# The Irish drinking culture - Drinking and drinking-related harm, a European comparison

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#### Introduction

During the last decade, alcohol consumption has risen rapidly in Ireland with Irish adults currently among the highest consumers of alcohol in Europe, at 14.2 litres per adult (STFA, 2002). Increasing alcohol consumption among women and youth are associated with this development (Simpura & Karlsson, 2001), as well as an increase in the adult binge drinking (SLAN, 2003). A European comparison of drinking habits and drinking problems among students aged 15-16 years, reported Irish youth among the highest risky drinkers (Hibell, 1999). Another characteristic of the Irish drinking culture is that many people do not drink alcohol at all. From the 1970s up to 1990s, estimates from various surveys revealed abstention rates of 20-25 per cent among men and 30 per cent among women. The SLAN survey conducted in 1998 estimated the fraction of non-drinkers to be 14 per cent for men and 19 per cent of women. This raises the question as to whether the sharp rise in overall consumption is driven by a decline in non-drinkers.

# **Purpose**

This paper examines the Irish drinking habits and to what extent drinking is associated with experiences of adverse consequences in the year 2002. The analysis is based on a survey containing similar questions that was used in a recent European comparative survey involving Finland, Sweden, Germany, UK, France and Italy, known as the ECAS countries (Leifman, 2002; Ramstedt, 2002). This provides a unique opportunity to examine the Irish results in a comparative framework. Furthermore, several aggregate level studies have revealed that a higher overall level of drinking in Ireland is associated with higher alcohol-related mortality, e.g., deaths from liver cirrhosis (Ramstedt, 2001), accidents (Skog, 2001) and homicide (Rossow, 2001). However, no previous study has examined to what extent higher alcohol consumption at the individual level affects the likelihood of suffering from adverse health, social and psychological consequences of drinking in Ireland.

#### Data and methods

Data were collected in a survey among a national representative sample of adults aged 18 years and older, carried out by Lansdowne Market Research for the Department of Health and Children. Using face to face interviews, 1069 respondents were asked a number of questions about their background, drinking habits and harm indicators. Fieldwork was carried out in September 2002.

The measure used for estimating volume of drinking was the Quantity-Frequency scale (QF-scale), consisting of the following questions for each beverage separately: *How many times during the last 12 months have you been drinking beer or cider/wine/spirits?* The nine response alternatives were: *Daily, 4-5 days a week, 2-3 days a week, Once a week, 2-3 days a month, Once a month, One or a couple of days a year, Never, Don't know.* These questions on frequency were followed by questions on quantity: *When you drink beer or cider/wine/spirits, approximately how many bottles/glasses etc. do you drink?* The answers were then added up and calculated into yearly alcohol consumption of pure alcohol.

The frequency of drinking larger amounts was measured by the question: *How many times during the last 12 months have you consumed alcoholic beverages corresponding to at least one bottle of wine, 25 centilitres of spirits or 4 pints of beer, or more, during one* 

drinking occasion? The response alternatives were the same as for volume of consumption. This kind of drinking occasion will be denoted as "binge drinking" in this paper.

To measure the prevalence of current drinking problems, the following eight items were used (given only to drinkers):

During the past 12 months have you...

- ...got into a fight when you had been drinking?
- ...been in an accident of any kind when you had been drinking?
- ...ever felt that you should cut down on your drinking?
- ...regretted something you said or did after drinking?
- ...felt that your drinking harmed your home life or marriage?
- ...felt that your drinking harmed your work or studies?
- ...felt that your drinking harmed your friendship or social life?
- ...felt that your drinking harmed your health?

#### Results

# Abstention, drinking level and beverage preferences

As observed in earlier studies, a significant proportion of the Irish population do not drink any alcohol. In this study 23 per cent had not consumed any alcohol during the past 12 months (Table 1). Compared to the other European countries, this fraction is about three times as high as in the two Nordic countries and around twice the rates seen in the other ECAS-countries. Very similar proportions of abstainers have been found in other Irish surveys from the 1980s and 1990s (Simpura & Karlsson, 2001), which suggests that the recent increase in per capita alcohol consumption in Ireland cannot be explained by a decline in abstention.

Table 1. Recorded alcohol sales per adult and self-reported alcohol consumption (litres 100% alcohol/year), the fraction of specific beverages and proportion of abstainers in Ireland and the ECAS-countries

	Non-	Recorded	Reported total	Reported	Beer	Wine	Spirits	
	Drinkers	Alcohol	alcohol	alcohol	(%)	(%)	(%)	
	(%)	sales	consumption	consumption				
		per adult		per drinker				
<u>Ireland</u>	<u>23</u>	14.2	<u>9.3</u>	<u>12.1</u>	<u>73</u>	<u>10</u>	<u>16</u>	
Finland	7	8.6	4.7	5.0	62	17	21	
Sweden	7	6.1	3.5	3.8	57	26	14	
Germany	12	11.9	3.9	4.4	49	18	33	
UK	11	9.4	9.0	10.1	55	28	17	
France	13	13.6	4.8	5.5	33	52	15	
Italy	11	9.2	5.3	6.0	19	74	8	

The average volume of alcohol consumption reported by the respondents in Ireland, expressed in pure alcohol per respondent aged 18 and over amounts to 9.3 litres (Table 1). This is almost twice the level reported in most of the ECAS-countries, the only exception being the UK with 9 litres. Further, the combination of a high drinking level and high abstention rates suggests that in Ireland reported consumption per drinker is 12.1 litres, which is clearly higher than in the ECAS countries. Self reported consumption of alcohol in Ireland thus accounted for 65% of sales statistics, which is a fairly high coverage rate for the quantity–frequency scale (e.g.

Kühlhorn & Ramstedt, 2000). It is higher than in the other ECAS-countries, except for the UK, where 86 % of recorded alcohol sales were reported in the survey.

Regarding beverage choice, beer is without question the most popular beverage in Ireland and represents almost 75 per cent (including cider) of all alcohol consumed, whereas the shares of spirits and wine are 16 and 10 per cent respectively. These figures match the distribution according to the Irish official sales statistics. A similar domination of one specific beverage is not seen in the other ECAS-countries, with the exception of wine in Italy.

#### Gender and Age differences

A more detailed analysis of the Irish data reveal gender and age differences that are also observed in the ECAS countries (Table 2). First, abstention is more common among women (25 %) compared to men (20%) and is higher in the older age group. Abstention is lowest among men aged 18-29 years (14%) and most prevalent for women older than 65 years (51%). Further, men drink about three times as much alcohol as women, which resembles the gender differences found in the Nordic countries, France and the UK but is somewhat higher than in Germany and Italy (Leifman, 2002). In Ireland the amount of alcohol drunk tends to decrease with age, with the highest consumption found among those aged 18-29 years and the lowest consumption among those older than 65 years. However, among the six ECAS countries such a continuous decline with age was only observed in Sweden and among women in the UK.

Table 2. Proportion of abstainers, average alcohol consumption (litres 100% alcohol/year), fractions of risky

consumers and beverage-specific consumption by gender and age

	N	Non- drinkers (%)	Total alcohol consumption	Risky*weekly drinking (%)	Beer (%)	Wine (%)	Spirits (%)
MEN							
<u>18-64</u>	<u>421</u>	<u>20</u>	14.3	<u>28.6</u>	84	<u>6</u>	<u>10</u>
18-29	115	14	17.9	39.3	87	6	7
30-49	197	18	13.6	28.4	81	8	11
50-64	109	31	11.5	27.0	83	5	12
65+	87	33	7.9	16.7	73	5	23
WOMEN							
18-64	<u>459</u>	<u>25</u>	4.8	13.3	<u>43</u>	<u>23</u>	<u>34</u>
18-29	116	19	9.1	31.4	55	11	34
30-49	220	26	3.8	9.8	35	33	33
50-64	123	35	2.7	7.4	28	34	38
65+	77	51	2.0	5.8	9	61	30

<sup>\*</sup>over 14 standard drinks (SD) for women and 21 SD for men (one SD equals 1/2 pint of beer/10 grams alcohol).

In relative terms, beer is more common among men, whereas wine and spirits are more common among women. Out of all the alcohol men consume, 84 per cent consists of beer, compared to 43 per cent of the consumption of women. Conversely, 23 percent of female drinking consists of wine but only six per cent of male consumption. Spirits accounted for one third of female drinking, but only one tenth of what men drink. This is probably related to the fact that the spirits category comprises also pre-mixed drinks (alcopops), which seem to be popular among women. These gender differences are also valid in the various age groups.

In Ireland, the weekly "low risk" limits recommend a weekly consumption no greater than 14 standard drinks for women and 21 standards drinks for men (one standard drink is equivalent to 1/2 pint of beer or 10 grams of pure alcohol). The fraction of respondents exceeding these

limits (here denoted as risky drinking) conforms to the observed variations in drinking levels. On average, 29 per cent of all men fulfil the criterion of having risky weekly drinking habits; 39% among the youngest group and 17% of those older than 65 years. For women, the equivalent figure is high among those aged 18-29 (31%) compared to the older age groups for whom the corresponding risk fractions range between 6 and 10%. Thus, heavy and risky alcohol consumption is much more concentrated in the younger age groups for women than for men.

# Drinking patterns

The Irish drinking patterns were examined in terms of how often alcohol is consumed and to what extent a drinking occasion can be classified as binge drinking. Few people in Ireland drink everyday, only 1.6 % of men and 0.2 % of women (Table 3). Daily drinking seems to be less common in Ireland than in any of the ECAS-countries among both men and women. However, the fraction of men drinking alcohol at least once a week is 69 %, which is about the same as in the UK, France and Italy. For women, the corresponding proportion is 51 %, which is similar to the UK and France but substantially higher than in the other countries. A similar picture is found when the yearly number of drinking occasions is calculated; Ireland has a mid position within the ECAS-countries, with 78 occasions per year for men and 46 for women. Considering the high fraction of non-drinkers, these figures suggest that those who drink in Ireland drink fairly often.

Table 3. Drinking patterns among men and women in Ireland in comparison with the ECAS-countries (All

respondents aged 18-64 years)

	Drinking everyday (%)	Drinking at least once a week (%)	Binge drinking at least once a week (%)	Mean drinking occasions past 12 months	Mean binge drinking occasions past 12 months	Binge per 100 drinking occasions
MEN						
Ireland	<u>1.6</u>	<u>69</u>	<u>48</u>	78	<u>45</u>	58
Finland	4	60	16	<b>78</b> 70	$\overline{20}$	<u><b>58</b></u> 29
Sweden	3	47	8	37	12	32
Germany	12	60	9	97	13	13
UK	9	74	38	118	47	40
France	21	68	8	121	11	9
Italy	42	76	11	179	23	13
WOMEN						
<u>Ireland</u>	<u>0.2</u>	<u>51</u>	<u>16</u>	<u>46</u>	<u>14</u>	<u>30</u>
Finland	2	<u><b>51</b></u> 33	<u>16</u> 3	<u>46</u> 35	<u>14</u> 6	17
Sweden	1	24	1	24	4	17
Germany	5	40	2	54	4	7
UK	5	51	12	73	16	22
France	9	38	2	62	3	5
Italy	26	52	7	121	14	12

#### Binge Drinking

The results also indicate that a drinking occasion in Ireland involves binge drinking more often than in the ECAS-countries. First, the prevalence of binge drinking at least once a week is 48 per cent among men and 16 per cent among women. The corresponding figures for the UK are 38 and 12 per cent respectively, with the UK scoring highest among the ECAS-countries. Secondly, when the number of binge drinking occasions during 12 months is

calculated, Ireland and the UK have practically identical results, which are about 3-4 times higher than what is found in the other countries. More revealing is that, when frequency of binge drinking occasions are related to the overall number of drinking occasions, it appears that of 100 drinking events, 58 end up in binge drinking for men and in 30 cases for women. These are undoubtedly the highest figures among these countries. This result suggests that among those consuming alcohol in Ireland, binge drinking is the norm among men and occurs in about a third of the drinking occasions of women.

# Gender and Age Differences

Among both men and women, weekly drinking as well as binge drinking is most common in the youngest age group and shows a rather constant decline by age (Table 4). The only clear exception is daily drinking where those above 65 years show the highest fractions among both men and women. Elderly women show the highest rate of daily drinking. This might reflect that some older people have adopted the idea of consuming a little alcohol everyday for health reasons.

Table 4. Drinking frequency and binge drinking in Ireland by gender and age (drinkers and non-drinkers)

	N	Drinking everyday (%)	Drinking at least once a week (%)	Binge drinking at least once a week (%)	Mean drinking occasions past 12 months	Mean binge drinking occasions past 12 months	Fraction of drinking occasions being binge (%)
MEN							
<u>18-64</u>	<u>421</u>	1.6 0.0	<u>69</u>	<u>48</u> 59	<del>78</del> 83	<u>45</u> 55	<u>58</u> 66
18-29	115	0.0	80	59	83	55	66
30-49	197	2.3	69	42	79	41	52
50-64	109	1.7	56	36	69	42	61
65+	87	2.5	49	22	66	26	39
WOMEN							
<u>18-64</u>	<u>459</u>	<u><b>0.2</b></u> 0.0	<u><b>51</b></u> 71	<u>16</u> 26	<u>46</u> 66	<u>14</u> 22	<u><b>30</b></u> 33
18-29	116						
30-49	220	0.0	48	12	40	12	30
50-64	123	0.9	38	11	38	12	32
65+	77	4.3	27	4	36	7	19

# Experiences of adverse consequences from drinking

Could these relatively heavy drinking habits among Irish people take place *without* resulting in a large amount of adverse consequences? The results presented in Table 5 suggest that this is not the case. Those who have experienced at least 1 of the 8 adverse consequences during the last 12 months, account for 39 per cent of male drinkers and 24 per cent of female drinkers, which is higher than the ECAS average, but lower than in Finland and the UK. However, there appears to be more problems per drinker in Ireland, which is indicated from the average or mean number of experienced problems. On average, Irish male drinkers report 1.2 problems, which is about twice as high as the ECAS-average and also higher than in Finland and the UK. A similar pattern is also found for Irish female drinkers with the exception that women in the UK have a higher problem rate.

The higher problem rates seem to be a result of a high prevalence of acute adverse consequences related to binge-drinking occasions. In fact, Irish men show strikingly high rates in comparison to ECAS countries in relation to "having regretted things said or done after drinking" (32%), "got into a fight" (11.5%), "been in an accident" (6.3%) and adverse consequences with work/studies (12.4%), friendships (9.6%) and homelife (7.8%). The experience of health problems, i.e., an indicator of problems caused by long term drinking, is on the other hand less often reported in Ireland than in the ECAS-countries (11.6%), and another measure of more chronic problems like "feeling a need to cut down" corresponds to the ECAS-average.

Irish female drinkers also experience relatively high rates of adverse consequences, but fewer than women in the UK and about the same as Finnish female drinkers. A similar tendency to experience more acute harms is also found among women, with a high prevalence of drinkers reporting "having regretted things said or done after drinking", harm to friendships and work, involvement in fights and accidents, whereas the experience of health problems is actually lower than in any of the ECAS-countries.

Table 5. Experiences of adverse consequences of alcohol use during the last 12 months among men and women in Ireland in comparison with the ECAS-countries (All respondents aged 18-64 years)

	Overall Ra	ates	Chronic	Harm	Acu	te Harm	Social harm				
					Regretted			Drinking harmed:			
	At least				things						
	1 harm	Mean	Cut	Health	said or	Got into	Been in	Work	Homelife	Friend-	
			down		done	fight	accident	studies	Marriage	ships	
MEN	•									0.1	
<u>Ireland</u>	<u>39</u>	<u>1.21</u>	<u>20.7</u>	<u>11.6</u>	<u>32</u>	<u>11.5</u>	<u>6.3</u>	<u>12.4</u>	<u>7.8</u> 6.8	<u>9.6</u> 5.2	
Finland	46.8	0.93	33.0	17.3	25.1	4.2	2.6	4.5			
Sweden	35.5	0.54	11.0	8.0	25.8	1.3	3.5	3.0	1.9	0.6	
Germany	33.5	0.51	17.8	17.3	7.2	5.5	0.5	3.3	3.0	1.6	
UK	45.0	0.95	24.5	18.6	27.9	7.5	3.6	9.1	6.5	5.1	
France	27.1	0.58	15.2	18.0	12.7	2.0	3.5	2.6	3.3	3.6	
Italy	18.3	0.43	10.7	9.8	4.9	1.2	1.6	5.7	4.3	6.0	
<u>Average</u>	<u>34.5</u>	0.66	<u>18.7</u>	<u>14.8</u>	<u>17.3</u>	<u>3.6</u>	<u>2.6</u>	<u>4.7</u>	<u>4.3</u>	<u>3.7</u>	
WOMEN											
<u>Ireland</u>	<u>24</u>	<u>0.51</u>	7.2 18.5	3.9 6.6	<b>21.7</b> 17.0	<u>2.8</u>	<u>2.4</u>	2.9 2.1	1.3 2.5	4.3 2.6	
Finland	28.6	0.50	18.5	6.6	17.0	1.4	0.8	2.1	2.5	2.6	
Sweden	18.6	0.28	6.0	5.7	13.0	0.6	1.3	0.8	0.5	0.7	
Germany	20.2	0.33	12.1	9.8	5.9	1.8	0.7	1.6	2.0	1.2	
UK	32.7	0.61	19.6	8.8	21.5	3.6	3.4	4.1	4.5	5.1	
France	12.1	0.20	4.7	8.0	4.4	0.0	0.4	0.4	0.2	1.3	
Italy	8.5	0.17	3.5	4.3	3.6	0.2	0.2	1.7	1.3	2.3	
<u>Average</u>	<u>20.5</u>	<u>0.35</u>	<u>10.7</u>	<u>7.2</u>	<u>10.9</u>	<u>1.3</u>	<u>1.1</u>	<u>1.8</u>	<u>1.8</u>	<u>2.2</u>	

# Gender and Age differences

The same data for different age groups are presented in Table 6. Two general conclusions can be drawn about the link between age and problems: the experience of problems decreases with age for men and women and drinkers above 65 years have consistently the lowest share of experiences of harm. One minor exception can be noted, namely that the average number of problems for women aged 30-49 years is lower than among the elderly age group 50-64 years, which was not found for the drinking measures previously presented. However, for some of the specific harms there is no decrease with increasing age. Problems related to home life and marriage, are concentrated in the middle age groups for both men and women, and the same is

found for men regarding health problems. Moreover, for several items there is no significant difference between the two middle age groups. More women in the younger age group (18-29 years) experience higher rates in almost all of the specific harms, excluding harm to homelife/marriage.

Table 6. Experiences of adverse consequences of alcohol use during the last 12 months among men and women

in Ireland by age

	N	1 +	Mean	Cut	Health	Regret	Fight	Accident	Work/	Homelife/	Friends
		harm		down					studies	marriage	
MEN											
18-29	94	43.4	1.4	27.3	10.6	42.0	16.1	7.4	19.5	6.8	13.0
30-49	167	33.5	1.3	22.0	14.1	34.1	13.6	6.7	15.9	11.1	13.3
50-64	77	27.2	1.2	24.3	20.2	33.7	11.2	8.6	8.9	12.8	7.9
65+	63	15.4	0.6	10.9	7.3	12.7	7.0	5.2	5.3	5.4	5.4
WOMEN											
18-29	94	23.3	0.8	11.1	6.7	27.7	6.7	4.3	9.8	1.2	9.0
30-49	169	19.4	0.4	5.7	4.5	22.5	1.8	2.9	1.0	2.2	3.4
50-64	86	13.7	0.5	9.5	5.8	19.6	1.1	2.3	1.2	3.6	4.7
65+	48	8.7	0.2	6.9	0.0	11.8	0.0	0.0	0.0	0.0	0.0

# The relationship between alcohol consumption and experiences of adverse consequences.

To what extent do changes in the level of drinking influence the likelihood of experiencing these problems, and how does regular binge drinking affect this relationship? Using logistical regression the results suggest that the likelihood of experiencing most of the different adverse effects increases significantly for both men and women with a one litre increase in consumption. A one litre increase in yearly alcohol intake increases the likelihood of having at least one of the harms (at least once) by 3% for men and 7% for women, having controlled for regular binge drinking. Furthermore, men who binge at least once a month have an almost three times higher risk (271%) of experiencing adverse effects compared with those who binge less often, even when controlled for the overall level of drinking. The corresponding figure for women is almost twice as likely (180%). Thus, both a high level of drinking and regular binge drinking is associated with a higher risk of problems in Ireland.

To what extent are those who report drinking within the weekly low risk limits protected from experiencing adverse consequences? The results indicate that the experience of harm is much more common among those drinking over the low risk weekly limits (namely risky drinking) (drinking over 14/21 sd) (Table 7). Reporting at least one problem is twice as common among men and three times as common among female drinkers who exceed these weekly drinking limits. However, 27 per cent of men within the weekly low risk limits have also experienced at least one problem. The most common negative consequence was, regrets for things said or done (21%), whereas fewer reported having considered cutting down (11.5%), fights (8%), health (7%) and problems with work and studies (7%). Further, 17 % of women within the weekly low risk limits had at least one problem, most often with regretting things said and done after drinking (15%), followed by considering cutting down (3.9%) and health problems (3.4%). Thus, the recommended weekly low risk limits of drinking volumes do not in fact protect against some of these negative social consequences. One explanation is that these weekly low risk drinking levels may be drunk on a few binge drinking occasions. Another possibility is that the respondents have underreported their drinking levels in this survey.

Table 7. Experiences of adverse consequences of alcohol use during the last 12 months among men and women

in Ireland by weekly "low risk" and "risky" drinking habits.

	N	1 + harm	Mean	Cut down	Health	Regret	Fight	Accident	Work/ studies	Homelife/ marriage	Friends
MEN Drinking category											
"Low risk" "*Risky"	234	27.5	0.82	11.5	6.7	21.5	7.9	3.7	6.7	3.8	4.1
WOMEN Drinking category	145	55.5	1.91	35.5	20.1	47.9	15.4	10.0	21.7	14.4	18.4
"Low risk" "Risky"	299	17.1	0.32	3.9	3.4	15.2	1.0	1.3	1.3	1.0	2.3
•	71	52.2	1.28	20.6	5.5	50.9	10.4	7.3	8.8	3.0	13.3

<sup>\*</sup>Risky= drinking over 14 standard drinks (SD) per week for women and 21 SD for men

# **Summary and discussion**

The self reported alcohol consumption in this survey support what is seen in official statistics on alcohol sales in Ireland today; a lot of alcohol is consumed, mostly in the form of beer. The current high level of drinking is unlikely to be as a result of declining abstention rates during the last number of years, since abstention rates continue to be relatively high in a European perspective, in particular among women and older segments of the population. On average every fourth woman and every fifth man do not drink alcoholic beverages in Ireland.

This unusual combination of a high reported drinking level and high abstention rates implies that drinkers in Ireland drink more than in other western European countries and that many have risky drinking habits. The tendency to drink a lot of alcohol on one occasion, referred to as binge drinking, is strikingly common in Ireland. An expression of the high inclination to binge drinking is the fact that, out of 100 drinking events, 58 ends up in binge drinking for men and 30 for women, rates which are much higher than in the ECAS-countries. For men and women, drinking weekly as well as binge drinking is most common in the youngest age group and shows a decline by age.

The relatively risky drinking habits of Irish drinkers are also associated with many experiences of harmful drinking-related consequences, in particular among men. On average, Irish male drinkers reported 1.2 problems (of a maximum of eight), which is about twice as high as the ECAS-average; a similar picture was found for women. The overall finding was that adverse consequences particularly related to single heavy drinking occasions were relatively common in Ireland, e.g. fights, accidents and regrettable conduct, whereas more long term problems like health ailments were typically less common than in the ECAScountries. This outcome may be related to the concentration of harm in the younger age groups. If this is the case, there is a risk that more long term consequences will emerge in the future.

The findings also cast some doubt over how people apply the Irish weekly low risk drinking limits. Although those drinkers exceeding the low risk weekly limits experienced more harm, the group of "low risk" drinkers also generated a fairly large amount of problems as well. In fact, Irish men reporting 'low risk weekly limits' generated more adverse consequences than the ECAS average, i.e., similar harm rates but with the heaviest drinkers included. This would suggest that the low risk weekly limits are drunk on one or two binge drinking occasions rather than spread out over the week.

Cross-country comparisons can be problematic because various cultural idiosyncrasies are difficult to control. Nevertheless, these results contain enough evidence to conclude that Ireland has a strikingly high prevalence of binge drinking and alcohol-related harm. It will be an important challenge to find preventive measures that can reduce these problems.

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