Final Report for Alcohol Education & Research Council (Grant R05/2000)

# Alcohol & Gender

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# **ABSTRACT**

This reports describes some of the preliminary findings from the UK part of 'GENACIS.' The survey of 2,027 British adults that was conducted during 2000. The heaviest drinking women were aged 18-24 years, while the heaviest drinking men were older. People who had misused prescription drugs were more likely than others to have used illicit drugs, to be smokers and to report drug-related problems. Females who had used illicit drugs had a slightly elevated risk of higher alcohol consumption, male smokers who did not use drugs were more likely than other men to be drinking more heavily. Males were more likely than females to report that somebody had tried to influence them to cut down their drinking. This reflected a higher rate of alcohol problems among men than among women. Conversely women who had used illicit drugs were more likely than their male counterparts to report having experienced some form of adverse consequence related to this drug use. Respondents who were living with a partner were more likely than others to report that they had been influenced to reduce their alcohol consumption. Those who were living with a partner to whom they were not married were more likely than others to report having experienced alcohol problems. There was a weak association between low/moderate levels of stress and alcohol problems. Finally, a number of factors were associated with alcohol and drug problems, unwise or at risk drinking. These included gender, marital status and experience of sexual abuse. Respondents were asked to rate the enjoyable/non-enjoyable nature of their drinking experiences. Their replies were examined in relation to a number of variables. There was a curious relationship between enjoyment of drinking and the experience of the adverse consequences associated with heavy/inappropriate alcohol consumption. gender differences emerged in this respect. The latter suggest that among women there was a more logical association between consumption and enjoyment of drinking than was evident among men. There was sub-group of men who drank heavily, but who reported that their drinking experiences were not enjoyable. Work on this study is There will be additional reports on the UK part of this continuing. venture and on the overall international GENACIS exercise.

# **SECTION 1: INTRODUCTION**

The AERC has provided one third of the funding to support the UK part of a multi-country study now known as 'GENACIS. Two thirds of the funding has been provided by the Amsterdam Group.

GENACIS is the acronym for 'Gender, Alcohol and Culture: An International Study.' GENACIS is primarily concerned with issues around gender differences related to alcohol consumption among adults. It has developed from the activities of the International Research Group on Gender and Alcohol (IRGGA). The latter has met annually for nine years under the auspices of the Kettil Bruun Society for Social and Epidemiological Research on Alcohol. An initial European Study reanalysed existing data sets from studies of self-reported alcohol consumption and alcohol-related problems in nine countries all of which, apart from the Czech Republic, were in member countries of the European Union. This was a very inexpensive, yet productive, way of exploiting available information for agreed purposes. This collaboration was nevertheless, limited by the fact that the studies in question only contained a relatively small number of common variables (Bloomfield et al. 1999, Plant et al. 2000).

GENACIS, rather like the European School Survey on Alcohol and other Drugs (ESPAD), has been conceived to investigate topics that are of international concern using agreed questionnaire items that will generate comparable survey data from new studies. The participants have agreed to use at least elements of a common questionnaire/interview schedule in their own national surveys. This questionnaire includes items on biographical details, alcohol, tobacco, illicit and prescribed drug consumption and both the positive and negative consequences associated with drinking, together with information about social networks, health and lifestyle, experience of violence/victimisation and abuse.

The GENACIS survey differs from ESPAD (also AERC-funded) in that it is a 'template design.' This means that there are three levels of involvement in each section from which researchers may choose: firstly, a core level which includes two or three questions on each topic, secondly, an expanded core, which includes a few more questions at greater depth and, thirdly, a much broader level which includes questions

which have already been validated and found reliable. This three level structure will enable researchers to become involved to the extent that it suits their personal or national agendas. Such researchers include those who are not primarily concerned with alcohol. Such people may include some GENACIS items in studies mainly that are mainly related to other topics. GENACIS participants may use an optional number of questions or scales related to themes that are of particular interest to them.

The participating countries include Australia, Canada, the Czech Republic, Finland, France, Germany, Israel, Italy, Japan, Mexico, the Netherlands, Nigeria, Russia, Sweden, the UK and the USA.

The main advantages of the types of collaboration involved in both ESPAD and GENACIS are as follows: Some questions have international significance, or can only be answered in the context of comparative investigation and evidence. The design and conduct of studies employing at least partly uniform approaches (e.g. questionnaire items, choice of subjects, sampling procedures) greatly extends the degree to which information elicited in widely varied social contexts may be compared. Studies of this type are vital to comparing and monitoring changing patterns of the use and problems associated with alcohol and other drugs across national boundaries.

The main disadvantages of studies of this type are that it is not possible to include every item or feature that all of the collaborating researchers would like. Agreed items and procedures emerge from discussions and arguments, which invariably culminate in compromise or the adoption of a majority view. Moreover, research has to be carried out in varied national contexts. The latter include differences in research resources, expertise and experience, money, and a host of situational factors, many of which are constraints. It is not the same thing to attempt to carry out a survey in a country as vast as Russia as it is to conduct 'the same study' in Iceland or the UK. A host of cultural factors need to taken into account, not only in the conduct of research in different countries, but also in relation to the interpretation of study findings. This is one of the reasons for a template design. The latter will enable researchers in different countries to include only a few questions, but which still allow for some robust comparisons.

This report describes progress on this study to date. The AERC provided one year's support from October 1<sup>st</sup>, 2000. Work is continuing thanks to additional support from the Amsterdam Group. At the time of writing several publications have been produced (Plant and Plant in press a,b,c;

Plant, Plant and Mason in press & submitted; Plant, Thornton and Plant in Press). The main substantive findings to emerge so far have been explored in two papers that are described below (Plant, Plant and Mason, in press & submitted). These relate to the following topics:

◆ The survey and its initial findings (Section 3) page 5

♦ People who enjoy drinking (Section 4) page 21

# **SECTION 3: THE SURVEY AND ITS INITIAL FINDINGS**

#### **BACKGROUND**

The use of alcohol, tobacco and illicit drugs has seldom been examined by using comparable survey methods in different countries. Notable exceptions include studies of teenagers and young adults (Hibell et al. 1997, 2001, Currie et al. 2000). There has long been considerable concern about the impact of heavy and inappropriate drinking among women (Plant 1997, Wilsnack and Wilsnack 1997). An initial collaborative international European study of gender differences related to alcohol consumption and related problems was completed in 1999 (Bloomfield et al. 1999, Plant et al. 2000).

As noted above, the International Research Group on Gender and Alcohol (IRGGA) (now known as GENACIS) has nowinitiated an international comparative study on gender and alcohol. This section describes some of the initial findings of the UK part of this study. The original European study analysed existing survey data sets. It was agreed to build upon this preparatory work with the conduct of a number of new surveys in several countries using at least elements of a common interview schedule. The survey reported here was designed to examine patterns of self-reported alcohol, tobacco and other drug use and the associated consequences of such use among adults within this comparative framework. It should be noted that general population surveys of the type reported here serve a valuable 'sentinel' function by indicating current patterns and monitoring trends in alcohol consumption and associated adverse effects. This type of information may be invaluable for planning clinical and other responses to alcohol, tobacco and illicit drug-related problems. Inevitably, however, such studies are limited by factors such as nonresponse and by inaccurate self-reports by some respondents.

addiction surveys only describe past or current behaviours and other Their findings inevitably become 'outdated' very quickly. items. Accordingly, survey findings should be treated with caution and interpreted in the light of whatever other information is available. In the United Kingdom such studies have only been carried out occasionally in relation to alcohol, tobacco or illicit drugs. Moreover, some invaluable and important studies (such as the General Household Survey) only include a very limited number of items on these topics. Possible gender differences have been paid little attention in some previous studies. Some studies, even after collecting information about both genders, have not analysed the data separately for females and males. Available UK evidence suggests that overall per capita alcohol consumption has not changed much in the past 20 years, but that alcohol-related morbidity and mortality have been rising. In addition, it has been suggested that heavy drinking among British women has been increasing disproportionately (compared with men) since the 1980s (Bridgewood et al. 2000, Plant and Cameron 2000).

Cigarette smoking among British adults has declined markedly in recent decades. Moreover, the gender gap has almost disappeared. In 1974 41% of women and 51% of men smoked. By 1998 the corresponding proportions of current smokers were 26% of women and 28% of men. (Thomas et al. 1998, Bridgewood et al. 2000).

There is no doubt that levels of illicit drug use and its related problems, as indicated by survey findings, together with official statistics for addict notifications and drug convictions, have been rising steadily (Ramsay and Spiller 1997, Ramsay and Partridge 1999, Corkery 2001). Moreover UK teenagers report exceptionally high rates of illicit drug use, periodic heavy drinking and intoxication and early tobacco smoking (Hibell et al. 1997, 2001, Miller and Plant 2001).

#### SUBJECTS AND METHODS

This study involved a single-phase, cross sectional survey of a sample of adults aged 18 and over in Britain. Subjects were selected at 267 geographically representative sampling points in England, Scotland and Wales. There are 10,529 census wards in Britain. For the purposes of this investigation these were stratified by region, urban/rural nature and social class. Respondents were selected at 267 sampling points by an interlocking quota to be representative of the general population in

relation to age and gender. In addition, a parallel quota on socioeconomic status was also imposed.

Fieldwork was conducted by trained interviewers who administered a standardised interview schedule. Fieldworkers conducted most interviews 'in-home' (in respondents' homes). Most of the interview was verbal, but more sensitive items were explored using Computer Assisted Personal Interview (CAPI). In addition respondents who preferred to do so were permitted to self-complete the entire interview using CAPI rather than to answer any oral questions. The latter enabled respondents to answer questions using laptop computers. CAPI is believed to increase item response rates and also safeguards confidentiality. Fieldwork was complemented by seven 'hall tests' undertaken in London, the South East of England and East Anglia. This involved bringing respondents into survey offices to complete the interviews. The interview procedure generally took approximately 25-30 minutes to complete. A total of 267 interviewers covered the 'in-home' sampling points, filling quotas of six or 12 interviews. In addition 62 interviewers worked on the seven hall tests.

During interview respondents were asked a series of questions about biographical/demographic details, drinking habits, the use of tobacco, illicit and prescribed drugs, together with questions on topics such as social networks, health and lifestyle, sexuality and intimacy, the experience of violence/victimisation and abuse. The interview schedule also included questions on who might have tried to influence respondents to reduce their alcohol consumption as well as adverse consequences that respondents attributed to alcohol and illicit drugs. These items were used to construct three scales as follows:

# Influences on Drinking Scale (8 items)

The following people had tried to influence them to reduce their drinking in the past year: their partner; their child or children; another female relative; another male relative; somebody at work or school; a female friend or acquaintance; a male friend or acquaintance; a doctor or health worker.

# Alcohol Problems Scale (22 items)

Experiences in past year: had so much to drink that it was hard to speak clearly or to walk steadily; had a headache or felt nauseated as a result of drinking; had a feeling of guilt or remorse after drinking; been unable to remember what happened the night before due to drinking; failed to do what was normally expected because of drinking; needed a first drink in

the morning to get going after a heavy drinking session; been unable to stop drinking once having started; tried to cut down drinking; *Drinking had harmed the following*: work, studies or employment; housework or chores around the house; marriage/intimate relationships; relationships with other family members, including children; friendships or social life; physical health; finances; *Having had the following experiences due to drinking:* trouble with law about drinking and driving; contributed to an accident in which somebody was hurt; had illness that prevented working or regular activities for a week or more; lost, or nearly lost a job; partner or someone they lived with threatened to leave or actually left; lost a friendship; been in a fight.

For both of the above scales, the data as recorded in the survey instrument were coded as 1=No, 2=Yes (once or twice), 3=Yes (Three or more times). These data were dichotomised to No = 0, Yes (2 or 3) = 1 to facilitate multiple response analysis.

These scales were also aggregated across the 8 items for the Influences on Drinking Scale and 22 items for the Alcohol Problems Scale giving the total of negative effects experienced by the respondent.

# Drug Problems Scale (5 items):

Having had any of the following drug-related problems in the past year: Social; health; financial; legal; other.

#### **RESULTS**

The survey was conducted between October 27th and November 12th 2000. The number of interviews required was 2,000. Information was elicited from 2,027 people out of 2,052 set. A total of 1,052 respondents, 51.9%, were females and 975, 48.1%, were males. There was some internal non-response to specific items included in the interview, so the totals presented below vary.

# **Alcohol Consumption**

A total of 91% (n=887) of males and 85% (n=890) of females reported that they consumed alcoholic beverages at least occasionally. The difference in consumption between the sexes was significant (Chi sq =23.113, n=2027, df = 2, p<0.005). Seventy three per cent of those who did sometimes drink (65% (n=582) of the females and 80% (n=707) of the male drinkers) had consumed alcohol in the previous week. The

mean alcohol consumption levels of females and males that had drunk in the past week were 9.5 units and 19.3 units respectively. Table 1a shows the proportions of those of either sex who had exceeded 'sensible'/ 'low risk' amounts of alcohol as delineated by UK medical colleges (e.g. Royal College of Psychiatrists 1986) in the past week (14 units for females and 21 units for males). These definitions and those for high risk drinking noted below are currently those endorsed by many researchers and clinicians (e.g. Royal College of Physicians 2001). It should be noted that rather different guidelines were recommended in 1995 in spite of strong advice to retain the existing ones (Interdepartmental Working The original definitions are employed for the purpose of some of the analyses presented in this section. This facilitates comparison with several other UK studies. A UK 'unit' or 'standard drink' is equivalent to one centilitre/7.9 grams of absolute alcohol. Each unit is equivalent to half a pint of 'normal strength' beer/cider/ lager/stout, to a single bar measure of spirits or to a glass of wine. As this table shows a minority of males of all ages (ranging from 4-14%) were drinking above the 'sensible' or 'low-risk' levels. Among females, however, only among those up to the age of 64 (3-12%) were drinking in this way. Younger people of either sex were significantly more likely to report drinking above the sensible levels (Females: Chi sq=29.193. n=1052, df=7, p<0.005, Males: Chi sq=19.681, n=975, df=7, p<0.05) Table 1b shows the proportions of respondents who were drinking at 'high-risk' levels (Royal College of Psychiatrists, op cit.). These levels were 36 or more units in the past week for females and 51 or more units in the past week for males. As this table shows, between 3-6% of men at all ages and between 1-8% of women aged 18-64 reported high-risk drinking. No older women were drinking at this level. Overall, 5% of men and 2% of women were drinking at high-risk levels. In relation to women, the greatest proportion of high-risk drinkers was among those aged 18-24 years and was significantly higher up to age 54 (Chi sq=23.254, n=1052,df=7, p<0.005). Among men the greatest proportion of high-risk drinkers was much older, being in the 35-54 age group (Plant and Plant 2001). However, age related at-risk drinking was not significant in men.

Table 1a: Percentages of all respondents exceeding 'sensible' levels of alcohol consumption

Age	18-24	25-34	35-44	45-54	55-64	65-74	75 &
							over
Male	14	12	13	11	8	6	4

%							
Female	12	4	4	3	3	0	0
%							

Table 1b: Percentages of all respondents drinking at 'high risk' levels

Age	18-24	25-34	35-44	45-54	55-64	65-74	75 &
							over
Male	5	5	6	6	4	3	4
%							
Female	8	3	3	3	1	0	0
%							

# **Tobacco Smoking**

A total 39% of males and 35% of females reported having smoked tobacco in the past 30 days. Levels of self-reported smoking by men and women were significantly higher in the 18-54 age group than in the over 55s (Females – Chi sq = 44.121, n=1052, df=7, p<0.005, Males – Chi sq = 47.584, n=975, df=7, p<0.005).

This finding is in line with previous research. The 1998 General Household Survey, for instance, showed that among those aged 20-24 years, 39% of women and 42% of men smoked. By comparison, in the present study, among those aged 18-24 years, 46.2% (n=49) of women and 49% (n=57) of men reported smoking. (Table 2)

Table 2 - Levels of smoking in the past 30 days by gender and age group

				Respond Smo		
Gender				No	Yes	Total
Female	Respondents	Not stated	n	12	2	14
	age group		% within Respondents age group	85.7%	14.3%	100.0%
		18 - 24	n	57	49	106
			% within Respondents age group	53.8%	46.2%	100.0%
		25 - 34	n	103	74	177
			% within Respondents age group	58.2%	41.8%	100.0%
		35-44	n	131	98	229
			% within Respondents age group	57.2%	42.8%	100.0%
		45 - 54	n	122	65	187
			% within Respondents age group	65.2%	34.8%	100.0%
		55 - 64	n	107	40	147
			% within Respondents age group	72.8%	27.2%	100.0%
		65 - 74	n	84	24	108
			% within Respondents age group	77.8%	22.2%	100.0%
		75+	n	71	13	84
			% within Respondents age group	84.5%	15.5%	100.0%
	Total		n	687	365	1052
			% within Respondents age group	65.3%	34.7%	100.0%
Male	Respondents	Not stated	n	5	7	12
	age group		% within Respondents age group	41.7%	58.3%	100.0%
		18 - 24	n	59	57	116
			% within Respondents age group	50.9%	49.1%	100.0%
		25 - 34	n	100	90	190
			% within Respondents age group	52.6%	47.4%	100.0%
		35-44	n	127	80	207
			% within Respondents age group	61.4%	38.6%	100.0%
		45 - 54	n	97	76	173
			% within Respondents age group	56.1%	43.9%	100.0%
		55 - 64	n	82	39	121
			% within Respondents age group	67.8%	32.2%	100.0%
		65 - 74	n	83	17	100
			% within Respondents age group	83.0%	17.0%	100.0%
		75+	n	46	10	56
			% within Respondents age group	82.1%	17.9%	100.0%
	Total		n	599	376	975
			% within Respondents age group	61.4%	38.6%	100.0%

# **Misuse of Prescribed Drugs**

Nine per cent of females (n=95) and six per cent of males (n=62) reported having used a prescription medication in a way other than that in which it had been prescribed in the past year. Among both males and females, those reporting misuse of prescription drugs were also significantly more likely to be using illicit drugs. 31.3% of females who misused

prescription drugs (n=25 and 2.4% of total females) also used recreational drugs (Chi sq=52.540, n=1052, df=2, p<0.005) Among males, 33% of those misusing prescription drugs (n=21 and 2.2% of all males) were also using recreational drugs (Chi sq=17.216, n=975, df=2, p<0.005). Among female smokers, 41.1% (n=39 and 3.2% of all females) of those misusing prescription drugs were also smokers.(Chi sq=12.029, n=1052, df=2, p<0.005, and among males, 56.5% (n=35 and 3.6% of all males) of those misusing prescription drugs were also smokers (Chi sq=17.502, n=975, df=2, p<0.005). Among women, 5.3% (n=5 and 0.5% of all women) who were misusing prescription drugs were also reporting drug related problems (Chi sq=17.983, n=1052, df=2, p<0.005) and among men, 12.9% (n=8 and 0.8% of all men) who misused prescription drugs also reported drug related problems(Chi sq=67.390, n=975, df=2, p<0.005). There were no significant differences in relation to age of respondent or reported alcohol-related problems

# **Illicit Drug Use**

Overall, 17% of males and 8% of females reported having used illicit drugs (mainly cannabis) in the past year. As expected, use was strongly influenced by age, with younger people being far more likely to have used drugs in the past year than older individuals. Amongst those aged 18-24, 41% of males and 34% of females had done so. Amongst those aged 25-34 years, the corresponding proportions were 29% of males and 14% of females. Levels of use declined steadily and markedly in older groups. Amongst those aged 55 years and over, no more than two per cent of males and one per cent of females reported illicit drug use in the past year.

Overall levels of past year's legal and illicit drug use reported by respondents are summarised in Table 3:

Table 3- Use/misuse of psychoactive drugs in the past year

	Fem	ales	ales	
Type of drug	N	%	N	%
Alcohol	890	85	887	91
Tobacco*	365	35	376	39
Misuse of prescribed drugs	95	9	62	6
Illicit drugs	80	8	153	16

<sup>\*</sup>Smoking in past 30 days

A more detailed summary of past year's illicit drug use is presented in Table 6.

# Associations Between Alcohol, Tobacco and Drug Use

Respondents' alcohol consumption was classed as non-drinker (0 units), normal, unwise or at risk as described above. The relationship between smoking, drug use, alcohol and gender was examined. Female smokers who used illicit drugs had a slightly elevated level of at risk alcohol consumption (Chi sq = 7.839, n=80, df=3 p<0.05). Male smokers who did not use illicit drugs were more likely to be drinking unwisely or at risk than non-smokers and non drug users (Chi sq = 16.419, n=822, df=3, p<0.005)

# **Alcohol and Drug-Related Problems**

A total of 266 drinkers (4.8% of females and 8.8% of males) reported having been influenced by others to cut down their drinking. Many of these, 45.5%, reported that the influential person had been their partner. Female relatives (29.3%) and friends (26.7%) were the next most likely to be cited as having tried to exert such influence. Females were more likely than males to be influenced by children, a female family member or a female friend while males were more likely than females to be influenced by someone at work, a male friend or a doctor (Table 4). Note that respondents in general may respond to any or all of the questions n this scale and the table shows the number of respondences to each question. The total is the total number of respondents and the percentages are based on the total responding to an individual question as a percentage of the total respondents.

Table 4 Influences on Drinking Scale

			Gen	der			Total
		F	emale		Male		
		n	Column %	n	Column %	n	Column %
Alcohol	Influenced by Partner	43	45.7	78	45.3	121	45.5
Problem	Influenced by Children	3	3.2	3	1.7	6	2.3
Scale	Influenced by Female family member	32	34.0	46	26.7	78	29.3
	Influenced by Male Family Member	19	20.2	36	20.9	55	20.7
	Influenced by Someone at Work/School	10	10.6	25	14.5	35	13.2
	Influenced by Female Friend	34	36.2	37	21.5	71	26.7
	Influenced by Male Friend	16	17.0	38	22.1	54	20.3
	Influenced by Doctor/Health Worker	18	19.1	41	23.8	59	22.2
Total		94		172		266	

Reported figures are numbers of respondents. Column percentages are % of cases.

A total of 907 drinkers (400 female, 507 male) reported having experienced negative effects related to alcohol consumption. Of these

517 (57%) overall (48% of females and 64.1% of males) reported having had so much to drink that it was hard to speak clearly or walk properly and 762 (84%) reported hangover effects. A further 355 (39.1%) overall (27.5% of females, 48.3% of males) reported being unable to remember what had happened while drinking.

Among the 275 (94 females, 181 males) who reported harmful effects on their home life, 150 (54.5%) overall (43.6% females, 60.2% males) reported harmful effects on their finances, 92 (33.5%) overall (41.5% females, 29.3% males) on their housework and/or chores and 89 (32.4%) overall (26.6% females, 35.4% males) reported harmful effects on their physical health.

A total of 163 (34 female, 129 male) drinkers reported some level of social impact with involvement in fights being the main problem, reported by 126 respondents (77.3%) overall (79.4% female, 76.7% male)

The results for the three scales are summarised in Table 5. Note that respondents in general may have replied to any or all of the questions in this scale and the table shows the number of responses to each question. The total is the total number of respondents and the percentages are based on the total responding to an individual question as a percentage of the total respondents.

Table 5 Alcohol Problems

			Gend	der			Total
		F	emale		Male		
		n	Column %	n	Column %	n	Column %
Alcohol	Drunk & incoherent	192	48.0	325	64.1	517	57.0
Problems	Hangov er	351	87.8	411	81.1	762	84.0
- Negative Impacts	Guilt/remors e	109	27.3	143	28.2	252	27.8
impacts	Memory loss	110	27.5	245	48.3	355	39.1
	Failed expectations	79	19.8	144	28.4	223	24.6
	Needed a morning drink	13	3.3	34	6.7	47	5.2
	Unable to stop	57	14.3	111	21.9	168	18.5
Total		400		507		907	
Alcohol	Work/studies/employ ment opportunities	16	17.0	46	25.4	62	22.5
Problems	Housework/chores	39	41.5	53	29.3	92	33.5
- Harmful Effects	Marrage/intimate relationships	28	29.8	48	26.5	76	27.6
Lilecis	Other family relationships	14	14.9	26	14.4	40	14.5
	Friendships/Social life	7	7.4	37	20.4	44	16.0
	Phy sical Health	25	26.6	64	35.4	89	32.4
	Finances	41	43.6	109	60.2	150	54.5
Total		94		181		275	
Alcohol	Drunk Driving	3	8.8	18	14.0	21	12.9
Problems	Accident	3	8.8	16	12.4	19	11.7
- Social	Drink-related illness	4	11.8	10	7.8	14	8.6
Impacts	Loss/Near loss of employment	1	2.9	8	6.2	9	5.5
	Broken partnership	6	17.6	14	10.9	20	12.3
	Loss of friendship	5	14.7	27	20.9	32	19.6
	Fighting	27	79.4	99	76.7	126	77.3
Total		34		129		163	

Reported figures are numbers of respondents. Column percentages are % of cases.

A total of 233 respondents reported use of illicit drugs in the past year. Of these, 89% (203) overall (82.5% female, 92.8% male) the vast majority, had used cannabis. Cocaine (16.7% overall, 11.3% female, 19.6% male), Ecstasy (15.9% overall, 13.8% female, 17% male) and Amphetamines (12.4% overall) were the next most popular drugs of choice (Table 6).

Table 6 - Illicit Drug Use

			Gen	der			Total
		ı	emale		Male		
		n	Column %	n	Column %	n	Column %
Recreational	Cannabis	66	82.5	142	92.8	208	89.3
Drug Use	Amphetamines	10	12.5	19	12.4	29	12.4
	Cocaine	9	11.3	30	19.6	39	16.7
	Ecstacy	11	13.8	26	17.0	37	15.9
	Glues or Solvents			2	1.3	2	.9
	Heroin	1	1.3	2	1.3	3	1.3
	LSD (Acid)	4	5.0	12	7.8	16	6.9
	Tranquillisers or sedatives	8	10.0	4	2.6	12	5.2
	Magic Mushrooms	3	3.8	12	7.8	15	6.4
	Morphine	1	1.3	2	1.3	3	1.3
	Opium			2	1.3	2	.9
	Methadone	1	1.3	2	1.3	3	1.3
	Other	5	6.3	11	7.2	16	6.9
Total		80		153		233	

Reported figures are numbers of respondents. Column percentages are % of cases.

Among this group, only 24 (11 female, 13 male) respondents reported problems in relation to their drug use. Fifty eight per cent (45.5% female, 69.2% male) of these reported health problems and a further 41.7% (45.5% female, 38.5% male) reported financial problems. (Table 7). Note that respondents in general may respond to any or all of the questions in this scale and the table shows the number of respondents to each question. The total is the total number of respondents and the percentages are based on the total responding to an individual question as a percentage of the total respondents.

Table 7 - Problems caused by illicit drug use

			Gen	der			Total
		F	emale		Male		
		n	Column %	n	Column %	n	Column %
Problems	Social Problems	6	54.5	3	23.1	9	37.5
caused by	Health Problems	5	45.5	9	69.2	14	58.3
recreational	Financial Problems	5	45.5	5	38.5	10	41.7
drug use	Legal Problems			3	23.1	3	12.5
	Other Problems						
Total		11		13		24	

Reported figures are numbers of respondents. Column percentages are % of cases.

The relationship between the above three problem scales and drinking, smoking, illicit drug use and the misuse of prescribed drugs were examined. In all cases, only those respondents who stated that they ever drank alcohol, who misused prescription drugs or who had used at least one illicit (recreational) drug were included in the analysis.

More male drinkers (8.8%) than female drinkers (4.8%) reported that someone had tried to influence their drinking. These differences were significant (Chi sq=10.991, n=1777, df=1, p<0.005) Male drinkers (60.9%) were also significantly more likely than female drinkers (46.7%) to report problems resulting from alcohol consumption (Chi sq=35.724, n=1777, df=1, p<0.005). Among illicit drug users, 8.5% of males and 13.8% of females reported problems related to their drug usage. There was little variation attributable to age among all drinkers concerning others trying to influence their drinking. However, those between 18 and 44 were significantly more likely to report problems resulting from their drinking (Chi sq=316.662, n=1777, df=7, p<0.005). There was no significant variation between different age groups in relation to reported drug problems.

Those cohabiting (married or living with a partner) were more likely to have been influenced to cut down their drinking with little variation in significance between females (Chi sq = 12.825, n=1052, df=5, p<0.05) and males (Chi sq = 12.889, n=975, df=6, p<0.05). Those who were living with a partner but not married were more likely to report alcohol-related problems again with little variation between female (Chi sq = 110.870, n=1025, df = 5, p<0.005) and males (Chi sq = 104.016, n=975, df = 6, p<0.005). There was a relatively weak relationship between reported stress and reported attempts by others to influence alcohol consumption. Drinkers who were a little or somewhat stressed were more likely to report having been influenced by others to cut down drinking. There was little variation between females (Chi sq=9.109, n=1025, df=3, p<0.05) and males (Chi sq=8.912, n=975, df=3, p<0.05). There was no significant association between tobacco use and increased level of alcohol or drug-related problems.

# **Prediction of Alcohol and Drug Related Problems**

Stepwise multiple regression was used to try to establish predictive models for alcohol problems, drug problems and at risk and unwise drinking. The factor set included in the regressions, from which the regression model in each case was established, included the following

- Gender
- Level of academic achievement
- Marital status
- State of partner relationship
- Age group
- Experience of sexual abuse
- Smoking
- Abuse of prescription drugs
- Use of illicit drugs
- Overall alcohol consumption

State of relationship had no significance in any of the models. Gender, marital status and illicit drug use are all contributory factors in the majority of drink related issues. Use of drugs provides the only predictor of drug related problems. The summary results from this regression analysis are shown in Table 8.

**Table 8 - Summary of regression models** 

		DEPEN	DENT VAR	IABLES	
Factor	Influences on Drinking Scale	Alcohol Problem Scale	Unwise Drinking	At Risk Drinking	Drug Problems
Adjusted R2	0.127	0.401		0.494	0.221
Gender Regression Coefficient Beta		0.229 0.045	-0.0381 -0.053	-0.0517 -0.144	
Level of academic achievement Regression Coefficient Beta			-0.0078 -0.040		
Marital status Regression Coefficient Beta	0.0414 0.089	0.217 0.137	0.0073 0.033		
Age group Regression Coefficient Beta		-0.266 -0.167			
Experience of sexual abuse Regression Coefficient Beta	0.225 0.105	0.793 0.108			
Smoking Regression Coefficient Beta		0.403 0.076			
Abuse of prescription drugs Regression Coefficient Beta			-0.56 -0.042		-0.0915 -0.0147
Use of illicit drugs Regression Coefficient Beta	0.103 0.097	0.586 0.162		0.0245 0.097	0.102 0.434
Overall alcohol consumption Regression Coefficient Beta	0.0132 0.260	0.0675 0.389	0.0192 0.785	0.0085 0.692	

#### **DISCUSSION**

This study has indicated the existence of some important gender differences. As noted above, the heaviest drinking sub group of women were aged 18-24 years, while the heaviest drinking men were older. This may simply reflect the obvious possibility that marriage and family commitments may cause women to cut down their drinking more than males in a similar situation (Plant 1997, Wilsnack and Wilsnack 1997). Conversely, this may be indicative of a cohort effect whereby this particular group of women will remain heavier drinkers as they mature. This finding in relation to women is broadly similar to that reported previously by Bridgwood et al. (2000). The latter, commenting on the 1998 British General Household Survey, concluded that the heaviest drinking sub group of women were aged 16-24 years. Bridgwood et al. also found that the heaviest drinking among men also those aged 18-24 years. This is different from the pattern among males in the present study that was conducted two years later. The overall levels of smoking noted in the present study were rather higher than those reported by Bridgwood et al. op cit. To some extent at least these differences probably reflect different sampling procedures.

The levels of illicit drug use in the past year reported by respondents in the present study (8% of females and 17% of males) were very similar to those (8% of females and 14% of males) noted by Ramsay and Partridge (1999). The latter described the findings of the British Crime Survey. This related to people aged 16-59 years and had been carried out in 1998. The similarity between these findings is remarkable since the age groups covered by the two studies differed slightly. It should be noted that, while drug use has clearly been rising in the UK in recent decades, there is some evidence to suggest that drug use among at least some groups of young people may have declined (Plant and Miller 2000).

Males in the present study were more likely than females to report that somebody had tried to influence them to cut down their drinking. This reflected a higher rate of alcohol problems among men than among women. Conversely women who had used illicit drugs were more likely than their male counterparts to report having experienced some form of adverse consequence related to this drug use. Respondents who were living with a partner were more likely than others to report that they had been influenced to reduce their alcohol consumption. Those who were living with a partner to whom they were not married were more likely than others to report having experienced alcohol problems. There was a weak positive association between low/moderate levels of stress and

alcohol problems. As shown in table 7, there were a number of significant factors associated with alcohol and drug problems, 'unwise' and 'at risk' drinking. Such factors included gender, marital status and experience of sexual abuse. The findings reported above emphasise the existence of some striking gender differences in not only patterns of self-reported substance use, but in relation to the inter-relationships between such patterns, the adverse consequences of use and a number of related social factors such as experience of abuse and the people who had influenced an individual's drinking.

More generally, this study supports previous evidence indicating that a substantial proportion of adult drinkers in Britain sometimes experience The findings suggest that some of the social adverse consequences. correlates of problematic drinking may vary between females and males. The pattern of results reported above only related to a sample who were interviewed in the year 2000. These findings may not predict the future behaviours of these individuals. Even so, it is also possible that the drinking patterns noted above do have some implications for the future. If so, there may be an increase in demand for services for women with alcohol-related problems, as well as for additional services for women and men with problems associated with illicit drugs. The present study is consistent with the general fall in tobacco user that has been evident in recent decades. Nevertheless, tobacco seems likely to remain by far the biggest drug-related health problems confronting British adults. Sadly, most recent attempts to curb problems associated with alcohol, or illicit drugs have not produced significant results. Far more needs to be done to make progress on this front.

In summary, the main gender differences emerging from the preceding analysis were as follows:

- The highest proportion of female 'high risk' drinkers were aged 18-24 years, while their male counterparts were aged 35-54 years.
- Females were less likely than males to report that somebody had tried to influence them to reduce their drinking.
- Females were much less likely than males to have used illicit drugs in the past year.
- Females who had used illicit drugs were more likely than males to report adverse consequences.

Note: The preceding findings are due to be published as a feature article in *The Journal of Substance Use* (Plant, Plant and Mason, in press).

# **SECTION 3: PEOPLE WHO ENJOY DRINKING**

The positive aspects of drinking have been examined in a number of studies over the years (Mäkelä and Mustonen 1988, Hall 1996, Peele and Grant 1999). However, most social and behavioural alcohol research has generally been primarily concerned with consumption patterns and with their associated health and social problems. The latter are the main concern of the present study (Plant, Plant and Mason op cit.). Even so, the current investigation also examined positive experiences with alcohol. This section considers survey findings related to this topic.

#### **METHODS**

The subjects and methodology of this study has been described in the previous section of this report. During interview, respondents were asked a series of questions about biographical/demographic details, drinking habits, the use of tobacco, illicit and prescribed drugs, together with questions on topics such as social networks, health and lifestyle, sexuality and intimacy, the experience of violence/victimisation and abuse. Some information was also obtained on positive experiences with alcohol. This was done in two ways. Firstly, respondents were asked to rate their drinking in the past year on a six point Likert-type scale as follows:

Very enjoyable
Enjoyable
Neither
Not enjoyable
It has been unpleasant
It has caused me problems

#### **Positive Experiences Scale (12 items)**

Secondly, respondents were asked if it was usually true, sometimes true or never true that they had experienced any of the following 12 positive effects when they consumed alcoholic beverages:

- a. You find it easier to relax
- b. You find it easier to be open with other people
- c. You find it easier to get through social situations
- d. You feel more confident
- e. You enjoy yourself more

- f. You find it easier to talk to your present partner about your feelings or problems
- g. You find drinking reduces work-related stress
- h. You find drinking reduces stress at home
- i. You find drinking helps you through difficult situations
- j. You feel less inhibited about sex
- k. Sexual activity is more pleasurable for you
- 1. You feel more sexually attractive

These items were used to create a positive experiences scale. For this scale, the data as recorded in the survey instrument were coded as 1=Never, 2=Sometimes True, 3= Usually True. These data were dichotomised to No = 0, True (2 or 3) = 1 to facilitate multiple response analysis.

This scale was also aggregated across the first 12 items giving the total of positive effects experienced by the respondent.

As noted above, the interview schedule also included questions on who might have tried to influence respondents to reduce their drinking as well as adverse consequences that respondents attributed to alcohol and illicit drugs. These items were used to construct three scales as previously described:

- Influences on Drinking Scale (8 items)
- Alcohol Problems Scale (22 items)
- Drug Problems Scale (5 items):

#### RESULTS

As noted above, respondents were asked how they would rate their drinking in the past year. Their responses to this question are shown in Table 1:

			Gen	der		Tot	tal
		Fem	nale	Ma	ale		
		n	Col %	n	Col %	n	Col %
Rating	Very enjoyable	191	21.8%	250	28.3%	441	25.1%
	Enjoy able	612	69.9%	576	65.3%	1188	67.6%
	Neither	58	6.6%	39	4.4%	97	5.5%
	Not enjoyable	7	.8%	9	9 1.0%		.9%
	Has been unpleasant	3	.3%	1	.1%	4	.2%
	Has caused problems	3	.3%	4	.5%	7	.4%
	Refused	2	.2%	3	.3%	5	.3%
Total		876	100.0%	882	100.0%	1758	100.0%

Table 1: Rating of Drinking in Past Year\*

Few people responded with answers in the categories 'not enjoyable', 'has been unpleasant' and 'has caused problems.' Accordingly, these three categories were merged to form a single 'not enjoyable, unpleasant or problems' category prior to carrying out further analyses.

Male drinkers were significantly more likely than expected than female drinkers were to rate their drinking experiences as 'very enjoyable', while females were more likely than expected to rate their drinking experiences as just 'enjoyable' (Chi sq = 12.729, n= 1753, df = 3, p = 0.005).

Among female drinkers, there was significant variation between age groups in how they rated their drinking experiences. Females in the 25-34 year old age group were more likely than expected to rate their experiences as very enjoyable and less likely than expected to rate them as simply enjoyable while this situation was reversed in the 35-44 year old age group (Chi sq=39.230, n=874, df=21, p<0.0). There was no significant variation between different age groups among male drinkers. (Table 2).

Married and divorced males were more likely than expected to rate their drinking experiences enjoyable and less likely than expected to rate them very enjoyable while the reverse was true for both widowed and single/never married men (Chi sq=31.198, n=879, df=18, p<0.05). There was no significant variation by marital status among female drinkers. (Table 3)

<sup>\*</sup> This table refers only to respondents who had consumed alcohol in the past year

Table 2: Rating of Drinking by age group and gender\*

											Gen	der										Table	Total
						Fer	nale									N	Male						
				R	ating of [	)rinkir	na				male otal			R	ating of	Drink	ina			Mal	e Total		
		V	ery		ating or i		·9	,	Not oyable, oleasant or			Very				Not enjoyable unpleasar or		1710	- Total				
		Enjoy able Enjoy able Neutral Problems					njoy able Enjoy able		N	eutral	l	blems											
											Col		Col						Col				
		n	Col %	n	Col %	n	Col %	n	Col %	n	%	n	%	n	Col %	n	Col %	n	%	n	Col %	n	Col %
Age	Not stated	2	1.0%	5	.8%	2	3.4%			9	1.0%	1	.4%	8	1.4%	1	2.6%			10	1.1%	19	1.1%
Group	18 - 24	22	11.5%	62	10.1%	3	5.2%	5	38.5%	92	10.5%	37	14.8%	66	11.5%	4	10.3%	2	14.3%	109	12.4%	201	11.5%
	25 - 34	45	23.6%	101	16.5%	17	29.3%	1	7.7%	164	18.8%	44	17.6%	122	21.2%	8	20.5%	2	14.3%	176	20.0%	340	19.4%
	35-44	38	19.9%	143	23.4%	12	20.7%	1	7.7%	194	22.2%	56	22.4%	119	20.7%	11	28.2%	2	14.3%	188	21.4%	382	21.8%
	45 - 54	35	18.3%	119	19.4%	8	13.8%	1	7.7%	163	18.6%	44	17.6%	106	18.4%	6	15.4%	4	28.6%	160	18.2%	323	18.4%
	55 - 64	21	11.0%	85	13.9%	2	3.4%	3	23.1%	111	12.7%	35	14.0%	65	11.3%	7	17.9%	2	14.3%	109	12.4%	220	12.5%
	65 - 74	13	6.8%	58	9.5%	10	17.2%	1	7.7%	82	9.4%	18	7.2%	65	11.3%	1	2.6%	1	7.1%	85	9.7%	167	9.5%
	75+	15	7.9%	39	6.4%	4	6.9%	1	7.7%	59	6.8%	15	6.0%	25	4.3%	1	2.6%	1	7.1%	42	4.8%	101	5.8%
Group '	Total	191	100%	612	100%	58	100%	13	100%	874	100%	250	100%	576	100%	39	100%	14	100%	879	100.0%	1753	100%

<sup>\*</sup> This table refers only to respondents who had consumed alcohol in the past year

Table 3: Rating of Drinking by marital status and gender\*

											Ger	nder										Table	e Total
						Fen	nale										Male						
				Ra	ating of D	rinkir	ng				male otal			F	Rating of	Drink	king			Male	e Total		
I		ery by able	Enjo	oy able			Not enjoyable, unpleasant or Problems					Very Enjoy able		oy able	N	eutral	enjo unp	Not by able, leasant or bblems					
		n	Col %	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %
Marital	Married	97	50.8%	319	52.1%	26	44.8%	8		450	51.5%	117	46.8%	306	53.1%	17	43.6%	4	28.6%	444	50.5%	894	51.0%
status	Liv ing/partner	13	6.8%	51	8.3%	7	12.1%	2	15.4%	73	8.4%	31	12.4%	71	12.3%	5	12.8%			107	12.2%	180	10.3%
	Widowed	16	8.4%	68	11.1%	8	13.8%	1	7.7%	93	10.6%	15	6.0%	17	3.0%	1	2.6%			33	3.8%	126	7.2%
	Div orced	20	10.5%	60	9.8%	8	13.8%			88	10.1%	10	4.0%	50	8.7%	4	10.3%	4	28.6%	68	7.7%	156	8.9%
	Separated	6	3.1%	14	2.3%	3	5.2%			23	2.6%	5	2.0%	7	1.2%	1	2.6%			13	1.5%	36	2.1%
	Single/Never married	39	20.4%	100	16.3%	6	10.3%	2	15.4%	147	16.8%	72	28.8%	124	21.5%	11	28.2%	6	42.9%	213	24.2%	360	20.5%
	Refused													1	.2%					1	.1%	1	.1%
Group T	otal	191	100%	612	100%	58	100%	13	100%	874	100%	250	100%	576	100%	39	100%	14	100%	879	100%	1753	100%
		191	100%	612	100%	58	100%	13															

<sup>\*</sup> This table refers only to respondents who had consumed alcohol in the past year

Females who misused prescription drugs were less likely than expected to rate their drinking enjoyable than those who did not. However, there was little variation from expected values amongst those who rated their drinking very enjoyable. These females were also more likely to be neutral or rate their drinking unpleasant than those who did not misuse prescription drugs (Chi sq=41.067, n=874, df=6, p<0.001). There were no differences noted among males who misused prescription drugs.(Table 4)

Table 4: Rating of Drinking by misues of prescription drugs and gender\*

									Ger	nder								Table	e Total
					Fema	ale							Ma	ale					
			Misuse of prescription drugs					Fema	Female Total Misuse of prescription drugs MaleTotal					eTotal	1				
		Y	es es	1	No	Re	ef us ed		Col	,	Yes		No	Re	ef us ed				Col
		n	Col %	n	Col %	n	Col %	n	%	n	Col %	n	Col %	n	Col %	n	Col %	n	%
Rating of	Very Enjoy able	16	21.6%	175	22.0%			191	21.9%	14	23.7%	234	28.7%	2	40.0%	250	28.4%	441	25.2%
Drinking	Enjoy able	44	59.5%	564	70.9%	4	80.0%	612	70.0%	40	67.8%	533	65.4%	3	60.0%	576	65.5%	1188	67.8%
	Neutral	8	10.8%	50	6.3%			58	6.6%	4	6.8%	35	4.3%			39	4.4%	97	5.5%
	Not enjoyable, unpleaseant or problems	6	8.1%	6	.8%	1	20.0%	13	1.5%	1	1.7%	13	1.6%			14	1.6%	27	1.5%
Group Tota	l	74	100%	795	100%	5	100%	874	100%	59	100%	815	100.0%	5	100.0%	879	100%	1753	100%

 $<sup>^{\</sup>star}$  This table refers only to respondents who had consumed alcohol in the past year

Respondents were asked to self-assess their physical health and mental health. Those who assessed their physical health as 'excellent' also were more likely to rate their drinking as very enjoyable and those who rated their drinking as not enjoyable to some degree were also more likely to rate their physical health as 'fair' or 'poor' (Chi sq=27.439, n=1753, df=15, p<0.05). There was no significant variation between males and females. (Table 5)

				Ra	ating of D	rinkin	g			Group	Total
		Very Enjoy able		Enjoy able		Neutral		Not enjoyable, Unpleasant or Problems			
		n	Col %	n	Col %	n	Col %	n	Col %	n	Col %
Physical	Excellent	69	15.6%	132	11.1%	8	8.2%	1	3.7%	210	12.0%
Health	Very good	134	30.4%	389	32.7%	30	30.9%	5	18.5%	558	31.8%
	Good	136	30.8%	398	33.5%	38	39.2%	8	29.6%	580	33.1%
	Fair	75	17.0%	207	17.4%	18	18.6%	8	29.6%	308	17.6%
	Poor	27	6.1%	58	4.9%	3	3.1%	5	18.5%	93	5.3%
	Refused			4	.3%					4	.2%
Group Tota	I	441	100%	1188	100%	97	100%	27	100%	1753	100%

Table 5: Rating of Drinking by self-assessed physical health

A similar but more marked relationship was noted in relation to mental health and there was a strong correlation between drinking enjoyment and self assessments of mental health. Those who rated their drinking experiences as very enjoyable were more likely to assess their mental health as excellent or very good while progressively poorer assessments of mental health were given by those who rated their drinking experiences less positively (Chi sq=88.678, n=1753, df=15, p<0.001). There were no significant gender differences. (Table 6)

				R	ating of [	) rink in	g			Grou	Total
			Very Enjoy able		y able	Ne	eutral	enjo Unp	Not byable, leasant roblems		
		n	Col %	n	Col %	n	Col %	n	Col %	n	Col %
Mental	Excellent	109	24.7%	193	16.2%	11	11.3%	3	11.1%	316	18.0%
Health	Very good	178	40.4%	474	39.9%	29	29.9%	5	18.5%	686	39.1%
	Good	102	23.1%	367	30.9%	31	32.0%	5	18.5%	505	28.8%
	Fair	40	9.1%	116	9.8%	22	22.7%	8	29.6%	186	10.6%
	Poor	12	2.7%	33	2.8%	4	4.1%	6	22.2%	55	3.1%
	Refused			5	.4%					5	.3%
Group Tota	ıl	441	100%	1188	100.0%	97	100%	27	100%	1753	100%

Table 6: Rating of Drinking by self-assessed mental health

<sup>\*</sup> This table refers only to respondents who had consumed alcohol in the past year

<sup>\*</sup> This table refers only to respondents who had consumed alcohol in the past year

Analysis of alcohol consumption levels, influences on drinking, positive experiences and alcohol and drug problem scales was carried out separately for males and females using one way analysis of variance.

# **Alcohol Consumption**

Overall mean alcohol consumption on the last drinking occasion was 3.48 units for females and 5.47 units for males. Among females, there were marked differences in mean consumption when factored by rating of drinking experience. Those who rated their drinking as enjoyable were drinking almost three times as much as those who rated it not enjoyable. These differences were significant (F=5.893, p<0.005). There was less variation amongst male drinkers where those who did not rate their drinking as enjoyable still consumed 76% as much as those who rated it very enjoyable. There were no significant differences amongst male drinkers. (Table 7)

Total Gender Female Male Consumption last occasion Consumption last occasion Col % Col % Col % Mean Mean Mean 441 Rating of Very Enjoy able 4.46 250 28.4% 6.23 25.2% 5.46 191 21.9% Drinking Enjoy able 65.5% 612 70.0% 3.30 576 5.21 1188 67.8% 4.23 Neutral 58 6.6% 2.50 39 4.4% 4.77 97 5.5% 3.41 Not enjoyable, unpleasant or 4.79 13 1.5% 1.62 14 1.6% 27 1.5% 3.26 problems 100.0% 5.47 100.0% 4.48

Table 7: Mean alcohol consumption on last drinking occasion by rating of drinking and gender

This table refers only to respondents who had consumed alcohol in the past year

Overall mean alcohol consumption in the past week was 6.27 units for females and, much higher, 15.49 units among males. (Table 8) There was significant variation in both gender groups when factored by rating of drinking but with clear gender differences. Amongst females, enjoyment is clearly related to consumption, with those who find their drinking very enjoyable drinking two and a half times as much as those who don't find it enjoyable. (F=7.887, p<0.001). Amongst males, consumption also declines with declining enjoyment, except for the relatively small group (n=14) who find it not enjoyable to some degree, where mean consumption rises to 25.21 units, the highest consumption group. (F=7.878, p<0.001).

				Gend	ler					
			Female			Male				
		Consi	umption last v	veek	Cons	umption last v	veek			
		n	Col %	Mean	n	Col %	Mean	n	Col %	Mean
Rating of	Very Enjoy able	191	21.9%	9.28	250	28.4%	20.22	441	25.2%	15.48
Drinking	Enjoy able	612	70.0%	5.69	576	65.5%	13.65	1188	67.8%	9.55
	Neutral	58	6.6%	3.10	39	4.4%	8.92	97	5.5%	5.44
	Not enjoyable, unpleasant or problems	13	1.5%	3.85	14	1.6%	25.21	27	1.5%	14.93
Total		874	100.0%	6.27	879	100.0%	15.49	1753	100.0%	10.90

Table 8: Mean alcohol consumption in past week by rating of drinking and gender

This table refers only to respondents who had consumed alcohol in the past year  $% \left( 1\right) =\left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right)$ 

The Influences on Drinking scale was examined using analysis of variance. In addition, gender differences were explored using a categorised version of the scale to obtain a cross tabulation. Males were less likely than females to report that nobody had tried to influences them to reduce their drinking. Males were more likely than females in all categories to report that they had been influenced. Overall, almost twice as many males (19.3%) as females (10.5%) reported being influenced by others to cut down their alcohol consumption. (Chi sq=26.974, n=1753, df=3, p<0.001) (Table 10)

Table 10: Influences on Drinking by Gender\*

			Gen	der		Tot	tal
		Fem	nale	Ma	ıle		
		Count	Col %	Count	Col %	Count	Col %
	None	782	89.5%	709	80.7%	1491	85.1%
on Drinking	1-2	73	8.4%	136	15.5%	209	11.9%
	3-4	15	1.7%	25	2.8%	40	2.3%
	5 or more	4	.5%	9	1.0%	13	.7%
Total		874	100.0%	879	100.0%	1753	100.0%

<sup>\*</sup> This table refers only to respondents who had consumed alcohol in the past year

When factored by rating of drinking, there were no significant differences in mean influences on drinking scores among female drinkers. However, there was significant variation among male drinkers where both those who were neutral and those who rated their drinking not enjoyable to some degree both had elevated mean influences on drinking scores. (F=3.633, p<0.05) (Table 11)

 ${\bf Table 11:} \ \ {\bf Mean \ Influences \ on \ Drinking \ scale \ by \ rating \ of \ drinking \ and \ gender$ 

				Gende	er				Total	
			Female			Male				
		Influ	ences on drink	king	Influ					
		n	Col %	Mean	n	Col %	Mean	n	Col %	Mean
Rating of	Very Enjoy able	191	21.9%	.21	250	28.4%	.39	441	25.2%	.32
Drinking	Enjoy able	612	70.0%	.18	576	65.5%	.30	1188	67.8%	.23
	Neutral	58	6.6%	.29	39	4.4%	.54	97	5.5%	.39
	Not enjoyable, unpleasant or problems	13	1.5%	.23	14	1.6%	.93	27	1.5%	.59
Total		874	100.0%	.19	879	100.0%	.34	1753	100.0%	.27

This table refers only to respondents who had consumed alcohol in the past year

Similarly, gender differences in Alcohol Problem Scales were explored using a categorised version of the scale. Less than half (47.4%) of females had experienced any problems against 61.3% of males who reported higher levels of problems in all categories. (Chi sq=59.363, n=1753, df=4, p<0.001)(Table 12)

Table 12: Alcohol Problems by Gender\*

			Gen	der		Tot	al
		Fem	nale	Ma	le		
		Count	Col %	Count	Col %	Count	Col %
Alcohol	No problems	460	52.6%	340	38.7%	800	45.6%
Problems	1-3 problems	296	33.9%	319	36.3%	615	35.1%
	4-6 Problems	79	9.0%	125	14.2%	204	11.6%
	7-10 Problems	33	3.8%	56	6.4%	89	5.1%
	11 or more problems	6	.7%	39	4.4%	45	2.6%
Total		874	100.0%	879	100.0%	1753	100.0%

<sup>\*</sup> This table refers only to respondents who had consumed alcohol in the past year

When factored by rating of drinking, there were no significant differences in mean Alcohol Problem scores among female drinkers. However, there was significant variation among male drinkers where the small number who rated their drinking not enjoyable to some degree, had mean Alcohol Problem scores of almost double that of the other groups. (F=4.072, p<0.05) (Table 13)

Total Gender Female Male Alcohol Problems Alcohol Problems Count Col % Mean Count Col % Mean Count Col % Mean Rating of Very Enjoy able 21.9% 1.69 28.4% 2.78 25.2% 2.31 Drinking Enjoy able 612 70.0% 1.34 576 65.5% 2.21 1188 67.8% 1.76 Neutral .97 4.4% 2.72 58 6.6% 39 97 5.5% 1.67 Not enjoyable, unpleasant or 13 1.5% 1.6% 1.5% 3.37 problems 2.44 100.0% 100.0% 1753 100.0% 1.39 1.92

Table 13: Mean Alcohol Problem Scale scale by rating of drinking and gender

This table refers only to respondents who had consumed alcohol in the past year

There were no observed significant variations in relation to recreational drug usage or drug problem scales between males and females or in relation to rating of drinking within these gender groups separately.

Among both males and females there was significant variation in mean Positive Experiences scores, the pattern being similar in both cases. The small number of drinkers who rated their experiences 'not enjoyable' to some degree had Positive Experiences scores about 51% of the group mean for females (F=3.058, p<0.05) and 42% of the group mean for males (F=4.486, p<0.005) (Table 14)

Gender Total Male Female Positiv e Experiences Positiv e Experiences Count Col % Mean Count Col % Mean Count Col % Mean Rating of Very Enjoyable 441 Drinking Enjoy able 612 70.0% 3.30 576 65.5% 1188 67.8% 3.63 3.46 Neutral 58 6.6% 2.60 39 4.4% 3.08 97 5.5% 2.79 Not enjoyable, unpleasant or 13 1.5% 1.62 14 1.6% 1.43 27 1.5% 1.52 problems Total 100.0% 3.41 1753 100.0% 874 100.0% 3.18 3.29

Table 14: Mean Positive Experiences Scale scale by rating of drinking and gender

This table refers only to respondents who had consumed alcohol in the past year

Multiple regression was employed to examine these results further. This did not reveal any further gender differences associated with the enjoyable/non-enjoyable nature of drinking.

#### **DISCUSSION**

The findings described in this section revealed a number of gender differences related to the extent to which drinking experiences were classified as being enjoyable or not. The findings suggest that women were less likely than men to classify their drinking as very enjoyable. Even so, there was a more straightforward association between alcohol consumption and enjoyment among women than among men. There was a sub-group of men who were heavy drinkers, who reported that their drinking had not been enjoyable. These may have considerable important clinically and will be examined further.

The ambivalent nature of people's perceptions of drinking has often been Cahalan (1970) compared the drinking experiences of the following three groups of US drinkers: those who had never experienced problems associated with their drinking; those who had experienced problems in the past, but who no longer did so and those who were currently experiencing problems. The most commonly cited experience cited by all groups was 'pleasure' (feeling happy and cheerful). European School Survey Project (ESPAD) 1999 found that 15-16 years olds in the countries in which teenagers were the heaviest drinkers were also those most likely to report two things. The first of these were higher levels of problems associated with drinking, the second was higher positive expectancies related to drinking (Hibell et al. 2001). supports the conclusion that people do not necessarily view drinking as wholly good or bad. Moreover, even people with problems still report enjoying the effects of alcohol consumption. It should also be emphasised that for many people, learning to drink involves at least passing through a phase of experiencing hangovers, nausea and other adverse effects (Plant and Plant, in press).

In relation to those who develop drinking problems the aspect of positive reasons why people drink is important. No competent therapist would only ask a patient about the negative consequences of their behaviour. To enable the therapist to create a complete sense of where the patient is in their life and their drinking it is necessary to explore the positives as well as the negative aspects from the patient's point of view. Indeed not doing so may well affect the patient's willingness to be completely honest about all the negative aspects. As noted earlier, even heavy or problem drinking will usually have some positive aspects for the person. Individuals may, for example, report increased self-confidence or decreased anxiety. For those with severe drinking problems alcohol may

well be the only friend they feel never deserts them and never criticises them. It is one of the main reasons why people who stop drinking for alcohol-problem related reasons often experience a grief reaction. They feel they have truly lost the only friend on whom they could depend.

Note: This section is based upon a paper submitted to *Drug & Alcohol Dependence* (Plant, Plant and Mason, submitted).

# **SECTION 4: DISSEMINATION**

As noted above, several publications have been produced and are listed in Section A of the References Section below. The initial findings of this study have been presented by the grant-holder at the Annual Alcohol Epidemiology Research Symposium of the Kettil Bruun Society for Social and Epidemiological Research on Alcohol (KBS), in Toronto in June 2001. Further presentations will be made in October 2001 at the 51<sup>st</sup> Alcohol Problems Research Symposium, Pitlochry at the Annual Seminar of the AERC in Edinburgh and to members of the Amsterdam Group at Gleneagles Hotel. It is planned to present further findings at other scientific and professional meetings in due course. Such meetings will include the 2002 annual KBS symposium in Paris.

#### **SECTION 5: FUTURE PLANS**

Thanks to the provision of additional support from the Amsterdam Group and the European Union, work on this study will be able to continue for some time. A number of additional reports will be produced related solely tot he UK survey described above. Moreover, separate reports on the international GENACIS study will be produced. These will include and acknowledge UK data and funding sources. It is proposed to produce other UK papers on a number of topics. These include social networks, family, other excessive/problem behaviours and a variety of demographic factors.

# SECTION 6: ACKNOWLEDGEMENTS

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