

**Report of Study Methodology
for
the School Surveys 2004, 2005 and 2006
for evaluation of the Regional Project carried
out by the Norwegian Institute for Alcohol and
Drug Research**

Hilde Pape, Ingeborg Rossow and Elisabet E. Storvoll

Foreword

As part of the Norwegian Government's Action Plan to Prevent Alcohol and Drug Problems 2003-2005 (Sosialdepartementet, 2002), the National Directorate for Health and Social Affairs initiated a pilot project to promote preventive efforts at the local level. The Norwegian Institute for Alcohol and Drug Research (SIRUS) was given the task of evaluating the pilot project.

As a central element in the evaluation of the Regional Project, in the autumn of 2004, 2005 and 2006, we carried out questionnaire surveys among school children in the nine test municipalities that were part of the Regional Project, and in seven control municipalities. The gross samples included pupils in all the lower secondary and upper secondary schools in these sixteen municipalities. As the first data collection took place *before* the preventive measures that were part of the Regional Project were initiated, this can be regarded as a baseline survey. At the time of the first follow-up survey, some of the municipalities were well under way with implementing their preventive measures, while others had just started. The second follow-up survey was carried out at the end of the project period.

This report gives a description of the preliminary work and implementation of the school surveys. It also contains information about the data material, including information about drop-out and the composition of the sample. In addition, the report provides an insight into some of the practical experience that we gained during the process.

SIRUS contacts were appointed at the 91 schools that participated in the survey, to help with practical matters related to the data collections. These contact persons, and all the young people who took part in the surveys, deserve our unreserved thanks for their contribution. We wish to thank the head teachers and the school administrations at all the schools for their good will and courtesy. Astri Vannebo, our project coordinator, has made an invaluable contribution. On behalf of SIRUS, she has had, among other things, continuous contact with the schools during the most hectic phases of the process. We also wish to thank Lasse Andersen at Kollektor (previously Capture Data) and Svein Gossner at DM Partner, who carried out the practical work of sending out and collecting the questionnaires and organizing the data files. Our colleagues at SIRUS deserve thanks for their contributions and useful suggestions about the school surveys. In particular we wish to mention Marianne Hansen, Bergljot Baklien and Kristin Buvik. Finally, we wish to thank each other for positive and constructive cooperation.

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Hilde Pape

Ingeborg Rossow

Elisabet E. Storvoll

Background

The Regional project, which was part of the Norwegian Government's Action Plan to Prevent Alcohol and Drug Problems 2003-2005 (Sosialdepartementet, 2002), has been a pilot project to strengthen preventive efforts at the local level. The overall aim was to reduce the prevalence of use of alcohol and drugs, and to reduced the amount of damage caused by the use and misuse of alcohol and drugs. The National Directorate for Health and Social Affairs was given the task of managing the Regional Project centrally. The Norwegian Institute for Alcohol and Drug Research (SIRUS) was given the task of evaluating the project.

All the municipalities in the country were invited to apply to the National Directorate for Health and Social Affairs to participate in the Regional Project. The applications from the following nine municipalities were successful: Haugesund, Larvik, Narvik, Nesodden, Os i Hordaland, and Sande, Hareid, Ulstein and Herøy (the last four municipalities comprise one unit in the project). We refer to these municipalities as *test municipalities*.

The National Directorate for Health and Social Affairs recommended a "menu" of eleven different preventive programmes. The municipalities chose partly to implement some of these programmes, partly to use other measures, and partly to continue with measures that they had previous experience with. In other words, the Regional Project included a series of different preventive measures and strategies. A common feature of many of the chosen measures was that they were mainly directed at young people. For example, they included school programmes, interventions for children and young people with behavioural problems, and measures to prevent sale and serving of alcohol to under-age people. Thus the aim of many of the measures introduced by the municipalities was to delay young people's debut with alcohol and drugs, to reduced the use of alcohol and drugs, and to reduce alcohol and drug-related damage among young people. Thus it was natural that SIRUS's evaluation of the pilot project should focus on changes in the alcohol and drug habits of young people resulting from the intensified efforts on prevention.

In order to identify any changes in young people's use of alcohol and drugs and in the prevalence of alcohol and drug-related damage, we collected information from the young people themselves. This was done using a questionnaire distributed through the schools. Experience has shown that the response rate with school surveys is high. In addition, such surveys reduce the danger that the participants influence each others' answers (since most pupils at a school answer at the same time, and because they are not allowed to speak to each other when they are filling out the questionnaires).

Organization of the School Survey

The following three SIRUS researchers had main responsibility for doing the preliminary work and carrying out the questionnaire survey among the pupils (referred to as the School Survey: Hilde Pape, Ingeborg Rossow and Elisabet E. Storvoll. Astri Vannebo was appointed as project coordinator for the data collection.

Kollektor and DM partner were our external partners with responsibility for the technical aspects of the data collection, including printing and sending out the questionnaires and other written material to the schools, and optical reading of the completed questionnaires.

Design

We chose to study changes in young people's use of alcohol and drugs and in alcohol and drug-related damage at three points in time. The first survey (t1) was carried out in the autumn of 2004, before the implementation or intensification of the preventive measures that were part of the Regional Project. In other words, this data collection can be regarded as a baseline study. The first post-test survey (t2) was carried out in the autumn of 2005. In the period between t1 and t2, the test municipalities began to implement or intensify their measures. The second post-test survey (t3) was carried out in the autumn of 2006.

Test municipalities and control municipalities

In order to establish whether any changes in use of alcohol and drugs or changes in the prevalence of alcohol or drug-related problems were the result of preventive activities, it was not sufficient to investigate trends in the test municipalities. We had to include control municipalities, that is, municipalities that did not receive extra resources to increase their preventive activities, but that were studied in the same way as the test municipalities in order to provide a basis for comparison.

In choosing the control municipalities, we used the list of the National Directorate for Health and Social Affairs of the municipalities that had applied to the Regional Project for funding for prevention, but whose application had been unsuccessful. In order to ensure the best possible basis for making comparisons, we wished to recruit municipalities that were similar to the test municipalities. We took several factors into account, such as location, degree of urbanization, distance to the nearest large town and population. Table 1 shows the municipalities we chose and the test municipalities they were matched with. Apart from Askøy, all the control municipalities were among the applicants for funding from the Regional Project.

Table 1: Test municipalities and control municipalities

Test municipalities	Control municipalities
Haugesund	Ålesund
Larvik	Tønsberg
Os	Stjørdal
Narvik	Kristiansund
Nesodden	Askøy
Herøy, Sande, Ulstein, Hareid	Andøy, Sortland

The National Directorate for Health and Social Affairs sent a letter to the control municipalities, inviting them to participate in the survey. These letters were addressed to the education authority or to the corresponding body in the municipal administration. In the invitation, it was pointed out that participation would make an important contribution to increasing knowledge about local preventive measures in the field of alcohol and drugs for young people. It was also pointed out that the municipality would not incur any expenses by participating. They were promised a report with their own results at a later date¹. The municipalities were positive to the offer, and all the municipalities that were invited to be control municipalities agreed to take part in the survey.

The target sample

The study thus had a control group design, and involved investigation of young people in test and control municipalities at three different points in time. The target sample for all three surveys was all the pupils in lower secondary and upper secondary schools in the nine test municipalities and the seven control municipalities.

Cross-sectional data and longitudinal data

We chose a design that enabled us both to identify changes over time in the population of young people as a whole, and to follow developments in individuals. Identification of changes over time in the population of young people as a whole requires comparable cross-sectional data from several points in time. We obtained this by surveying pupils in the same grades at all the three data collections. Following developments in individuals requires longitudinal data. This requires collecting information about the same people on several occasions. A description of the longitudinal part of the study will be published in a separate report on the Internet.

Procedure

Authorization from the Norwegian Data Inspectorate

The study was reported to the Norwegian Social Science Data Services (NSD), which assesses research projects on behalf of the Norwegian Data Inspectorate. The project was originally authorized on condition that we obtained written informed consent from parents/guardians for all pupils under 18 years of age. This consent was obtained at t1. Before carrying out the surveys at t2 and t3, this condition was changed to apply only for lower secondary school pupils.

¹ All the municipalities, both test and control municipalities, were sent a report in the autumn of 2005 with selected results from their own municipality. The results were from the base-line survey, but were not sent out until after the first follow-up survey had been carried out.

Establishing contact with the schools

All the test municipalities in the Regional Project appointed their own project coordinator. These coordinators established contact with the lower secondary and upper secondary schools in their own district. Thus, in the test municipalities, SIRUS could, to a large extent, start straight away with the data collection. In the control municipalities, contact with the individual schools had to be made in other ways. The lower secondary schools were contacted by the education authority or the corresponding body in the municipal administration. The upper secondary schools were contacted by SIRUS.

Appointment of SIRUS contacts

All the schools, both in the test and control municipalities, were asked to appoint a SIRUS contact, that is, a member of the teaching staff or school administration who could be our contact person at the school. The task of the SIRUS contacts was to help with practical and administrative tasks in connection with the data collections. Many of the contact persons who were appointed had a special role in their school. In several cases, the head teacher took on this role. Other SIRUS contacts were members of the teaching, administrative and social staff. At some of the schools, we had the same SIRUS contact for several data collections, while at other schools they were different. All the SIRUS contacts were given a fee for their contribution. For schools with more than 600 pupils, the fee was NOK 2000 per data collection. At smaller schools the fee was NOK 1000. At t2 and t3, all the SIRUS contacts took part in a lottery for a holiday of their choice to the value of NOK 10 000.

In the preparation phase, one of the most important tasks for the SIRUS contacts was to ensure that a brochure giving information about the survey was distributed to the pupils and their parents or guardians. Also, consent forms from parents or guardians of lower secondary school pupils had to be collected and organized (for all pupils under 18 years of age at t1). It was important to have an overview of the pupils who had parental consent to participate in the survey, and which pupils did not have consent. The SIRUS contacts also had responsibility for setting the date for the data collection, receiving the questionnaires from Kollektor and distributing them to the classes, and for informing the other teachers about how the survey should be carried out.

When the data collections took place, the SIRUS contacts had the task of ensuring that the survey was carried out in accordance with the instructions.

An important part of follow-up was to get hold of the pupils who had not been present when the main survey was carried out. The SIRUS contacts were asked to ensure that there were follow-up rounds. After the survey had been carried out, both the main survey and follow-up rounds, the SIRUS contacts were required to collect in all the questionnaires and to send them back in one package to Kollektor. The SIRUS contacts also had responsibility for filling out and sending a registration form for the whole school, with information about the number of participants and the number of drop-outs.

Communication with the SIRUS contacts was fairly frequent round about the time of the data collections, both via e-mail, telephone and post. This would not have been possible if we had not had a project coordinator.

Information to pupils and parents/guardians

Pupils and parents/guardians were given a brochure with information about the survey through the schools. This brochure gave a short description of the background for the survey and how the survey would be carried out. In line with the regulations, they were informed that participation was voluntary, at they could withdraw whenever they wanted to, and that they could hop over questions. They were also informed that everyone who took part in the survey would be given a lottery ticket with the chance to win a prize worth NOK 20 000 for a holiday of their choice for the whole family (NOK 30 000 at t1). In addition, the brochure gave the addresses of various websites, so that those who wanted to could obtain more detailed information about the study.

Informed consent

Lower secondary school pupils (pupils under 18 years of age at t1) had to have written consent from their parents to take part in the survey. The brochure for lower secondary pupils contained a consent form for this purpose.

Filling out the questionnaire at school

One school period was set aside for filling out the questionnaire. The instructions to the pupils about filling out the questionnaire were read to them by the teachers before they filled it out. Among other things, they were reminded that they could hop over questions they thought were difficult to answer. The pupils put their own completed questionnaire in an envelope that they sealed before handing to the teacher.

At t1, the pupils were given a card with the telephone number of the helpline for children and the alcohol and drug helpline. This was in order to provide help to pupils who needed to talk to an adult about the theme of the survey. At t2 and t3 this information was given at the end of the questionnaire.

The questionnaire for the pupils

As the main aim of the Regional Project was to reduce the use of alcohol and drugs and damage caused by alcohol and drugs, the questionnaire contained many questions about this. In addition, we investigated a series of well-documented risk factors for drinking and use of illegal drugs. At the end of the questionnaire, there were questions about gambling. This was part of the evaluation of the availability of gambling machines in Norway.

While some of the questions had been develop for this study, others were based on questions that had been used in earlier studies. For example, some of the questions were from the country-wide questionnaire surveys *Young in Norway 1992*, and *Young in Norway 2002* (see Rossow and Bø, 2003). One consideration with these studies was to use standardized series of

questions from international research. In addition, the questionnaire used in *Young in Norway 2002* was piloted with both lower secondary and upper secondary pupils.

Two slightly different questionnaires were used: one for lower secondary school pupils and one for upper secondary school pupils. Among other things, the youngest pupils had more questions about rules at home (for example how late they were allowed to stay out in the evenings), while the oldest pupils had more questions about problems associated with their own drinking. Both questionnaires were available in the two Norwegian languages (bokmål and nynorsk).

The questionnaires contained the following elements (most of the questions were asked in all the three data collections):

Background variables. Gender, age, school grade, line of study (at upper secondary school), who they lived with, whether they lived in the same municipality as the school (upper secondary school pupils only), which country their parents were born in, religious affiliation, parents' education and employment status, and assessment of the family's economy.

Use of alcohol and drugs. Questions were asked about use of alcohol and drugs at any time and during the last year. More specifically, there were questions about use of alcohol, tobacco (cigarettes and chewing tobacco), cannabis, other drugs, sniffing of solvents, and use of tablets (to get high). With a few exceptions these questions were from *Young in Norway 2002*. In addition, there were questions about the context for the debut of drinking and getting inebriated.

Problems associated with use of alcohol. Young people who had drunk alcohol during the last year were asked how often they had experienced various problems related to their drinking. Some of these questions were based on Rutger's Alcohol Problem Index (RAPI; White and Labouvie, 1989). In addition, some questions from *Young in Norway 2002* about exposure to violence were included, and some new questions about where they were when they were exposed to violence (for example, whether this happened at a place where alcohol is served) were also included.

Attitudes to and knowledge about alcohol and drugs. The pupils were asked about their opinions of young people who drink/do not drink, and about alcohol policy measures such as age limits and prices. In addition, they were presented with some assertions about use of alcohol and drugs (for example that alcohol is responsible for more deaths than drugs) that they were asked to assess the truth of. They were also asked to estimate the proportion of young people of their own age who use various drugs.

Availability of alcohol and drugs. In order to assess the availability of alcohol, the young people were asked about the distance from where they lived to different types of places that sell or serve alcohol, and whether they knew about such places where it was easy for young people under 18 years of age to buy alcohol. In addition, they were asked whether they had been offered illegal spirits, or whether they knew where they could obtain illegal spirits.

Young people who had drunk alcohol during the last year were asked about how they had obtained alcohol (including whether they had obtained alcohol at home). This is an elaborated version of the series of questions that was tested in *Young in Norway 2002*. In addition, they were asked about whether they had tried to buy alcohol at various types of premises that sell or serve alcohol, and if so, whether they had been required to show proof of identity. They were also asked about whether they had become drunk at places that sell or serve alcohol.

In order to say something about use of tobacco, those who smoked or used chewing tobacco were asked whether they had bought the tobacco themselves. In addition, we asked the respondents whether they had been offered cannabis or other illegal drugs at any time.

Other factors that may be associated with the availability of alcohol and drugs to young people were also investigated: time of puberty (Petersen and Crockett, 1985), whether they thought that they looked younger or older than they were, how much money they had at their disposal per month, and whether they had used false identification.

Parents. The young people were asked about how often their parents drank alcohol, and whether they had seen their parents inebriated (tested in the *Young in Norway* surveys).

We also asked about what they thought their parents would think about them using alcohol and different types of drugs, and whether their parents talked to them about the dangers associated with the use of alcohol and drugs. Those who had drunk alcohol during the previous year were asked whether their parents knew about this (tested in the *Young in Norway* surveys).

In addition, we asked the respondents whether their parents allowed them to drink alcohol at home, and about more general rules (for example whether they were allowed to stay out as long as they liked). They were also asked about their parents' knowledge about what they did in their leisure time, and how their parents obtained this information. These questions were based on a measure of parental monitoring developed by Alsaker et al. (1991) and on the work of Stattin and Kerr (Kerr and Stattin, 2000; Stattin, 2001; Stattin and Kerr, 2000). The young people's relationship with their parents was investigated, among other ways, using parts of the Parent Bonding Instrument (Parker et al., 1979).

Friends, girlfriends and boyfriend, and other peers. All the young people were asked whether they had a girlfriend or boyfriend, how often they were with friends in their leisure time and how many close friends they had. In addition, they were asked about the use of alcohol and drugs of their two closest friends, and girlfriend or boyfriend (based on the *Young in Norway* surveys).

Thriving and fitting in at school. The pupils were asked about how well they thrived at school and about whether they had been bullied by other pupils at school (from *Young in Norway 2002*). In addition they were asked about what marks they had in certain subjects.

Leisure-time activities. They were asked about various leisure-time activities, and other ways they used their leisure time (used in the *Young in Norway* surveys).

Degree of orientation towards the future. As a measure of degree of orientation towards the future, we included an earlier tested measure of discounting of future goods (Bretteville-Jensen, 1999). In addition, we used an impulsivity scale (Plutchick impulsivity scale; Plutchick et al., 1989).

Problem behaviour and mental health. The respondents were asked about a range of antisocial behaviour. The questions were largely based on Olweus' measure of antisocial behaviour (Olweus, 1989) and a measure used in a national survey in the USA (Windle, 1990). Depressive mood was measured using six questions from Hopkins Symptom Checklist (HSCL; Kandel and Davies, 1982; Derogatis et al., 1974). Suicidal thoughts were measured using one question tested in *Young in Norway*.

Gambling. As part of the evaluation of the reduction in availability of gambling machines in Norway, questions about gambling were included at the end of the questionnaire. Among other things, these included questions about the frequency of gambling, the Lie-Bet Questionnaire (Johnson et al., 1997) and SOGS-RA (Hardoon et al., 2003).

In 2006, the use of banknotes was no longer allowed in gambling machines. In order to see whether this measure has had any effect, questions about whether this had influenced gambling habits were included in the questionnaire at t3. The respondents were also asked about their age when they first used gambling machines, their experiences of problems associated with gambling, and about cognitive misconceptions about gambling.

Each questionnaire had a school code and a class code. This made it possible to study whether specific phenomena had a tendency to be concentrated in specific classes and/or in specific schools. The codes made it possible to analyse the data at several levels.

In addition, the pupils who took part in the surveys several times were given an ID number. This was necessary in order to study changes over time for the same pupils. In order to ensure anonymity, we asked the schools to make a list of ID numbers and pupils' names, and to keep the list in a secure place. In other words, the researchers who had access to the data file did not have access to the list of ID numbers and names.

From questionnaire to data file – t2 and t3

The SIRUS contacts collected all the completed questionnaires at the school, and sent them back to Kollektor in one package for optical reading. SIRUS received two SPSS files from Kollektor, one for lower secondary school pupils and one for upper secondary school pupils.

These two files were merged, and variable names and category names were added. At t2, this collective file contained data from 21 389 optically-read questionnaires. For 78 cases there were no answers, or observations for only a few variables. All these cases were deleted from the SPSS file. At t3, the file contained data from 20 786 questionnaires. Sixty-four cases were deleted because there were no answers, or because there were answers for only a few variables.

From experience we know that there are some pupils who fool around when they answer the questionnaire. We tried to identify and weed out answers that were obviously unreasonable. Pupils who reported extremely high frequencies of exceptional behaviour, use of tobacco, alcohol consumption, or use of money, and/or reported an improbable age of a girlfriend or boyfriend, were assessed more closely. Sixteen cases at t2 and 27 cases at t3 were deleted from the file because the respondent had given many improbable answers. This limited “tidying up” does not mean that all improbable values have been deleted. With further analysis of the data, it is important for the researcher to make a critical assessment of the distributions and values for each variable.

After these changes had been made, the data file was comprised of 21 295 cases at t2 and 20 695 cases at t3. For a description of the process from questionnaire to data file at t1, see Pape et al. (2005).

Participating schools

Altogether, 94 schools were asked to take part in the first school survey (t1). A lower secondary school in Ålesund withdrew at an early stage. For various reasons, two other schools also withdrew before the *first* data collection took place. These were an upper secondary school in Sortland (number 55) and a lower secondary school in Askøy (number 63). All these schools were from control municipalities. In other words, 91 schools took part in the first data collection. Table 2 shows the distribution of schools according to lower and upper secondary schools, and test and control municipalities.

Table 2: Lower secondary schools (LSS) and upper secondary schools (USS) in test municipalities and control municipalities included in the data material at t1

Test municipalities			Control municipalities		
	LSS	USS		LSD	USS
Haugesund	5	8	Ålesund	7	5
Larvik	8	1	Tønsberg	7	2
Os	4	3	Stjørdal	3	2
Narvik	5	3	Kristiansund	2	2
Nesodden	4	2	Askøy	3	1
Herøy, Sande, Ulstein, Hareid	8	2	Andøy, Sortland	4	2
Total	34	19	Total	26	14

Note: The total number of schools is 91, and not 93. The reason for this is that two schools (one in Nesodden and one in Haugesund) have been counted twice, since they have pupils at lower secondary school level and also function as upper secondary schools.

At the *second* data collection, we lost a school from the control municipality Ålesund. This was an upper secondary school (number 73). In addition, we lost two schools from test municipalities. These were a small lower secondary school (less than 10 pupils) from Os (number 38) and an upper secondary school from Hagesund (number 16). The latter school withdrew because it had already taken part in another survey of alcohol and drugs under the auspices of Haugesund municipality. We chose to exclude a lower secondary school from the test municipality Narvik (number 33). Data from this school was collected about three months later than from the other schools. In addition, three upper secondary schools in Haugesund (numbers 19, 20 and 21) were amalgamated to form one school (number 20) between the first and the second data collections. Thus, the data material at t2 encompassed 85 schools. Table 3 shows the distribution of schools according to lower and upper secondary schools, and test and control municipalities.

Table 3: Lower secondary schools (LSS) and upper secondary schools (USS) in test municipalities and control municipalities included in the data material at t2

Test municipalities			Control municipalities		
	LSS	USS		LSS	USS
Haugesund	5	5	Ålesund	7	4
Larvik	8	1	Tønsberg	7	2
Os	3	3	Stjørdal	3	2
Narvik	4	3	Kristiansund	2	2
Nesodden	4	2	Askøy	3	1
Herøy, Sande, Ulstein, Hareid	8	2	Andøy, Sortland	4	2
Total	32	16	Total	26	13

Note: The total number of schools is 85, and not 87. The reason for this is that two schools (one in Nesodden and one in Haugesund) have been counted twice, since they have pupils at lower secondary school level and also function as upper secondary schools.

At the *third* data collection, we lost a lower secondary school from the test municipality Narvik (number 34), an upper secondary school from the control municipality Askøy (number 59) and an upper secondary school from the control municipality Ålesund (number 77). Thus, the data material at t3 encompassed 82 schools. Table 4 shows the distribution of schools according to lower and upper secondary schools, and test and control municipalities.

Table 4: Lower secondary schools (LSS) and upper secondary schools (USS) in test municipalities and control municipalities included in the data material at t3

Test municipalities			Control municipalities		
	LSS	USS		LSS	USS
Haugesund	5	5	Ålesund	7	3
Larvik	8	1	Tønsberg	7	2
Os	3	3	Stjørdal	3	2
Narvik	3	3	Kristiansund	2	2
Nesodden	4	1	Askøy	3	-
Herøy, Sande, Ulstein, Hareid	8	2	Andøy, Sortland	4	2
Total	31	15	Total	26	11

Note: The total number of schools is 82, and not 83. The reason for this is that one school in Haugesund has been counted twice, since it has pupils at lower secondary school level and also functions as upper secondary schools.

Drop-out

The *net samples* are available from the data files for t1, t2 and t3. The data file for t1 includes 20 703 responders (see Pape et al., 2005). As explained in the section *From questionnaire to data file – t2 and t3*, the data file included 21 295 responders at t2 and 20 695 responders at t3.

The *gross samples* were calculated from a registration form that the schools filled out in connection with the data collection. Since some of the SIRUS contacts did not fill out this form, the size of the gross sample for some of the schools is somewhat uncertain. However, there is probably little difference between the number of pupils reported by the school originally, and the number of pupils at the school at the time of the data collection. After older pupils, and pupils who, according to the assessment of the teachers, could not participate in the study (pupils who could not speak Norwegian, and pupils in classes for children with special needs) were excluded from the samples, the gross samples were 26 712 at t1, 25 263 at t2 and 24 609 at t3. This gives a response rate of 77.5 at t1, 84.3 at t2 and 84.1 at t3.

For calculating the response rates presented in Tables 5 and 6, whole school grades and classes and groups that did not take part in the survey were deducted from the gross sample. This mainly represents a fortuitous drop-out. There is little probability that classes that for practical reasons did not take part in the survey are significantly different from other classes with respect to use of alcohol and drugs. The reasons why some school grades did not take part in the survey are as follows. One school excluded first-year and second-year upper secondary school pupils from the t1 survey because they meant that it was pointless to obtain written parental consent for upper secondary school pupils. Another school excluded first-year and second-year upper secondary school pupils from the t1 survey because they did not receive the questionnaire at the right time. One school excluded eighth grade pupils from the t1 and t2 surveys because they meant that these pupils were too young to answer questions

about use of alcohol and drugs (this included 573 pupils at t1 and 22 pupils at t2). In addition, whole classes and groups that did not take part in the survey were deducted from the gross sample (1 102 pupils at t1, 681 pupils at t2 and 472 pupils at t3). In some of the registration questionnaires, it was explained why these classes and groups had not participated. For example, some pupils had practice places outside the school, some pupils had places as apprentices and some were away on a class trip. After these changes had been made, the gross samples were 25 037 at t1, 24 560 at t2 and 24 137 at t3 which gives response rates of 82.7, 86.7 and 85.7 (see Table 5).

For lower secondary schools, the response rate was 86 per cent for all three data collections (see Table 5). For upper secondary schools, the response rate was lower at t1 (80 per cent) than at t2 (87 per cent) and t3 (85 per cent). This can partly be because we had to obtain written consent from parents and guardians at t1 for all pupils under 18 years of age. Many schools reported that this presented practical problems (see section *Experience gained from carrying out the questionnaire surveys*).

Table 5: Response rate¹, gross and net number of pupils according to type of school at t1, t2 and t3

Type of school	T1 ²			T2			T3		
	Gross	Net	%	Gross	Net	%	Gross	Net	%
Lower secondary	11 868	10 177	85.8	11 717	10 097	86.2	11 616	10 017	86.2
Upper secondary	13 169	10 526	79.9	12 843	11 198	87.2	12 521	10 678	85.3
<i>Total</i>	<i>25 037</i>	<i>20 703</i>	<i>82.7</i>	<i>24 560</i>	<i>21 295</i>	<i>86.7</i>	<i>24 137</i>	<i>20 695</i>	<i>85.7</i>

¹ Response rates were calculated for all the schools that participated (that is to say, 91 schools at t1, 85 schools at t2 and 82 schools at t3).

² There is a small difference between the gross sample size given in this table and that given in Pape et al. (2005). This is due to different methods of calculation.

Table 6 shows the response rate for each municipality. Most of the municipalities had a response rate between 80 and 90, but some had a lower response rate for one of the data collections. For lower secondary schools, the response rate was almost the same for test and control municipalities for all three data collections. For upper secondary schools, the response rate was lower at t1 for test municipalities than for control municipalities. There was also a difference at t3, but in the opposite direction.

Table 6: Response rate, gross and net number of pupils according to municipality/region at t1, t2 and t3

Municipality/region	T1 ¹			T2 ²			T3 ³		
	Gross	Net	%	Gross	Net	%	Gross	Net	%
Nesodden	959	756	78.8	1 484	1 203	81.1	1 461	1 208	82.7
Larvik	3 075	2 225	72.4	3 142	2 700	85.9	3 245	2 743	84.5
Haugesund	3 518	3 006	85.4	3 099	2 773	89.5	3 237	2 903	89.7
Narvik	1 616	1 327	82.1	1 393	1 197	85.9	1 390	1 157	83.2
Os	1 390	1 196	86.0	1 593	1 383	86.8	1 429	1 334	93.4
Sør Møre	1 864	1 535	82.3	1 818	1 596	87.8	1 799	1 601	89.0
<i>Total number of test municipalities</i>	<i>12 422</i>	<i>10 045</i>	<i>80.9</i>	<i>12 529</i>	<i>10 852</i>	<i>86.6</i>	<i>12 561</i>	<i>10 946</i>	<i>87.1</i>
<i>LSS test municipalities</i>	<i>6 229</i>	<i>5 347</i>	<i>85.8</i>	<i>5 968</i>	<i>5 091</i>	<i>85.3</i>	<i>5 756</i>	<i>4 988</i>	<i>86.7</i>
<i>USS test municipalities</i>	<i>6 193</i>	<i>4 698</i>	<i>75.9</i>	<i>6 561</i>	<i>5 761</i>	<i>87.8</i>	<i>6 805</i>	<i>5 958</i>	<i>87.6</i>
Andøy, Sortland	935	729	78.0	927	759	81.9	877	704	80.3
Askøy	1 148	981	85.5	1 157	1 032	89.2	656	581	88.6
Kristiansund	1 968	1 702	86.5	1 881	1 581	84.1	1 815	1 608	88.6
Stjørdal	1 684	1 393	82.7	1 719	1 523	88.6	1 938	1 423	73.4
Ålesund	4 188	3 616	86.3	3 526	3 039	86.2	3 151	2 720	86.3
Tønsberg	2 692	2 214	82.2	2 821	2 376	84.2	3 139	2 653	84.5
<i>Total number of control municipalities</i>	<i>12 615</i>	<i>10 635</i>	<i>84.3</i>	<i>12 031</i>	<i>10 310</i>	<i>85.7</i>	<i>11 576</i>	<i>9 689</i>	<i>83.7</i>
<i>LSS control municipalities</i>	<i>5 639</i>	<i>4 815</i>	<i>85.4</i>	<i>5 749</i>	<i>4 975</i>	<i>86.5</i>	<i>5 860</i>	<i>5 002</i>	<i>85.4</i>
<i>USS control municipalities</i>	<i>6 976</i>	<i>5 820</i>	<i>83.4</i>	<i>6 282</i>	<i>5 335</i>	<i>84.9</i>	<i>5 716</i>	<i>4 687</i>	<i>82.0</i>

¹The sum of the number of pupils who participated is 20 680 and not 20 703. The reason for this is that we did not have the school number for 23 pupils, so were unable to find out which municipality they belonged to. There is a small difference between the gross sample size given in this table and that given in Pape et al. (2005). This is due to different methods of calculation.

²The sum of the number of pupils who participated is 21 162 and not 21 295. The reason for this is that we did not have the school number for 133 pupils, so were unable to find out which municipality they belonged to.

³The sum of the number of pupils who participated is 20 635 and not 20 695. The reason for this is that we did not have the school number for 60 pupils, so were unable to find out which municipality they belonged to.

Participants

Table 7 presents a short description of the net samples from the three data collections. As can be seen, the gender and age distributions were almost the same for all three samples. About half of all the three net samples were made up of pupils from upper secondary schools. However, the proportion of pupils from upper secondary schools was slightly different in the test and the control municipalities, both at t1 and t3. Also, the proportion of pupils from

vocational training courses varied somewhat for the test and control municipalities. This was the case for t1, t2 and t3.

Table 7: Description of the net sample sizes in test municipalities (T) and control municipalities (C) at t1, t2 and t3

	T1			T2			T3		
	Both	T	C	Both	T	C	Both	T	C
Proportion of girls (%)	51	51	51	50	49	51	51	49	52
Mean age	15.4	15.3	15.6	15.5	15.5	15.5	15.5	15.6	15.4
Proportion of 13-18-year-olds (%) ¹	93	94	91	94	95	94	94	95	93
Proportion from USS (%)	51	47	55	52	53	52	52	54	48
Proportion from vocational subjects (%) ²	49	46	53	48	51	45	47	50	43

¹ The age range was from 12 to 20 years

² Calculated for upper secondary school pupils

Experience gained from carrying out the questionnaire surveys

At t1 we were required by the Norwegian Social Science Data Services (NSD) to obtain active (written) consent from parents/guardians for all pupils under 18 years of age, including pupils attending upper secondary school. There was great resistance from many of the SIRUS contacts to collecting active consent at the upper secondary schools, and many of them reported practical problems in obtaining this consent. Because of this, at one of the upper secondary schools, the people responsible excluded all pupils under 18 years of age from the t1 survey. After a new application to NSD, at t2 and t3 we were given permission to obtain active (written) consent only from parents/guardians of pupils attending lower secondary school.

At t1, it took a long time for SIRUS to find out which schools had participated in the survey, and which schools had not. Therefore, at t2 and t3, the scanning company was asked to send weekly reports to SIRUS about which schools they had received questionnaires from. This meant that we could follow up schools that had not sent in the questionnaires more quickly. This system worked well.

Taking into account the large number of pupils, parents and teachers who were involved in the survey, there were few reactions to the content of the questionnaire. Of the small amount of feedback we received, some was positive and some was negative.

Survey of preventive measures used in the schools

As a basis for interpreting the information we received from the pupils, we also surveyed preventive work in the field of alcohol and drugs in the schools that took part in the survey. The SIRUS contacts in all the schools were asked to fill out a questionnaire, if necessary in consultation with the head teacher or other members of the teaching staff. They were asked about preventive measures that had been used during the previous school year (at t1 we asked about the school year 2003/2004, etc.).

Questionnaire for teachers

Two questionnaires were developed, one for use in lower secondary schools and one for use in upper secondary schools. The difference between these two questionnaires was primarily that the list of preventive measures, used to record the preventive measures that had been used, was different for lower and upper secondary schools. Since there was a code for the school on the questionnaires for the pupils, data from the questionnaires for the schools could be merged with data for pupils from the individual schools.

In the light of experience from the first data collection, the school questionnaires were shortened considerably before carrying out the surveys at t2 and t3. For a description of the questionnaire we used at t1, see Pape et al. (2005).

1. Measures/activities for preventing use of alcohol, drugs and tobacco

In the first part of the questionnaire, we investigated whether the school had initiated any programmes/measures for preventing the use of alcohol and drugs among pupils during the previous school year, and if so, which programmes/measures. The teachers were given a list of appropriate programmes for the age group from the list of measures recommended to the test municipalities by the National Directorate for Health and Social Affairs and the programmes/measures that were assumed to be the ones most used in schools. In addition, there was space to describe other programmes/measures that had been used. Finally, they were asked whether use of alcohol and drugs had been a theme in the normal teaching.

2. Description of preventive measures/activities in the field of alcohol and drugs

This section contained questions about parental involvement in preventive work, and about who had provided information to parents about this theme. There were also questions about who had provided information to the pupils, and about how much time had been spent on the preventive measures/activities that had been used during the previous school year.

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