12-13 14-15		12-13 14.15 17-18	-15 17	-18
Illicit use									Γ
Marijuana			0.0						.3
Cocaine			50.0 0.0 0.0		0.0 22.2		2.0	6.5 0	0.5
LSD			0.0						0.
Other Hallucinogens									
Heroin			0.0 0.0 0.0						0.
Opiates			0.0						0
Stimulants			0.0						5.
Barbiturates			0.0						4
Tranquillisers			0.0		9.1				'n
Inhalants			0.0						۲.
Alcohol									
Any alcohol			5.8			6			9
Beer			4.1 2.2 0.7		3.2 2.5	2			6
Wine			4.2			7			
Liquor			0.0			6			
Got drunk			4.3		, .	2	5.1	2.2	1.2

conceal the truth is assumed to be much less for the responses to these questions than it might be for the illicit drug use questions.

Table 3.3 presents the data on the marijuana question for all countries using these questions (France did not). Portugal used a single general purpose question responding to the use of "any drug." (Table 16 in each country report provides the full set of data.) Overall, the results again are quite reassuring. In all countries fewer than 5% say "No" among those 17 years old or older, and fewer than 10% of the 15 to 16-year-olds. The "No's" increase among the youngest respondents, for whom the questions may be most hypothetical, but are still less than 20% in every country, and much lower in some. Taken at face value, these data suggest that the tendency to conceal rises with declining age which makes sense theoretically, since the same drug using behavior tends to be statistically and normatively more deviant at the lower ages.

Among the four reporting countries with students 17 or older, from 81% to 92% say they already have admitted to use or would do so. It seems likely that a number of those in the "not sure" category would do so, as well, were they actually users—in part because users are less likely to disapprove of use themselves or to have friends who disapprove.

As predicted, young people report asslightly greater tendency to conceal amphetamine use than marijuana use, and a slightly greater tendency to conceal heroin use than amphetamine use. (Data not shown here. See Table 16 in the relevant country reports.) These differences are very small, but again are consistent with the presumed degree of deviance associated with the behaviors.

There is, in general, rather little variation among the country samples in tendency to conceal among the older teenagers. (See Table 3.3.) The variance becomes greater at the younger ages.

It may be worth noting that the Sweden country report (Hibbell and Andersson, 1989) indicates that a few years ago a follow-up study was carried out with respondents to the regular national school survey on drugs, which was anonymously answered. When asked about the truthfulness of the responses they had given three weeks earlier in the main survey, "a very large majority indicated that they had answered truthfully" (pp. 9-10).

3.3.4 Criterion group comparisons

Still another way to check for validity is to compare data on more groups which have been rank ordered in terms of their likely drug involvement based on other information, and then to see if the survey results prove consistent with that other, usually impressionistic, information. Both the U.S. and Greek samples contained schools which were identified in advance of the survey as likely to have higher or lower rates of drug use among their students.

In the Greek survey all technical-vocational and evening schools were considered "high risk" schools, with the remainder assumed to be at lower risk. The results were consistently in the expected direction across a range of drug using behaviors (except for heroin, which showed essentially no difference). For example, the high risk/low risk school samples showed the following lifetime prevalence rates, respectively: for marijuana 11.7% vs 3.9%, cocaine 2.6% vs 1.6%, stimulants 4.4% vs 2.5%, getting drunk 70.4% vs 52.2%, and smoking cigarettes 64.7% vs 40i2%. Most of these differences reached statistical significance.

In the U.S. sample the results were essentially the same. Of the four high schools surveyed, two were "alternative schools" for youngsters who either were having problems in the traditional schools, or who chose not to go to them. (One of these hadia very small sample.) These were judged to be the "high risk" schools. The two alternative schools had much higher prevalence rates for having used any illicit drug in lifetime, past year, and past month. For example, the two traditional schools showed a monthly prevalence for any illicit drug use of 34% and 31%, while the two alternative schools had rates of 80% and 50%. Thus the results of the criterion group comparisons in the two countries in which they were conducted gave evidence supporting the validity of the data obtained.

		Table 3.3 Willingness to admit us Entries are percentages	Table 3.3 Willingness to admit using marijuana by age* Entries are percentages	у аде*		
	Department of France**	Athens Greece	Amsterdam Netherlands	12 schools in Lisbon Portugal***	8 schools in Sweden	Small city in USA
Age under 15					(f) (1)	417 61 617
No No	I	∞ r	91	ωţ	(14-13 yrs. 01d) 11	(12-13 yrs. old) 16
Yes, or I already have	t I	76	53 46	88	\$ 64	52 55
Age 15-16			r		,	
No	***	'n	6	7	(14-15 yrs. old) 7	(14-15 yrs. old) 7
Not sure Yes, or I already have	1 1	14 82	34 57	12 86	28 65	14 79
Age 17 or over						
No	ı	4	2	64	1	. 2
Not sure	t	ο ί	4.	2 %	ı	9
res, or 1 aiready nave	1	8/	84	98	1	92

* This table corresponds to Table 16 in the country reports
** Data not collected
** Answered a general question asking whether they'd be willing to report use of "any drug"

3.3.5 Validation by urinalysis

Urine was collected from 384 students ages 14-18 in four Athenian schools after they participated in a pilot study. The urine samples were matched to the questionnaires of the respondents by a method in which anonymity was retained. Biochemical analysis was performed in the Instituto Superiori di Sanita (Rome) by the method of radio-immuno-assay for the detection of opiates, cocaine and cannabis. Results were positive for five (1.38%) out of the 360 students from whom urine samples were collected and identification of questionnaires was possible; four were found positive for cannabis and one for opiates. All five students responded positively in the pertinent questions of the questionnaire. There is a discrepancy however between laboratory findings (1.38% positive) and self reported use of any illicit drug (3.8%). The most plausible explanation is that although report on illicit drug use in the questionnaire extended to the last 30 days, the laboratory techniques employed ensure their detection for only a few days following their intake.

3.3.6 Construct validity

Construct validity refers to the extent to which measured variables relate to other variables or constructs in a way which is theoretically or otherwise predicted. More simply, do the measures of these variables relate to other measures in a way which makes sense? There is already reported in the scientific literature substantial evidence of construct validity in self-report measures of drug use. There is considerable evidence of construct validity in the current data sets based on analyses completed to date. Further analyses are likely to show more.

3.3.6.1 Use of illicit drugs

First, prevalence in the three time periods will be discussed; then differences between age groups, age of first use, and finally, differences between the sexes.

3.3.6.1.1 Prevalence in lifetime, 12-months and:30-days

Results from the five European samples show, as expected from information provided by other sources, that drug use is a more pronounced phenomenon in the samples containing big cities than in those containing rural areas. As expected, prevalence of use show a systematic decrease from lifetime to 12-month and 30-day in all countries. A comparison of lifetime prevalence rates with 30-day prevalence rates is important. Lifetime prevalence rates tell us which part of the student population ever had any experience with a certain drug, while 30-day prevalence rates inform us on current usage levels. The higher the rate of noncontinuation for using a drug, the larger will be the discrepancy between lifetime and current use.

The differences between 30-day and lifetime prevalence rates are rather striking. Almost all 30-day prevalence rates in the European samples are very low (<10%), in fact many of them are nil. These very low 30-day prevalence rates suggest either that most illicit drug use (with the exception of marijuana) was experimental in nature and/or that there has been a recent downward trend in the active use of these drugs.

Thirty-day prevalence should always be substantially lower than lifetime prevalence since we know that many users do not continue use. The quotient of 30-day prevalence and lifetime prevalence gives an indication of the proportion of students who continued use until the last month before the survey took place. This odds ratio is between .50 and .20 for almost all substantial prevalence rates (>1.0%), implying that 50% - 80% of the students who ever used a certain drug, did not do so in the last month.

3.3.6.1.2 Changes with age

Lifetime prevalence rates show the expected increase with age. As a general rule, lifetime prevalence in the 15-16 years age group is 2 to 3 times higher than in the younger teen group (<15 years age), and the same is true regarding the differences between the 15-16 years students and the 17 years or older students, implying that the lifetime prevalence in the oldest age group is about 4 to 9 times higher than the prevalence in the youngest age group. Most exceptions have to do with very low prevalence rates, probably due to chance fluctuations; there is little difference between samples regarding the rate of increase with age.

With most prevalence rates we find only a few exceptions to an ordinal increase by age group; they are in the Athens sample (for opiates) and in the U.S.A. small city sample (for heroin, sedatives, and inhalants). There are several possible explanations for these exceptions. It is possible that older students

tend to underreport incidental use that occurred at an earlier age. It is also possible that a new fad has come along, particularly influencing younger cohorts of students. Still another possibility is that students who use the drug at earlier ages are more likely to leave school before the age of 17 years; this seems a probable explanation with respect to heroin and perhaps with inhalants as well. Differences between age groups with respect to 30-day prevalence rates follow the same pattern as those with respect to lifetime prevalence rates.

3.3.6.1.3 Age of first use

It has been shown that the younger a person starts using drugs, the greater the chance that he or she will continue his/her drug use and develop a habit of heavy and problematic drug use (Robins, 1984; Kandel & Logan, 1984). For this reason it is important to collect data on the age of first use; and this was done for all nine illicit drugs in the Pompidou questionnaire. Since we are dealing here with studies with rather small samples, and with prevalence figures that are very low for most drugs, most data on first use of illicit drugs from the younger age groups are limited to make a reasonable interpretation possible. Therefore we discuss only the data on first use of marijuana by >17 years old students.

In all samples the modal age for beginning use of marijuana is 15-16 years. There are some important differences, however, between the samples. In the samples with higher prevalence rates of marijuana use, a higher proportion start using this drug at an earlier age. (Spearman Rank Correlation between proportion of users who started before their 15th birthday, and lifetime prevalence of marijuana, is: r=1.00, N=5, p<.01).

This finding might be explained in terms of deviant behavior: the higher the prevalence that is reached in older age groups, the less deviant the behavior (illicit use). And the less deviant the behavior (the illicit use of a certain drug), the more likely it is that students start at an earlier age.

3.3.6.1.4 Differences between sexes

In most samples the prevalence of the use of marijuana is higher for boys than for girls, although in some cases the difference is very minor (for instance, 0.3% difference, oldest age group U.S.A). With tranquillizers we see a quite different picture. With few exceptions the prevalence of the lifetime use of tranquillizers is higher, sometimes substantially so, for girls than for boys. The differences are very small in the U.S. city sample, but quite large in the Athens sample. In the Lisbon sample, this sex difference is reversed in the oldest age group. It is interesting to note that the two samples with the greatest differences between the sexes with respect to marijuana (Athens, Amsterdam) also provide the greatest differences with respect to tranquillizers, whereas the sample with the least sex difference with respect to marijuana (U.S.A.) also shows the least difference with respect to tranquillizers.

3.3.6.2 Medically prescribed drugs

Doctors can prescribe a number of these drugs—narcotics, stimulants, tranquillizers and barbiturates—to youngsters. Such use under medical supervision is legal and generally socially accepted. However extended, medically supervised use can have unacceptable consequences, such as a habituation. Also, widespread medically prescribed use can introduce a number of youngsters to use who may then continue use without medical supervision. For these reasons, questions on the use of four drugs under the supervision of a doctor are included in the Pompidou questionnaire.

3.3.6.2.1 Lifetime prevalence

The lifetime prevalence rates for medical use of some drugs are quite substantial. Opioids have been used, on the average, by twice as many students under medical supervision as without it. Lifetime rates of medically supervised use of opioids are especially high in the Athens and U.S. city samples (29.1% and 39.5% respectively).

Lifetime prevalence rates of supervised use of stimulants are far lower (0.0%-5.6%). In the European samples the illicit use of stimulants roughly equals the supervised use. In the U.S.A. sample, however, illicit use is far higher than supervised use (19.5%). The rates of medically supervised use of tranquillizers (2.5%-16.3%) more or less equal the rates for illicit use. This pertains also to the use of barbiturates (medically supervised, 0.0%-6.6%).

The frequency of medically supervised use of these drugs was not been ascertained in the Pompidou questionnaire. There is, however, information on the time period over which the students used these drugs. Most use was restricted to a period of less thamthree weeks. Only about 10 to 20% of the users continued for three weeks or more.

3.3.6.2.2 Changes with age

For medically prescribed use, lifetime prevalence rates do not increase with age as systematically and substantially as was true for the illicitly used drugs. Although most lifetime prevalence rates for medically supervised use are higher for the oldest age group, there are some surprising exceptions. For instance, medically supervised use of opioids (codeine containing syrups) in the Athens sample from 24% in the youngest age group to 18% in the oldest age group and smaller irregularities are quite frequent. There are a number of possible explanations for such anomalies:

- 1. Doctors may have changed their policies regarding the prescription of these drugs to youngsters. If doctors are more apt to prescribe these drugs to youngsters at present than a few years ago, this explains why sometimes the lifetime prevalence is highest for the youngest age group. In the United States the opposite is reported to have occurred, with physicians having become much less likely to prescribe tranquillizers, barbiturates, or amphetamines to youngsters than was true ten years earlier (Johnston, O'Malley, and Bachman, 1987). This appears to be the case in Athens, as well, since rates in 1988, compared to a 1984 study, have dropped significantly for opioids.
- 2. Some of the older students may just have forgotten their use under medical prescription at an earlier age. This is quite plausible since the use of these drugs is not illegal and for this reason not as memorable an event.
- 3. Some younger students may not have fully understood the questions and, for instance, may have mistaken cough syrups not containing codeine with codeine containing drugs.
- 4. Students who tend to be prescribed some of these drugs at an early age may also be more likely to leave school at an earlier age.

With the available data it is not really possible to decide among these possible explanations.

3.3.6.2.3 Differences between the sexes

There are not very pronounced sex differences in the medically prescribed use of these drugs, though some regularities seem to exist. For example, tranquillisers are more often prescribed to girls in the samples from Amsterdam and Athens and in the oldest age group in the Lisbon sample. However, the sex differences are neither large nor consistent for this drug in the other countries' samples, which is also true for the remaining psychotherapeutic drugs across allicountries.

3.3.6.3 Alcohol and cigarettes

Although the main concern of the Pompidou Group is illicitly used drugs, the Pompidou questionnaire also included questions on the use of alcohol and cigarettes. Both substances are psychoactive drugs in their own right, of course, and it is known that their use often precedes illegal drug use. For girls regular smoking is associated with a larger probability of using marijuana, whereas for boys heavy drinking has the same strong association (Yamaguchi & Kandèl, 1984).

3.3.6.3.1 Prevalence in lifetime and 30-day use

In Part B, Table 1 of each country report lifetime prevalence rates for alcoholic beverages, drunkenness, and cigarettes are shown. At first glance: it is quite obvious that the use of alcohol and cigarettes is far more common than the illicit use of any drug or the medically supervised use of any psychotherapeutic drug in all student samples.

The use of alcohol appears to have penetrated almost the whole student population. Lifetime prevalence rates range from 57% to 93%. Beer and wine among the youngest age group alone have been more widely used than liquor in all samples. In one sample liquor seems to be used seldomly (7%-15%), where-

as in the other samples the prevalence rates for liquor are substantial (31%-84%). Alcohol is not only widely used, but often is used in excess, as well. Drunkenness is reported by 60% - 75% of the oldest age groups.

Cigarettes have been used by large proportions of the samples from all five countries reporting on cigarette use. Lifetime prevalence rates range from 69% to 76% in the oldest age groups.

The 30-day (or "current") prevalence rates for use of alcohol and cigarettes are shown in Part B, Table 3. The differences between lifetime and 30-day prevalence rates are far less pronounced with alcohol and cigarettes than with the illegal drugs, which means that the rate of continuation of use is much higher for these legal drugs. In the oldest age group about 67% - 78% of the students used an alcoholic beverage at least once in the prior month.

Differences among the 30-day prevalence rates for beer, wine, and liquor are less pronounced than that for lifetime prevalence rates. In most samples current prevalence rates for beer, wine, and liquor are not too different. There are some large differences among the samples in the current prevalence of alcohol consumption at the youngest age level. There are also sizeable differences between the samples on each of the three classes of alcoholic beverage.

At least once in the prior month drunkenness occurred to between 1% and 45% of the students. Drunkenness occurred more often in the U.S.A. sample than in the European samples (U.S.A., 5%-45%; Europe, 1%-22%).

There are some dramatic differences between the samples in cigarette smoking rates, particularly at the oldest age level where "only" 26% of the U.S.A. sample reports current smoking compared to 54% to 74% in three of the European samples.

Frequent drunkenness (defined as five times in the past month) also has notable prevalence rates in all samples ranging from 5.7% to 1.0% in the samples of the U.S.A., Athens, France, and Amsterdam for which data are available. It is obvious that regular use of alcohol is more frequent than regular use of any illicit drug.

Cigarettes also are used on a daily basis quite often. Based on the data from the *entire* age range surveyed in each country, daily smoking ranged from 18.6% to 5.2% in the six samples. It is interesting to note that in the Athens sample daily smoking rates are more than twice higher than in the remaining five samples.

3.3.6.3.2 Changes with age

Lifetime prevalence of the use of alcohol increases with age, but the differences are not very pronounced because the prevalence rate in the youngest age group examined here is already very high. With respect to liquor and drunkenness the proportional increases are more pronounced than for beer or wine, and the same holds true for 30-day prevalence rates. The 30-day prevalence rates do show some very large differences by age, however, and these differ by sample because of the large differences at the youngest ages.

With respect to lifetime and 30-day prevalence rates of cigarette use, the proportional differences between age groups are sizable. Lifetime prevalence is at least two times higher for the oldest age group as for the youngest in all samples. The differences with respect to 30-day prevalence rates of cigarette smoking are even more pronounced.

3.3.6.3.3 Age of first use

Age of first use for alcohol and cigarettes was gathered on only three samples (those from Athens, Amsterdam, and U.S.A.). The modal age category to start alcohol consumption in all three samples is 15-16 years, although in two samples nearly half the students had their first experience by age 14 years. First experience with drunkenness tends to lag somewhat their first drinking experience, though the ages 15-16 years still show the highest rate for first drunkenness. In general, the U.S. sample shows a considerably higher rate of early drunkenness than the other two samples.

Only in the U.S. sample does cigarette smoking on a daily basis often start at the age of 11 or 12 years. Most daily smokers in Amsterdam and the U.S.A. samples start this habit at the age of 15 or 16 years, but in Athens there is a sharp increase in daily use above the age of 17.

3.3.6.3.4 Differences between the sexes

With respect to the use of alcohol and cigarettes the differences between the sexes are in all samples moderate, though fairly systematic. For all age groups and all samples the lifetime prevalence of the use of alcohol is about 2% - 8% higher for boys. Only in the youngest age group in the Swedish sample is the difference much larger (17%).

The experience of drunkenness is, however, not always more prevalent among boys than among girls, though in 10 out of 14 cases it is. Among girls in the youngest age group in two European samples and among girls in the middle age group in the U.S.A. sample, the prevalence of drunkenness is higher for girls than for boys, perhaps reflecting the tendency for girls to date somewhat older boys.

The differences between the sexes are relatively small for lifetime cigarette prevalence rates. Females show the higher rates consistently in three of the European samples, but males are higher in the Swedish samples and the comparisons are mixed in the U.S. sample.

3.3.6.4 Perceived availability

One of the factors which may contribute to the use of drugs is the availability of those drugs. For this reason the Pompidou questionnaire asks respondents to estimate how difficult they think it would be for them to obtain each of a number of drugs. The answers range across five categories from "probably impossible" to "very easy". Unfortunately, these data are only available for four samples.

Not surprisingly, alcohol is the most readily available to students in all samples. Some 60% to 97% answer that it would be "fairly easy" for them to get alcohol. Illicit drugs are available to fewer students than alcohol, but in the oldest age groups most drugs are available to significant fractions of the student population. Availability tends to be considerably higher for older age groups in nearly all cases. For example, in the U.S. small city sample some 91% of students aged 17 years or older say marijuana is readily available versus 28% of the youngest age group. Marijuana is the most readily available of the illegal drugs in all countries. Aside from marijuana, the other three illegal drug classes (cocaine, hallucinogens, and heroin) have about equal availability to each other in the three European samples, whereas in the U.S.A. sample there are large differences in their availability — with cocaine being most available (51% of the oldest age group) and heroin least available (21% for the oldest age group).

The availability of legal, psychotherapeutic drugs is quite high in all samples. The availability of tranquillisers or barbiturates to the students in the Athens and the Swedish sample—even the youngest students—is noteworthy.

It is quite clear that there is a strong correlation between the perceived availability of a drug and the prevalence of the use of that drug. (Pearson correlation between lifetime prevalence rate and "availability score": r=.72, N=75; p<.0001.) Howeven it is equally clear that availability cannot explain the very large differences in lifetime prevalence rates.

3.3.6.4.1 Changes with age

As stated earlier, for most drugs the perceived availability increases with age. The proportion of students aged 17 years who think that it would be "fairly easy" or "very easy" to get a drug is two to four times higher than the proportion of their colleagues aged 14 years or younger. The major exception to this rule occurs with barbiturates and tranquillizers in the Swedish and Athens samples, where the increase in availability with age tends to be more modest. Alcohol is also more easily available at older ages, but the differences between the age groups are limited since alcohol already is widely available to the youngest age group.

3.3.6.4.2 Differences between the sexes

Perceived availability sometimes is different for the different sexes. In the Athens sample marijuana, cocaine, and heroin are more readily available to boys than girls (differences 1% - 6%), whereas stimulants and tranquillisers are much more accessible to girls (differences 7% - 18%). In the Swedish sample we see a peculiar pattern; most drugs are somewhat easier to get for boys than for girls in the youngest age group (by 1% - 5%), but in the middle age group almost all drugs are more readily available to girls (differences 0%-6%). In the U.S. small city sample all differences are small. Clearly the differences between the sexes are quite different across these samples.

4.0 SUMMARY OF METHODOLOGICAL AND SUBSTANTIVE RESULTS IN THE SIX COUNTRIES

In sum, the methodological results provide considerable evidence of the reliability and validity of the self-report measures of drug use used in the Pompidou school survey questionnaire. These findings, bolstered by other evidence already in the literature on very similar measures, suggest that this questionnaire can be applied across a range of cultural settings in which the secondary school population is quite literate.

For substantive results the absolute differences in prevalence rates could not be directly compared among the countries. As was stressed in the introduction, we are dealing here with six study samples that differ considerably in terms of location (e.g., rural versus metropolitan) and representativeness. In fact, there are several factors which could explain observed differences among the samples from the six reporting countries. These include:

- 1. non-representativeness of the student samples taken in some countries;
- 2. somewhat different age groups being represented in samples from different countries;
- 3. differential school retention (or dropout) rates in different countries (i.e., differential rates of coverage of an age group by using student samples);
- 4. differential rates of concealment across the samples (though this now appears unlikely).

Regarding the representativeness of the samples, the investigators from Sweden and the U.S.A. characterized their sample results as fairly typical of the national results obtained from the representative national surveys which are routinely carried out in those countries, though not exact replications. The Athens sample is based on a representative sample drawn from the city, but the national statistics, which would include rural areas, may be lower. Similarly, Amsterdam has the highest rate of drug use in The Netherlands, based on results from other studies and neither the Amsterdam nor the Lisbon samples were drawn to be precisely representative of their respective cities. In France the particular Department from which a representative sample was surveyed contains a population which is somewhat more rural than the country as a whole, perhaps resulting in slightly lower than average prevalence rates.

With respect to the age groups, there are also some differences among the countries. The lowest (<14 years old) and highest (>17 years old) categories are open-ended. Differences in the school-systems found in each country led to the differences in the composition of these two age groups. In the Athens sample, for instance, the youngest secondary school students surveyed were age 13 years, while in the Amsterdam sample the youngest students were age 11 years. Secondly, in the Sweden and U.S. samples the boundaries of the age categories are one year below the boundaries in the 4 other samples. Small differences between the six samples thus could be attributed to these differences in the composition of the age groups in the upper and lower age categories, though not the middle one.

Differences among the countries with respect to school dropout or retention rates have not yet been examined. However, given the particular set of countries reported here, it does not seem likely that there are large differences, at least within the age ranges examined. To the extent that there are such differences, they would be larger for the older age groups, of course.

The possibility of different rates of concealment across samples cannot be ruled out entirely. However, the evidence reviewed in the previous section would suggest that any such differences are quite modest.

Though none of these samples was fully representative of the national student population in its country, a number of interesting findings can be summarized briefly. First, it is quite evident that very large differences between the European and the U.S.A. samples exist with respect to the use of drugs by young people. Prevalence rates for almost all drugs are at least two times higher in the U.S. small city sample (which has fairly typical prevalence rates for the country as a whole) than in any of the European samples. Since the U.S. small city figures are considered to be fairly close to the national figures, this finding cannot be attributed to an unrepresentatively high level in this U.S.A. sample; and, since the rates are that much high-

er than in any of the European samples, it seems likely that this finding could be replicated with nationwide surveys.

While the prevalence rates of illicit drug use are very moderate in the European samples compared to the U.S.A. samples, that is not to say that in the European schools surveyed a drug problem does not exist among youngsters. In the European samples marijuana has been used at least once by 10%-36% in the samples of the older student population. And in the Athens and Swedish samples tranquillizers are used more widely than marijuana.

Other illicit drugs than marijuana are far less popular in the European samples. With only a few exceptions lifetime prevalence rates never exceed 10%. To date the use of cocaine does not appear to be very extensive in European samples; lifetime prevalence rates range from 1% to 5% in the oldest age group. However a real danger of its spread in the coming years remains as North American consumption continues to decline and the South American drug cartels seek replacement markets for their excess production. In fact, continuing student surveys of the type conducted in Sweden, Greece, and the U.S.A. may provide important early indicators to determine whether a cocaine epidemic is beginning to evolve.

Most illicit drug use in these European student samples seems to involve experimental and incidental behavior for the most part, since 50%-100% of the students who ever used a certain drug did not do so in the past month. Past 30-day prevalence rates are very low, with the exception of the rate for marijuana, which has been used by 3%-14% of the students in the European samples. For other illicit drugs most 30-day prevalence rates are below 1% or nonexistent. In the U.S. small city sample, on the contrary, 30 day prevalence rates are sometimes quite substantial: marijuana (31%), cocaine (8%), and inhalants (7%). Current regular use (20 times or more in the past month) of illicit drugs is very rare in all samples. Only marijuana has been used on a nearly daily basis by 1% or more; and this only in the U.S.A. sample (3%) and two of the European samples (at 1%).

Although the prevalence of illicit drug use in the European samples appears to be moderate among students, these drugs seem to be readily available to many of them. Illicit drugs are perceived by 20%-60% of the students to be fairly easy or very easy for them to get. In the U.S.A. most drugs are seen as available by the largest proportions of the students, but these modest differences in availability cannot explain the sometimes very substantial differences in prevalence rates. In all samples heroin is among the drugs that are rather difficult to acquire, whereas marijuana is among the most available drugs. In some countries drugs that are also used under medical prescription are fairly easy to get. This may be a function of physicians' prescribing practices and/or loose control of pharmacy sales.

Drug use under medical supervision is quite widespread in all samples. As a rule prevalence rates for the physician-prescribed use of opioids, stimulants, tranquillizers, and barbiturates are higher than the illicit use of these drugs. The use of opioids is especially high, reaching peak levels of 29% in the Athens sample and 40% in the U.S.A sample.

The use of the two licit drugs, alcohol and cigarettes, is far more widespread than the use of illicit drugs. The majority of students have tried alcohol and smoked a cigarette, but the regular and heavy use of these drugs is also considerable. Of the oldest students 60%-75% have experienced drunkenness at least once in their lifetime. This can be considered a normal pattern within Western societies, but the proportion of students who have gotten drunk five or more times in the past month is rather alarming, ranging from 1% to 4% in the three European samples for which data are available to 6% in the U.S. small city sample.

Current (past month) smoking rates are very high in the oldest age groups in the three European samples reporting—from 54% to 74%—and will have a substantial impact on morbidity and mortality in these populations in ensuing decades. In the U.S.A. sample cigarette smoking has a considerably lower prevalence rate (26% past month prevalence).

Most of the older students who ever used an illicit drug started this use at the age of 15 or 16 years, and this is true in all samples. (In the U.S.A. sample substantial proportions began at an even younger age.) For this reason the prevalence of use among the older students (17 years old or more) is four to nine times higher than among the youngest students (14 years old or less). Comparing across samples, we see that the higher the proportion of users who start use at an early age, the more widespread the use of that drug.

In the majority of samples, differences between boys and girls with respect to the use of drugs are mostly small. Of the illicit drugs, boys use marijuana more often than girls, except in the Swedish sample. Tranquillizers, on the contrary, are always more often used by girls. Girls also use tranquillizers and narcotics on medical prescription more often. Alcohol is used somewhat more by boys than by girls, but with cigarettes it tends to be the other way round.

5.0 CONCLUSIONS AND RECOMMENDATIONS

From a methodological point of view, this collaborative research project has demonstrated the validity and usefulness of the instrument for a fairly wide age range of adolescents in a wide range of different countries. This implies that valid comparable international research on substance use is feasible. Data of this research can give strong impetus to initiate and co-ordinate a policy on prevention and reduction of dangerous substance use between states and on the European level. Scientifically this kind of research makes it possible to delineate the cultural determinants of substance use in the adolescent, which provides a better insight in the genesis of habits of substance use and misuse. We are hopeful that the instrument and protocol approved in this study will serve as a model for emerging national and regional studies, so that comparisons of the type illustrated here will become increasingly possible. There remain a number of further comparisons possible in the current data sets, of course: we have been able to encompass only a limited number of questions here. In particular, the commonality of risk factors associated with use should be examined. But it is clear that comparisons based on representative national samples would be substantially more interesting, and that nationally representative samples would be of considerably greater policy value to the governments involved.

From the point of view of public health it can be concluded that the regular use of alcohol and cigarettes deserves a great deal of attention in all countries. In the U.S.A. reducing the current levels of illicit drug use in the student population is also clearly very important, whereas in Europe emphasis probably should be placed on preventing any further growth of illicit drug use, particularly cocaine.

APPENDIX I

STUDENT QUESTIONNAIRE



SURVEY RESEARCH CENTER

INSTITUTE FOR SOCIAL RESEARCH

THE UNIVERSITY OF MICHIGAN ANN ARBOR MICHIGAN

This questionnaire is part of a study being conducted by the University of Michigan's Institute for Social Research. The study is being done on behalf of both the Ann Arbor School System and the University. The results will be used in connection with a nationwide survey currently being conducted by the University and an international survey of secondary school students now under way in five other countries.

This is an anonymous questionnaire – it will not contain your name or any other information which would identify you individually. Your questionnaires will be collected at the end of the period by the survey administrator, who will immediately seal them in an envelope and take that envelope to the University's Institute for Social Research. The results will be put on to computer tape and will be reported only in summary form for the city as a whole, and not for particular classrooms or particular schools.

We are interested in learning a number of things about the lifestyles of today's young people, in particular about the important areas of smoking, drinking and drug use. We are also interested in your leisure time activities and in your attitudes about these and related subjects.

If the study is to be successful, it is important that you answer each question as thoughtfully and frankly as possible. Remember your answers are totally confidential.

The study is completely voluntary. If there is any question which you or your parents would find objectionable for any reason, just leave it blank.

This is not a test. There are no right or wrong answers. If you do not find an answer that fits exactly, mark the one that comes closest. Please mark the appropriate answer to each question by making an "X" in the box.

Thank you in advance for your participation, and we hope you will find the questionnaire interesting. If you have a question, please raise your hand and the survey administrator will come to your desk to answer it.

Please begin.

PART A

BEFORE BEGINNING BE SURE TO READ THE INSTRUCTIONS ON THE COVER. Please mark your answer to each question by making an "X" in the appropriate box.

1.	What is your grade level in sch	ool?							3		
	7 th grade		8 th g	rade				grade	***************************************		
	10 th grade	4	11 th	grade		5	12 t	h grade		***************************************	<u></u> 6
	The next fe	w que	stions o	isk abou	t the kin	ds of thi	ngs you	might de).	:	
2.	How often do you do each of th	e follow	ving?(I	Mark one	box for	each line)	.			,	
		*.	Almo every		At lea		Once twice a		A few times a y		Never
	a. Ride around in a car (or motorcyle) just for fun				2		3		4	٠	5
	b. Participate in community affairs or volunteer work	••••••	1		2		3		4	· · · · · · · · · · · · · · · · · · ·	[5]
	c. Play a musical instrument or	sing	1		2		3		4		5
	 Actively participate in sport athletics or exercising 	ts,	1		2	İ	3		4		[5]
	e. Read books, magazines or newspapers				2		3		4		[5]
	f. Go to parties or other social	affairs	1		2		3		4		5
	g. Participate in extracurricula activities after school		[]		2		3		4		[5]
3.	On the average over the school	voor h	aw mai	ny hanre	ner weel	r đa van v	vork in a	ngid or 1	nnaid iol	h ?	
<i>J</i> .					_				,	-	² [2]
	None					r less hour to 15 hour					
	16 to 20 hours					to 25 hour					
	26 to 30 hours				7	re than 30					F******
4.	During an average week, how n	nuch m	oney do	you get	from				•		
]	None	\$ 1-5	\$ 6-10	\$ 11-20	\$ 21-35	\$ 36-50	\$ 51-75	\$ 76-125	\$ 126+
	A job or other work			2	3	4	5	6	7	8	9
	Other sources (allowances etc)		1	2	3	4	5	6	7	8	9
5.	During a typical week, on how	maonw o	voninac	do von	io out fo	e fun and	racrantic	n ?			
٥.	J	("")	-	•							[3]
	Less than one					<u>_</u>					
	Three	(1)	rour	ог нуе		5	⇒ SIX	or seven.	••••••••••		Ľ
6.	On the average, how often do y	ou go o	ut with	a date?			;			»·	
	Never		Once	a month	or less		2 2 or	3 times a	month		3
	Once a week	4	2 or 3	timee a	veek	[3	5 000	r 3 times	a week		6

7.		ring the LAST FOUR WEEKS,						
	hov	v many whole days of school have y	ou missed					
		I	None I day	2 days	3 days	4-5 days	6-10 days	11 days or more
	a.	Because of illness		3	4	5	6	7
	b.	Because you skipped or "cut"		[3]	4	5	<u>6</u>	7
	c.	For other reasons		[3]	4	5	6	[7]
8.	Dui	ring the last four weeks, how often b	nave you gone to sch	oel. but skin	med a class	when you w	ere not sum	soced to?
		at all	1 or 2 times		·	times		
		0 times	11-20 times			e than 20 tim		
9.		w likely is it that you will do each of ark one box for each line)	the following thing	s after high	school?			
		•	Definitely won't	Probably	won't	Probably wi	ll Defi	nitely will
	a.	Attend a technical	П	2]	3		[4]
	b.	or vocational school		2	-	[3]		4
	с.	Graduate from a two-year			_	الشا		E2.1
		college program		2]	3		4
	d.	Graduate from college (four-year program)	1	2]	3		4
	<i>e</i> .	Attend graduate or professional school after college		2]	3		4
		The following questions c	oncern cigarettes.	alcohol an	d a numbe	r of other d	rues.	
		J				. oj 011101 u.		
10.		et, how much do you think people ri ork one box for each line)	sk harming themse	lves (physica	ally or in ot	her ways), if	they	·
		,	No risk	Slight risk	Modera risk			Can't say ug unfamiliar
	a.	Smoke one or more packs of cigarettes per day		2	3	Γ	4]	[5]
	b.	Try marijuana (pot, grass) once or to		2	3		4	5
	с.	Smoke marijuana occasionally		2	3		<u></u> 4]	[5]
	d.	Smoke marijuana regularly		2	3	-	4]	[5]
		Try LSD once or twice		2	3	_	<u>.</u> 4]	[5]
	e.	·		2	3	_	4	5
	f.	Take LSD regularly	L	L#4.1			. <u></u>	[4]
	g.	Try an amphetamine (uppers, pep pills, bennies, speed) once of	r twice 1	2	3		4	5
	h.	Take amphetamines regularly		2	3	. [2	4]	5
	i.	Try cocaine once or twice	<u> </u>	2	3	[4	[5]
	j.	Take cocaine occasionally	_	2	3	[4]	5
	<i>k</i> .	Take cocaine regularly	*******	2	3	[·	4	5
	i.	Take one or two drinks nearly every	_	2	3		4	[5]
	m.	Take four or five drinks nearly every		2	3		4	5
	n.	Have five or more drinks once or twice each weekend	1	2	3		4]	5

11.	Individuals differ in whether or not they disapprove of people doing certain things.
	Do YOU disapprove of people (who are 18 or older) doing each of the following? (Mark one box for each line)

							,
			Oon't approve		Disapprove		Strongly disapprove
	a.	Smoking 20 or more cigarettes a day			2		3
	b.	Trying marijuana (pot, grass) once or twice	1		2		3
	c.	Smoking marijuana occasionally	1		2		3
	d.	Smoking marijuana regularly	1		2		3
	e.	Trying some hallucinogen (like LSD, mescaline, peyote, psilocybin, PCP, etc) once or twice			2		3
	f.	Trying heroin (smack, horse) once or twice	1		2		3
	g.	Trying a barbiturate (downer, goofball, red, yellow, etc)	1		2		3
	h.	Trying an amphetamine (upper, pep pill, bennie, speed) once or twice			2		3
	i.	Trying cocaine once or twice			2		3
	j.	Having five or more drinks once or twice each week	1		2		3
12.			ne follow	ing types of Very difficult	drugs, if yo	ou wanted Fairly easy	some? Very easy
	a.	Marijuana, cannabis, pot, grass or hashish	<u> </u>	2	3	4	[5]
	b.	Hallucinogens (LSD, PCP, mescaline, peyote, psilocybin)	1	2	3	4	5
	c.	Amphetamines (uppers, pep pills, bennies, speed)	1	2	[3]	4	5
	d.	Barbiturates (sleeping pills, downers, reds, yellows, etc)	1	2	3	4	5
	e.	Tranquillizers (Librium, Valium, Miltown)	1	2	3	4	[5]

2

2

2

2

3

3

[3]

3

4

4

4

4

Heroin (smack, horse)

Any alcoholic beverage (beer, wine or liquor).....

(opium, codeine, paregoric, methadone, etc)

f.

g.

h.

i.

Some other narcotic

[5]

[5]

5

[5]

PART B

The next major section of this questionnaire deals with cigarettes, alcohol and various other drugs.

There is a lot of talk these days about these subjects, but very little accurate information.

Therefore, we still have a lot to learn about the actual experiences and attitudes of people your age.

We hope that you can answer all questions, but if you find one which you feel you cannot answer honestly, we would prefer that you leave it blank.

Remember that your answers will be kept strictly confidential; they are never connected with your name or your class.

The following questions are about CIGARETTE SMOKING.

1.	Have you ever smoked cigarettes?										
	Never – GO TO QUESTION 3	***************************************	1	Once or twice o	only		***************************************	2			
	Occasionally but not regularly	***************************************	[3]	Regularly in the	past	**************	,	4			
	Regularly now										
2.	How frequently have you smoked cig	arettes during (the past	30 days?							
	Not at all		1 1	Less than one c	igarette per	day		2			
	One to five cigarettes per day			About one-half							
	About one pack per day		_	About one and		-					
	Two packs or more per day				•			. —			
	The next questions are about AL	COHOLIC BI	EVERA	GES – includ	ling beer,	wine and h	ard liquo	r.			
3.	On how many occasions have you had	l alcoholic beve	erages to	drink (Mark	one box f	or each line))				
	Number of occasions	0	1-2	3-5	6-9	10-19	20-39	40 or more			
	a. In your lifetime	1	2	3	4	5	[6]	[7]			
	b. During the last 12 months		2	3	4	5	6	7			
	c. During the last 30 days		2	3	4	5	6	7			
4.	More specifically, on how many occas	ions (if any) ha	ve you h	ad beer to dri	nk						
	Number of occasions	0	1-2	3-5	6-9	10-19	20-39	40 or more			
	a. In your lifetime		2	3	4	5	[6]	7			
	b. During the last 12 months	[1]	2	3	4	[5]	6	7			
•	c. During the last 30 days	1	2	3	4	[5]	6	7			
5.	On how many occasions (if any) have you had wine to drink										
	Number of occasions	0	1-2	3-5	6-9	10-19	20-39	40 or more			
	a. In your lifetime	1	2	3	4	5	6	7			
	b. During the last 12 months		2	3	4	5	6	7			
٠	c. During the last 30 days	C	2	3	4	5	6	7			
6.	On how many occasions (if any) have you had liquor to drink										
	Number of occasions	0	1-2	3-5	6-9	10-19	20-39	40 or more			
	a. In your lifetime		2	3	4	5	6	7			
	b. During the last 12 months		2	3	4	5	6	7			
	c. During the last 30 days		2	3	4	5	6	7			

7.	Think back over the LAST TWO (A "drink" is a glass of wine, a bot	WEEKS. How many tle of beer, a shot gla	times l ass of li	nave you had fiv quor or a mixed	e or m drink	ore drinks in a	row?	
	None	Once	***********	2	Twice			[3]
	Three to five times	_				r more times		
8.	On how many occasions (if any) ha	ive you been drunk (or very	high from drinl	king al	coholic bevera	ges?	
	Number of occasions	0	1-2	3-5	6-9	10-19	20-39	40 or more
	a. In your lifetime	1	2	[3]	4	5	6	[7]
	b. During the last 12 months		2	[3]	4	[5]	6	7
	c. During the last 30 days		2	3	4	5	6	7
	Tranquilizers are somet or relax their m	imes prescribed by de uscles. Librium, Vali					,	
	Drugstores	s are not supposed to do NOT include any	sell the	m without a pres	scriptio			
		•	-					
9.	Have you ever taken tranquilizers		-					
	No, never	Yes, but for less the	an three	weeks 2	Yes, fo	or three weeks o	or more .	3
10.	 On how many occasions (if any) ha without a doctor telling you to take 	ive you taken tranqu e them	ilizers (on your own ti	hat is,			
	Number of occasions	0	1-2	3-5	6-9	10-19	20-39	40 or more
	a. In your lifetime		2	[3]	[4]	5	[6]	[7]
	b. During the last 12 months	-	2	3	4	5	6	7
	c. During the last 30 days	,	2	3	4	5	6	7
11.	On how many occasions (if any) ha	ve vou taken quaalu	ides (an	ads, soaners, m	efham	salane) an vour	own _ f	hat ic
	without a doctor telling you to take	them		,			0,,,,,	
	Number of occasions	0	1-2	3-5	6-9	10-19	20-39	40 or more
	a. In your lifetime	1	2	[3]	4	5	6	[7]
	b. During the last 12 months	1	2	3	4	5	6	7
	c. During the last 30 days	1	2	3	4	5	6	7
		times prescribed by d d sleeping pills, down are not supposed to do NOT include any	rs, dowi sell thei	iers, goofballs, y n without a pres	ellows, criptio	reds, rainbows	.	
12.	Have you ever taken barbiturates b	oecause a doctor told	l you to	take them?			1-	
	No, never	Yes, but for less that	an three	weeks [2]	Yes, fo	r three weeks or	r more	3
	· .					. ·		
13.	On how many occasions (if any) ha without a doctor telling you to take				at is,			
,	Number of occasions	0	1-2	3-5	6-9	10-19	20-39	40 or more
	a. In your lifetime	1	2	[3]	4	5	6	7
	b. During the last 12 months		2	[3]	4	5	6	7
	c. During the last 30 days	[T	2	3	4	5	6	7

Amphetamines can be prescribed by doctors to help people lose weight or to give people more energy.

They are sometimes called uppers, ups, speed, bennies, dexies, pep pills and diet pills.

Drugstores are not supposed to sell them without a prescription from a doctor.

(These do NOT include any non-prescription drugs, such as over-the-counter diet pills (like Dexatrim) or stay-awake pills (like No-Dox), or any mail-order drugs.)

14.	Have you ever taken amphetai	nines because a doc	ctor told you	to take the	em?			
	No, never	1 Yes, but for l	ess than three	weeks	2 Yes, f	or three wee	eks or more .	3
15.	On how many occasions (if any without a doctor telling you to					s,		
	Number of occasions	0	1-2	3-5	6-9	10-19	20-39	40 or more
	a. In your lifetime		2	3	4	5	6	7
	b. During the last 12 months		2	3	4	5	6	7
	c. During the last 30 days		2	[3]	4	5	6	7
	These drugs inc	n narcotic drugs wh to prevent cougl lude morphine, cod tores are not suppos	hing or to co eine, parego	ntrol diarrh ric, demero	oea. l, talwin and	d Iaudanum		
16.	Have you ever taken any of the	ese narcotic drugs l	oecause a do	ctor told yo	ou to take tl	hem?		
	No, never	1 Yes, but for l	ess than three	e weeks	2 Yes, f	or three wee	eks or more .	3
17.	On how many occasions (if any on your own – that is, without	y) have you taken a a doctor telling you	ny of these : i to take the	narcotic dri m ?	ugs (or opiu	ım or meth:	adone)	
	Number of occasions	0	1-2	3-5	6-9	10-19	20-39	40 or more
	a. In your lifetime	1	2	3	4	5	6	7
	b. During the last 12 months.	<u></u>	2	3	4	5	6	7
	c. During the last 30 days		2	3	4	5	6	7
		The next few questi	ons ask aboi	it some othe	er drugs.			
18.	On how many occasions (if any	y) have you used m	arijuana (gr	ass, pot) or	hashish (h	ash, hash oi	il)	
	Number of occasions	0	1-2	3-5	6-9	10-19	20-39	40 or more
	a. In your lifetime		2	3	4	[5]	6	7
	b. During the last 12 months.	1	2	3	4	5	6	7
	c. During the last 30 days	· · · · · · · · · · · · · · · · · · ·	2	[3]	4	5	6	7
19.	On how many occasions (if an	y) have you taken I	SD					
	Number of occasions	0	1-2	3-5	6-9	10-19	20-39	40 or more
	a. In your lifetime		2	3	4	5	6	7
	b. During the last 12 months.	ריין	2	.3	4	5	6	7
	c During the last 30 days	ं न	2	[3]	[4]	[5]	6	7

20.	On how many occasions (if any) have yo	u used psych	edelics other t	han LSD	(like mescali	ne, peyote, p	silocybin, l	PCP)
	Number of occasions	0	1-2	3-5	6-9	10-19	20-39	40 or more
	a. In your lifetime	1	2	3	4	5	[6]	7
	b. During the last 12 months	1	2	3	4	5	6	7
	c. During the last 30 days	<u>I</u>	2	3	4	5	6	7
21.	On how many occasions (if any) have y	ou used coc	aine (sometin	ies called	"coke")	•		
	Number of occasions	0	1-2	3-5	6-9	10-19	20-39	40 or more
	a. In your lifetime	 []	2	<u>3</u>	4	5	6	7
	b. During the last 12 monthsc. During the last 30 days		[2]	3	4	<u>5</u>	<u>6</u>	7
	c. During the last 30 days	[.]	<u>(2)</u>	Ð	[4]	[3]	[0]	7
22.	On how many occasions (if any) have y	ou used her	oin (smack, h	orse, ska	g)			
	Number of occasions	0	1-2	3-5	6-9	10-19	20-39	40 or more
	a. In your lifetime	1	2	3	4	5	6	7
	b. During the last 12 months		2	3	4	5	6	团
	c. During the last 30 days		2	3	4	5	6	7
23.	On how many occasions (if any) have y	on eniffed a	luo or broath	ad the co	ntante of gar	enend eneny		
	or inhaled any other gases or sprays in	order to get	high	cu are co	intents of act	osoi spray (ans,	
	Number of occasions	0	1-2	3-5	6-9	10-19	20-39	40 or more
	a. In your lifetime		2	3	4	[5]	6	7
	b. During the last 12 months		2	3	4	5	6	7
	c. During the last 30 days	1	2	3	4	[5]	6	7
24	Other than the drugs you have already	told us abov	it have you u	cod any	othon dunas i			0
	No				_			
	110	. 🖭 What	are they carre	J	***************************************	***************************************	***************************************	***********
	When (if ever) did you FIRST do each o							
	Don't count anything you took because	a doctor tol Never	a you to. (ivia Grade	rk one be Grade	ox tor each is Grade 9	ne) Grade 10	Grade 11	C 4- 10
		140401	6 or below	7 or 8		(Sophomore		Grade 12 (Senior)
	a. Smoke cigarettes on a daily basis		2	3	4	[5]	<u>[6]</u>	7
	 Try an alcoholic beverage 			rzn		(=3		freezen
	more than just a few sips		2	3	4	5	6	7
	c. Try marijuana or hashish	h	2	3	4	<u>5</u>	6 6	7
	d. Try LSDe. Try any psychedelic other than LSD		2	3	4	<u>5</u>	6	7 7
	e. Try any psychedelic other than LSDf. Try amphetamines		2	3	4	5	6	7
	g. Try quaaludes		2	3	4	5	6	7
	h. Try barbiturates		2	3	4	5	6	7
	i. Try tranquillizers		2	3	4	5	[6]	7
	j. Try cocaine		2	3	4	5	6	7
	k. Try heroin		2	3	4	5	6	7
	l. Try any narcotic other than heroin		2	3	4	5	6	7
	m. Try inhalants		2	3	4	<u></u>	6	7
	n. Smoke your first cigarette		2	3	4	[5]	6	7
	o. Try smokeless tobacco		[2]	ব	4	ਵਿ	[Z]	<u></u>
	(snuff, plug or chewing tobacco)p. Drink enough to feel drunk or very high		2	3	4	[<u>5</u>]	6 6	7 7
i	p. Dinaconough to for didnik of very flight	<u>L</u>	ت			ت	U	L

PART C

The next few questions ask for some background information about yourself.

1.	What is your sex?	
	Male Female	2
2.	How old were you on your last birthday?	
	11 years old or less 1 12 years old 2 13 years old 13 years old 14 years old 15 years old 5 16 years old 6 17 years old 7 18 years old or more	
	The next two questions ask about your parents' education. If you were raised mostly by foster parents, step-parents or others, answer for them. For example, if you have both a step-father and a natural father, answer for the one that was most important in raising you.	
3.	What is the highest level of schooling your father completed?	
	Completed grade school or less	2
	Completed high school	
	Completed college	[6]
	Don't know, or does not apply	
4.	What is the highest level of schooling your mother completed?	
	Completed grade school or less	2
	Completed high school	4
	Completed college	6
	Don't know, or does not apply	
5.	How many times have you moved your home from one city to another?	
	Never	3
	Three times	
6.	Which of the following best describes your average grade this past year?	
	A (93-100)	3
	B (83-86)	
	7 C (70.70)	9

PART D

1.	. During the LAST TWO WEEKS, how many times (if any) have you been a passenger in a car							
			None	Once	Twice	3-5 times	6-9 times	10 or more
	a.	When the driver has been drinking	1	2	3	4	5	6
	b.	When you think the driver had 5 or more drinks		2	3	[4]	5	6
		If you have not driven a car in the L		VO WEEKS. GO	TO OUES	STION 3.		
				, - , , - , - ,				•
2.	Dur	ring the LAST TWO WEEKS, how many times (i	if any)	have you driven	ı a car, tru	ck or moto	rcycle after	***
			None	Once	Twice	3-5 times	6-9 times	10 or more
	a.	Drinking alcohol		[2]	[3]	[4]	[5]	[6]
	и. b.	Having five or more drinks in a row		2	3	[4]	5	[6]
	υ.	Maring five of more drinks in a few		L	***************************************			**************************************
3.	Hov	w many of your friends would you estimate						
			None	A few	So	me	Most	All
	a.	Smoke cigarettes		2	F:	3	4	[5]
	и. b.	Smoke marijuana (pot, grass) or hashish	(T)	[2]		3]	4	[5]
	<i>c</i> .	Take hallucinogens (like LSD, mescaline,		,			******	
		peyote, PCP etc)		2		3]	4	5
	d.	Take amphetamines (uppers, pep pills, bennies, speed)	r	2		3]	4	5
	e.	Take barbiturates (downers, goofballs, reds, yellows etc)	******	[2]		3]	4	[5]
	f.	Take tranquillizers	· · · · · · · · · · · · · · · · · · ·	2	_	3	4	[3]
	g.	Take cocaine		2		3]	4	<u>5</u>
	h.	Use inhalants (sniffing glue, acrosols, laughing gas etc)		2		<u>3]</u>	4	<u>5</u>
	i.	Drink alcoholic beverages (liquor, beer, wine)	,	2		<u>3</u>] 3]	4	
	j.	Get drunk at least once a week		2	يا	21	[4]	[5]
4.	Hay	ve you had any drug education courses or lecture	s in scl	nool?				
		- GO TO QUESTION 7		Yes				2
5.	Wo	uld you say that the information about drugs tha	t you r	eceived in schoo	ol classes o	r programs	has	
	Mad	de you less interested in trying drugs					***************************************	
	Not	changed your interest in trying drugs		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
	Mad	de you more interested in trying drugs		······································		•••••••••••		3
6	Own	erall, how valuable were the experiences to you?						
6.		· ·	[T	_				[7]
		le or no value	<u></u>	Some value				r
	Con	isiderable value	[3]	Great value			**************	4

7.	If you had ever used marijuana or hashish, do you think that you would have said so in this questionnaire?							
	I already said that I have used it							
8.	If you had ever used prescription-type stimulants, like amphetamines (without a doctor's orders), do you think that you would have said so in this questionnaire?							
	I already said that I have used it							
9.	If you had ever used heroin, do you think that you would have said so in this questionnaire?							
	I already said that I have used it 1 No 2 Not sure 3 Yes 4							

THANK YOU

for taking the time to answer these questions.

We hope you found them interesting.

We are eager to tabulate your answers along with those of other respondents.

APPENDIX II

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APPENDIX III

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APPENDIX IV

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