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LICIT AND ILLICIT DRUG USE IN AMSTERDAM II

Report of a household survey in 1994 on the prevalence of drug use among the population of 12 years and over

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Different Approaches

11.1 Introduction

It may be argued that it is important to investigate the effects of the application of other instruments. One reason for investigating the effects of (small) changes to the instrument applied, is technological progress that may help to obtain reliable response. More and more surveys are now making use of computer assisted methods. Interviews can easily be organized in such a way that response can be fed directly into a portable computer, thus achieving several gains in terms of reliability. A second reason to look at (slightly) different methods is that in surveys in which questions are asked that need some privacy in the interview situation in order to be answered correctly, the conditions should be created to guarantee that privacy. Here one might think of offering the interviewee the opportunity to administer the questionnaire him/herself. A third reason to look at different survey methods is '(future) international comparability'. Most surveys carried out in other countries have so far differed from those carried out in Amsterdam. The use of computers and the self-completion variation are examples of such differences. To improve the comparison of the results of the Amsterdam survey with those of other cities, insight into the effects of these variations has to be improved.

There are reasons to expect effects from a variation in the way people are approached. One can think of the existence of some population categories comprising people who are still somewhat 'afraid' of computers (the elderly), or of differences in terms of the specific answers given depending on whether or not the questionnaire is self-completed. It can reasonably be expected that the use of illegal drugs will be mentioned more often if the interviewee's privacy can be guaranteed. That expectation is supported by a recent publication of Aquilino (1994; see also Turner et al. 1992) on interview-mode effects in surveys of drug and alcohol use. He found a somewhat higher rate of admission of illicit drug use where interviewees were allowed to complete questionnaires themselves. He ascribed that effect to response anonymity. These effects were derived from analyses in the 37 largest Standard Metropolitan Statistical Areas in the United States. Only persons in the 18-45 age category were interviewed. Of that group, 25 per cent of those who came under the self-administered category stated that they had used cocaine at least once, whereas only 22 per cent of those who were personally interviewed admitted using it. However, American culture and the

attitudes of Americans to the use of drugs may well differ from that of Dutch culture and the attitudes of the Dutch, particularly of those living in Amsterdam. Harrell (1985) provides evidence from which it can be concluded that even within cultures differences may show up as far as the response to questions are concerned. She found that differences in personal values, expectations, and reference group norms appeared to be key factors in how willing respondents are to provide authentic answers. Harrison (1995) too pointed at such effects on the validity of the methodology used. She argued that valid self-reporting of drug use is a function of the recency of the event, but also of the desirability of the drug, and nuances of the data collection methodology. Various strategies may, in other words, have various effects on different response categories in various circumstances. It is important, therefore, that we too look at the effects of such variations in some detail, and that is the purpose of this chapter. We subdivided the sample into categories that had to be approached differently. Section 11.2 gives a brief comparison between those persons who participated in the so-called written version (the method we used in former years to measure drug use) and those who participated in the computer version. In Section 11.3 we focus attention on the difference between the interviewer-completed and the self-completed versions that were distinguished within the computer version approach. Section 11.4 summarizes the most relevant results.

11.2 Written versus computer version

The samples drawn from the population registry were randomly split into a subsample to be approached with a questionnaire printed on paper, and a subsample to be approached with a questionnaire displayed on the screen of a portable computer. Sample- and response differences from the general population were almost negligible.

In general, there are no important differences between the two versions as far as drug prevalence is concerned (Table 11.1a). The only significant differences were in the 'ever used' categories, but these were small. The computer version reveals somewhat higher prevalences in tobacco- and alcohol use, and the written version a significantly higher prevalence score for opiates and an insignificantly higher score for cannabis. At first sight these small differences seem to be related with small variations in response rates per age category. The written version response gives a slightly higher rate among persons in the 25-29 years old category, which is one of the categories with the highest cannabis-and opiates prevalence figures. The computer version has, relative to the written version, a higher share of respondents in the 30-34 and 60-69 years old categories, who together may be responsible for the somewhat higher tobacco- and alcohol rates. However, an age effect on the differences between the drug prevalence figures of the written- and the computer version could not be found. Nor did the effect of gender, lifestyle, education, ethnicity, labour-market position or type of household have an effect. In Table 11.1b the prevalence figures are presented once

Table 11.1 Prevalence of drug use, by fieldwork version (written or computer) A) non-standardised, and B) standardised on age, educational level and ethnicity

A: non-stand.	lifetime			last year			last month			N	
drug		written			written		computer	written		comp.	written
tobacco	68.3	64.8	•	45.2	45.1		41.4	40.3		2 184	2 169
alcohol	87.5	84.7	•	78.2	76.1		68.7	67.7		2 185	2 167
hypnotics	19.6	19.2		10.2	9.8		7.1	6.4		2 183	2 167
sedatives	19.4	21.0		8.8	9.6		5.2	5.9		2 183	2 150
cannabis	28.5	30.0		10.6	10.5		6.6	6.5		2 184	2 166
cocaine	6.8	6.9		1.8	1.7		0.6	0.9		2 185	2 139
amphetamines	4.6	4.8		0.6	0.4		0.3	0.2		2 185	2 165
ecstasy	3.1	3.2		1.5	1.5		0.5	0.8		2 185	2 124
hallucinogens	4.1	4.8		0.6	0.4		0.2	0.0		2 185	2 141
inhalants	0.9	1.3		0.3	0.1		0.1	0.1		2 185	2 159
opiates	6.5	8.9	•	1.9	2.3		0.6	0.3		2 185	2 179
heroin	1.2	1.4		0.3	0.2		0.0	0.0		2 185	2 179

B: standardised	lifetime			last year			last month			N	
drug		written			written		computer	written		comp.	written
tobacco	67.9	64.8	•	44.6	45.1		40.9	40.3		2 184	2 169
alcohol	87.0	84.7	•	78.0	76.1		70.3	67.7	•	2 185	2 167
hypnotics	19.7	19.2		10.2	9.8		6.9	6.4		2 183	2 167
sedatives	19.4	21.0		8.5	9.6		4.9	5.9		2 183	2 150
cannabis	28.9	30.0		10.5	10.5		6.8	6.5		2 184	2 166
cocaine	6.9	6.9		1.6	1.7		0.6	0.9		2 185	2 139
amphetamines	4.6	4.8		0.6	0.4		0.3	0.2		2 185	2 165
ecstasy	3.1	3.2		1.4	1.5		0.5	0.8		2 185	2 124
hallucinogens	4.2	4.8		0.6	0.4		0.2	0.0		2 185	2 141
inhalants	1.1	1.3		0.4	0.1		0.2	0.1		2 185	2 159
opiates	6.8	8.9	•	2.0	2.3		0.7	0.3		2 185	2 179
heroin	1.2	1.4		0.3	0.2		0.1	0.0		2 185	2 179

more, this time after the written- and computer versions have been made comparable (standardised) in terms of age, education and ethnicity. The differences are slightly smaller, but still significant. Clearly these differences beg for further analysis, in which the class effects of 'third' variables should be taken into account.

Table 11.2 shows some details with regard to the significant differences between the written- and computer versions, as well as some elaboration of the possible explanations of the differences. Without any weighting, three types of drugs (tobacco, alcohol and opiates) show lifetime prevalence figures that differ significantly between the written- and computer versions (Table 11.2a). Income and ethnicity appeared to be the only two variables significantly associated with the version (written, or computer) applied. Therefore, analyses have been repeated after weighting for income (Table 11.2b) and ethnicity (Table 11.2c). In both situations only small changes in percentages can be shown. Also the weighting on the basis of a combination of income and ethnicity does not result in significant

Table 11.2 Significant differences in prevalence of drug use by version, standardised and non-standardised

a (non-standardised)	computer	written
lifetime prevalence tobacco	68.3	64.8
lifetime prevalence alcohol	87.5	84.7
lifetime prevalence opiates	6.5	8.9

signficant differences for: income and ethnicity

b (standardised on income)	computer	written
lifetime prevalence tobacco	68.4	64.6
lifetime prevalence alcohol	87.7	84.4
lifetime prevalence opiates	6.5	8.9

signficant differences for: household status and ethnicity

c (standardised on ethnicity)	computer	written
lifetime prevalence tobacco	68.0	65.1
lifetime prevalence alcohol	87.3	85.3
lifetime prevalence opiates	6.5	9.0

signficant differences for: income

d (standardised on income and ethnicity)	computer	written
lifetime prevalence tobacco	68.2	64.8
lifetime prevalence alcohol	87.6	84.7
lifetime prevalence opiates	6.6	8.9

signficant differences for: household status

e (standardised on income, household status and ethnicity)	computer	written
lifetime prevalence tobacco	68.4	64.7
lifetime prevalence alcohol	87.8	84.7
lifetime prevalence opiates	6.7	8.8

signficant differences for: none

f (standardised on 'interviewed single')	computer	written
lifetime prevalence tobacco	68.7	64.8
lifetime prevalence alcohol	87.8	84.3
lifetime prevalence opiates	6.7	8.8

signficant differences for: income, household status and ethnicity

changes (Table 11.2d). Since in that situation a new significant relation shows up between type of household and version applied, an additional analysis was performed weighting on the basis of income, ethnicity and type of household. None of these variables, however, even in combination, appeared to reduce the

differences in LTP figures on tobacco, alcohol and opiates between the written- and computer version (Table 11.2e).
A close examination of various associations revealed that differences between the two versions in terms of the number of single persons present might provide an explanation for the different prevalence scores. In Table 11.2f the results are shown in a situation in which the type of household (single person or not) was taken into account. However, no effect was demonstrated.
Our conclusion must be that there are a few small but significant differences between the written version and the computer version applied in our research project. We tried to explain these differences by referring to small differences between the two sub-populations involved, but did not succeed. However, being aware of these differences (even though we are not able to explain them) will allow us from now on to compare results of research carried out using either one of the two ways described here, simply by applying a weighting procedure.

11.3 Self-completed version versus interviewer-completed version

Another variation in the method applied is related to the differences in the level of privacy or anonymity. Some people in the sample were asked to fill in the questionnaire him/herself, and others were interviewed personally. The comparison elaborated upon below refers only to the computer version. Table 11.3 shows some results in terms of the prevalence figures of the drugs involved. Although most differences are small and insignificant, others appeared to be significant. Lifetime prevalence of cannabis use is significantly higher in the self-completed version than in the interviewer-completed version. The same holds true for the 'last year' prevalence figures of the use of alcohol.
However, these differences, and also the insignificant differences appear to be strongly related to the specificity of the response group in each of the two versions. Apparently, some selectivity was developed as far as the method used. There appeared to be evident and significant differences between the self-completed version and the interviewer-completed version in terms of age category, ethnicity, labour-market position, education, type of household, income and lifestyle. Differences in terms of age category in particular seem to be important when interpreting the differences shown in Table 11.3a. The response group in the self-completed version is somewhat younger than the response group of the interviewer-completed version. Therefore the latter scores higher on sedatives and hypnotics, whereas the former scores higher on cannabis and (insignificantly) on cocaine, amphetamines and ecstasy.

While selectivity was not planned, it was allowed to develop. For example, if an old person was asked to fill in the questionnaire him/herself directly on the computer, and that person then asked the interviewer to input it for him/her, it was allowed. The same applied to people from specific ethnic origin (language problems) and educational level (reading skills). People from either group may have asked the interviewer to fill in the questionnaire, instead of doing it

Table 11.3 Prevalence of drug use, by interview version (self- or interviewer completion) A) non-standardised, and B) standardised on age, educational level and ethnicity

A non-stand. drug	lifetime self	lifetime interv.		last year self	last year interv.		last month self	last month interv.	N self compl.	N interv.
tobacco	66.4	69.7		43.4	46.5		39.7	42.6	901	1 283
alcohol	88.2	86.9		81.4	75.9	•	70.4	67.5	901	1 284
hypnotics	17.9	20.8		8.7	11.3		6.1	7.7	900	1 283
sedatives	17.5	20.8		8.5	9.1		5.0	5.3	899	1 284
cannabis	31.2	26.6	•	11.3	10.0		6.6	6.7	900	1 284
cocaine	7.7	6.2		1.3	2.1		0.3	0.8	901	1 284
amphetamines	4.9	4.4		0.4	0.8		0.3	0.2	901	1 284
ecstasy	3.8	2.6		1.9	1.2		0.7	0.5	901	1 284
hallucinogens	4.2	4.0		0.6	0.7		0.3	0.2	901	1 284
inhalants	0.7	1.1		0.0	0.5		0.0	0.2	901	1 284
opiates	6.5	6.5		1.9	1.9		0.6	0.6	901	1 284
heroin	0.9	1.5		0.3	0.3		0.1	0.2	901	1 284

B standardised drug	lifetime self	lifetime interv.		last year self	last year interv.		last month self	last month interv.		N self compl.	N interv.
tobacco	65.9	69.2		41.5	46.8	•	38.1	42.9	•	901	1 283
alcohol	86.3	87.5		79.1	77.3		70.8	69.9		901	1 284
hypnotics	18.8	20.3		9.4	10.7		6.9	6.9		900	1 283
sedatives	17.9	20.5		8.2	8.6		5.0	4.8		899	1 284
cannabis	28.3	29.4		10.1	10.7		6.3	7.2		900	1 284
cocaine	6.8	6.9		1.0	2.1		0.3	0.8		901	1 284
amphetamines	4.7	4.6		0.4	0.8		0.3	0.2		901	1 284
ecstasy	3.3	2.9		1.6	1.2		0.6	0.5		901	1 284
hallucinogens	3.9	4.4		0.4	0.7		0.2	0.2		901	1 284
inhalants	0.8	1.2		0.0	0.6		0.0	0.3		901	1 284
opiates	6.4	7.0		2.0	1.9		0.7	0.7		901	1 284
heroin	0.8	1.6		0.3	0.3		0.1	0.2		901	1 284

themselves. It was therefore expected that the resulting differences between the self-completed version and the interviewer-completed version were merely an effect of selectivity.
Therefore it was hardly a surprise that after correction for age category, ethnicity and education all connections between the use of drugs and the version applied disappeared (Table 11.3b).

11.4 Conclusion

In this chapter two varieties of interview approaches have been compared. One of the conclusions is that traditional approaches in which the questionnaire is printed on paper, and approaches in which the computer plays a central role, are providing small but significant differences that are not easy to explain.
Different strategies with regard to the way the questionnaire is completed (self-

or interviewer-completed) appear to be unimportant, if both categories which are to be compared are made comparable in terms of age, ethnicity and education. The differences that did show up in our comparison initially, had to be ascribed to selective processes during the interview phase rather than to the privacy/ anonymity aspect that was expected to be related to the self-completed version in particular, and which was also found in the American context (Aquilino 1994). Apparently, the inhabitants of Amsterdam are less sensitive to the anonymity aspect than are their North American counterparts.