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SURVEY OF EUROPEAN DRINKING SURVEYS. ALCOHOL SURVEY EXPERIENCES OF 22 EUROPEAN COUNTRIES

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Title: survey of European drinking surveys. Alcohol survey experiences of 22 European countries

Abstract:

This paper provides an overview of the drinking survey experiences from majority of European countries. The main aim of this report is to summarise existing alcohol survey experiences identified in the course of study. The review of European surveys was based on data collected across Europe using questionnaire targeting European alcohol researches. The data were collected from 22 countries constituting 73% of the originally targeted sample and they cover 43 surveys.

The review shows a low degree of uniformity across European surveys, as regards sampling, methods of administration as well as age ranges, and especially in relation to alcohol consumption measures both within and between countries. Various instruments to measure alcohol consumption, risky drinking, dependence/abuse, negative social consequences and harm to third parties are used across Europe. Even the terminology is not uniformed.

This review identified most important areas of priority towards standardization of alcohol measures across Europe including definitions of indicators and sampling standards.

INTRODUCTION

One of the SMART objectives is “to develop standardized comparative survey methodologies on heavy drinking, binge drinking (episodic heavy drinking), drunkenness, context of drinking, alcohol dependence and unrecorded consumption”. The starting point to achieve this objective is a review of the drinking survey methodologies used in European countries. The main aim of this report is to summarise existing alcohol survey methodologies identified in the course of this study.

METHOD

The review of European surveys was based on data collected across Europe by national project teams using a template designed for the project (appendix 1). Each national team collected and delivered information on surveys carried out in their own country and in selected countries that had not participated in the project. The intention was to include all European Union countries and Switzerland and Norway.

The inclusion and exclusion criteria for the review were as follow:

- Inclusion criteria – general adult population surveys (national and/or regional and/or local), implemented in 2000-2008 entirely devoted to alcohol or with alcohol/drinking as an important component within them
- Exclusion criteria – surveys targeted at specific groups (e.g. patients, professional groups, school surveys)

The reporting unit was an individual survey, but in case of repeated surveys or a series of surveys only one template was completed from the most recent study.

The template for summarizing methodology of individual surveys had three sections. The first included questions on abstinence, lifetime and current drinking, measurement of alcohol consumption including volume of drinking, heavy volume consumption, episodic heavy drinking, alcohol abuse/ dependency and unrecorded consumption. These dimensions of alcohol consumption were selected because they seem to be most commonly used for analyses of drinking patterns in relation to alcohol problems. The section about alcohol consumption also covered methods of estimating annual alcohol consumption by using an estimation algorithm.

The second section covered items concerning the context of drinking, alcohol related problems and opinions on alcohol policies including the impact on different population groups.

The final section sought information on the definition of the target population, sampling methods and mode of administration.

Appendix 2 provides a breakdown of all the surveys used with an accompanying numerical reference shown in superscript that is used throughout this paper.

MATERIAL

The data was collected from 22 countries. This was 73% of the originally targeted sample. It included data from all 10 SMART countries (Czech Republic, Estonia, Finland, Germany, Hungary, Italy, Ireland, Poland, Spain, UK) and 12 other European countries. These were Austria, Belgium, Bulgaria, France, Greece, Latvia, Lithuania, Netherland, Norway, Portugal, Romania, Switzerland. Seven countries: Cyprus, Denmark, Luxemburg, Malta, Slovenia, Slovakia and Sweden were missing in the review as relevant data were not made available.

The countries included “old” EU countries as well as those that have joined EU since 2004 and represented all three traditional drinking patterns. The first pattern consisted of regular, frequent beer consumption, examples included Czech Republic, UK or Germany; the second pattern was one in which everyday wine drinking with meals prevailed such as France and Italy and finally one characterized by infrequent drinking bouts of spirits (Nordic countries, Baltic States and Poland).

Thus the review covered 43 surveys (if repeated surveys were counted as one). If the all possible “versions” were included the number grows to 127. The countries varied in terms of number of unique surveys or survey series. The lowest number of surveys in any country was 1 and the highest was 4. Among repeated surveys the biggest number of repetitions was noted in Italy²².

Finland had been collecting data for the longest period (since 1968) and the latest surveys covered by this paper were all from 2008. All the figures shown in superscript relate to appendix 1 and are used throughout the paper.

Table 1. Number of different surveys (collected questionnaires) per country

Country	No of surveys	Country	No of surveys
Austria	1	Italy	2
Belgium	1	Latvia	4
Bulgaria	1	Lithuania	1
Czech Rep.	2	Netherland	1
Estonia	3	Norway	1
Finland	2	Poland	4
France	4	Portugal	2
Germany	1	Romania	2
Hungary	3	Spain	2
Greece	1	Switzerland	1
Ireland	1	United Kingdom	3
Total number of surveys – 43			

Table 1 shows the number of surveys collected in 22 European countries. All 22 countries reported data on national surveys (41 surveys), additionally 2 countries also reported descriptions of regional and local surveys (Latvia²³ and UK – England⁴²).

The age ranges varied across surveys. Some used a lower limit whilst others a defined range. In surveys using lower age limit thresholds these varied from 13 years (Italy²²) to 18 years (Hungary¹⁸). The most commonly used lower age limits were 15 and 18. In surveys using age ranges the lower and upper limits varied, though the modal range was 15-64 (9 surveys^{3, 24, 25, 26, 27, 33, 35, 36, 37, 39}). This age range was used

mostly in the case of drug studies with an alcohol component which met the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) requirements. Other ranges varied from country to country. In this case the lowest lower limit was 12 years and highest upper limit was 85 years. In total 44 surveys with 17 various age limits were applied.

There were three types of surveys:

- alcohol only
- alcohol and other issues, but alcohol as main topic
- other issues and alcohol

The first group focusing on alcohol only consisted of 6 surveys (Estonia⁸, Finland⁹, Ireland²⁰, Italy²¹, Latvia²³, Poland³¹). All these surveys covered issues such as alcohol consumption, alcohol related problems and context of drinking. One extra survey from this group was focused on illegal alcohol only (Estonia⁷).

There were 12 surveys where alcohol issues were regarded as the main topic, the majority combined “drugs and alcohol issues only” (Latvia²⁶, Hungary^{15, 18}, Bulgaria³). Others combined “alcohol with tobacco and drugs” (Lithuania²⁷), “drugs and crime” (Spain^{38, 39}, Netherlands²⁶, Norway²⁹), “gambling and drugs” (Finland⁹), “smoking” (UK⁴¹), “smoking, driving, gambling, sex and leisure time activity” (Czech Republic⁵).

In the group of remaining 24 surveys focused on other issues and alcohol the biggest subgroup consisted of 7 surveys with drugs as a main topic (France¹², Latvia²⁴, Poland^{30, 33}, Portugal³⁵, Romania^{36, 37}). The second biggest subgroup was composed of 5 general health surveys (Latvia²⁵, Poland³², Switzerland⁴⁰, UK⁴², Portugal³⁴). There were additional 4 surveys on health and alcohol; the first one covered special health issues and alcohol (France^{14, 13}), next one - the omnibus survey (UK⁴³) encapsulated attitudes towards alcohol use in combination with attitudes towards climate change, smoking and general working conditions. A third survey from this sub-group was focused on health drugs and alcohol, (Belgium²) and a fourth survey handled alcohol in the context of mental health (Hungary¹⁷). Several surveys put

alcohol questions into a wider context of: health, drugs, crime (Greece¹⁶, France¹¹), or drug use, leisure time activity, work, home, (Italy²², Estonia⁶, Czech Republic⁴). Two surveys were focused on substance use (Germany¹⁵, Austria¹) thus giving similar priority to both alcohol and illicit drugs. In addition the German survey also assessed tobacco consumption and the use of prescription drugs as well as gambling behaviour.

In conclusion, in addition to varying age ranges, comparability of alcohol surveys in EU is compromised due to a wide variety of contextual questions which encapsulate alcohol use across Europe.

RESULTS

Abstinence

The concept of the lifetime abstinence was not commonly used. If explored at all, it was consistently defined across the surveys as “never drinking during an individual’s lifespan.” However there were some exceptions, for instance in Ireland (Ireland²⁰) lifetime abstinence was defined as “never drinking beyond sips or tastes”.

The rate of lifetime abstainers was estimated in various ways. Most often questions concerning lifetime drinking were used whilst other surveys estimated it by the number of “never” responses to a question on frequency of drinking; others used the number of “never” responses to the question on age of drinking onset.

The concept of current abstinence was more popular than lifetime abstinence. Its definition varied greatly, too. The current abstainers were defined mostly as “persons who did not drink during the last 12 months.” Some surveys made a distinction between current and life time abstainers. For instance in Greece¹⁶, a current abstainer was defined as “a person who has not drunk in the last 12 months, but drank in their lifetime.” Similar definitions were used in Austria¹ – “Currently abstinent, but drank alcohol before.” Some surveys used a different time frame, for instance in

one Italian survey current abstinence is defined as “no drinking during the last 3 months” (Italy²¹). Sometimes the time frame was not strictly defined, instead of time thresholds descriptions such as “Usually a “Non-Drinker” or “Not Drinking Nowadays” were used (Italy²², UK⁴²).

Three types of questions were used when measuring current abstinence.

The first method was a separate question on drinking of alcoholic beverages over a designated period with a yes/no response (for instance: have you ever drunk any alcohol beverage during last 12 months?). There were similar beverage specific questions e.g. have you ever drunk beer/wine/sprits during last 12 months. The second method used to identify current abstainers was to add the category “never in last 12 months” to the list of answers to the question on frequency of drinking. Finally the third method was to ask the question: “How long ago did you last have an alcoholic drink?”

Table 2 presents the percentage of current abstainers in the countries surveyed. It is very difficult to make comparisons about abstinence rates between countries as some of these differences are a reflection of different definitions and in particular terminologies used and the differences in ages of the sample as has been previously discussed. In particular, the distinction between current (12 months abstainers) and lifetime abstainers as is the practice in Austria and Greece leads to lower estimates of current abstainers compared to other countries.

Table 2. Percentage of Current Abstainers

Country	Age coverage	% of abstainers	Comments	References
Austria	15+	4.7	life-time abstainers not included	1
Belgium	15+	15.8		2
Bulgaria	15-64	18.8		3
Czech Republic	18-64	14.5*	men – 9%; women – 20%	4
Estonia	18-74	14.9		6
France	15-75	13.7		14
Finland	16-69	12.0		9
Germany	18-64	8.0		15
Greece	12-64	3.1	life-time abstainers not included	16
Hungary	18-54	20.8		19
Ireland	18+	25.7		20
Italy	11+	30.6		22
Latvia	15-64	15.0		26
Lithuania	15-64	14.9		27
Netherlands	16-65	10.0*	men - 5.9%; women - 14.1%	28
Norway	15+	13.0		29
Poland	15-64	9.4		33
Portugal	15-64	29.4		35
Spain	15-64	18.0		39
Switzerland	15+	23.6*	men – 15.6%; women – 31.6%	40
UK	16+	16.0		43

* Roughly estimated from gender specific results
For an explanation of references see appendix 1

Volume of alcohol consumption

The survey review identified several methods of asking about alcohol consumption. In most countries the Quantity Frequency (QF) method was applied. This method consists of asking about frequency of drinking in a defined period and then about the quantity usually drunk on one occasion (drinking episode) or one day. There was a wide variety in the time frame used. Some countries used both 12 months and 30 days as time frames, e.g. Germany. The most common covered the last 12 months. (Czech Republic⁵, Finland^{9, 10}, Ireland²⁰, Latvia²⁶, Poland^{30, 31, 33}), others the last 30 days or 4 weeks. (Romania^{36, 37}, Spain³⁸ – separately for weekdays and weekends; Estonia⁶, Czech Republic⁴). In one survey (Italy²¹) the relevant period was the last 3 months.

The quantity-frequency approach appears in two versions: generic and beverage specific quantity frequency measures. Examples of generic measurement are produced below from the Italian survey (Italy²¹)

“During the last 3 months how often have you drunk (wine, beer, aperitifs, liquors, other alcoholic beverages)?

The day you drink (wine, beer, aperitifs, liquors, other alcoholic beverages) how many (glasses, cans, little bottles) do you drink?”

Examples of the second approach of beverage specific question came from the Czech’s survey: (Czech Republic⁵).

“In the past 4 weeks, on how many days did you drink any beer?

“On a day when you drink beer, how much do you usually drink? (0,5 l bottle(s) of beer)”. The same question was repeated in relation to wine and spirits.

Most surveys measured beer, wine and spirits consumption. Occasionally the list was extended, for example alcopops and cider are added to the Norwegian survey (Norway³⁰).

One British survey applied the last week as a time frame for asking about alcohol consumption (UK⁴²). The assumption behind such approach is that last week is representative of a respondent’s drinking.

The Belgians asked about the usual week by asking separate questions about weekday and weekend drinking (Belgium²). These are the relevant questions from

the Belgian survey; Firstly “Do you usually drink alcoholic beverages during the days of the week (Monday till Thursday)?” secondly “On how many weekdays (Monday to Thursday) do you usually drink alcoholic beverages?” and finally “How many glasses of alcoholic beverage do you drink on average per day during weekdays (Monday to Thursday)?” Corresponding questions were asked for the weekends. (Belgium²)

A similar approach was used in the Portuguese survey. The starting point was a question on drinking during last week. Those who had an alcoholic drink were then asked to state whether they drank everyday, 3 to 6 days or 1 to 2 days per week. In addition, there was an attempt to compare drinking during working days and the weekend (Portugal³⁴).

Other countries e.g. Finland and Latvia (Finland¹⁰, Latvia²⁶) applied the graduated frequency (GF) method to estimate alcohol consumption. The GF method asks an individual to estimate their drinking using a sliding scale method as follows:

“During last 12 months:”

1. How often had you 12 drinks or more?
2. How often had you 8-11 drinks or more?
3. How often had you 5-7 drinks or more?
4. How often had you 3-4 drinks or more?
5. How often had you 1-2 drinks or more?

The responses to this question are given using standard frequency scale ranging from once a day to once a year.

Another method used in the Hungarian (Hungary¹⁷) and Polish surveys (Poland^{30, 31, 33}) was to ask questions about the last occasion/drinking episode. Included in the question was the time that had elapsed since last drinking. The relevant questions in the Polish survey were:

How many days ago did you last drink vodka? How much vodka did you drink on the last occasion? Similar questions were asked about wine and beer.

Apart from the methods described previously we have found three country specific approaches (Italy²², Poland³², Bulgaria³). In one Italian survey the question was: “How many glasses of (125 ml) wine, (330 ml) beer, (80 ml) liquors do you usually drink per day or less frequently (Italy²²)”. In the Bulgarian survey the researchers asked about the number of standard drinks of alcohol i.e. 50 ml of spirits, a glass (approx. 170 ml) of wine or one beer – 330 ml), which are usually drunk on a daily basis over the last year (Bulgaria³). In the Polish EHIS Study (European Health Interview Survey) respondents were asked to reflect upon the last year and estimate the typical frequency and volume they drank seven combinations of three beverages from: “vodka, wine, beer” to “vodka only”, “wine only”, “beer only”. The two most typical combinations were selected and the amount was reported (Poland³²).

Summing up the review of different measurements of annual alcohol consumption it was found that the BSQF methods was the most prevalent being used in 19 out of 43 surveys. The generic QF method was applied in 6 surveys, Last occasion method in 4 surveys and GF method in 2 surveys.

There were also differences in the measures used to report the results. Two approaches were used to estimate alcohol consumption. The first and most commonly used was to estimate annual consumption in liters of pure alcohol. The second method reported the average number of units or mg of alcohol per day (Czech Republic⁴, UK⁴³). In the UK a unit was either 8 grams of pure alcohol – UK⁴³. A similar approach was used in Belgium, where average weekly quantity of alcohol intake per respondent was calculated (Belgium²).

There are a number of limitations when estimating alcohol consumption using either the beverage specific or generic quantity-frequency approaches. It is difficult to estimate alcohol consumption per occasion using the beverage specific approach because it asks the respondent to estimate different types of alcohol drunk in one day but not whether each type of drink is consumed on each occasion. The limitation of generic measurement is that it often refers to such terms as a “standard drink” a term which varies or is understood differently in European countries. Moreover, the

generic quantity frequency approach does not provide any information what kind of alcoholic beverage people really drink.

Some countries (Finland¹⁰, Latvia²⁶, Poland^{30, 31, 33}) used more than one method in one survey which offered an excellent opportunity to compare their quantities directly. Three measures Graduated frequency (GF), beverage specific quantity/frequency (BSQF) and generic quantity/frequency (QF) were used in Latvia²⁶ across a common timeframe – (last 12 months.) The GF method gave higher estimation (4.1 liter per capita) than BSQF method (3.4 liter per capita). The generic QF method gave the lowest estimation (3.0 liter per capita) (Latvia²⁶), the order of questions, however, was not controlled for.

In Poland (Poland^{30, 31, 33}) a number of questions were asked on the last occasion of drinking of beer/wine/spirits, in addition to Beverage Specific Quantity Frequency (BSQF) method (timeframe – last 12 months.) The last occasion method always gave higher estimation of annual alcohol consumption than QF. Again, the order of questions was also not controlled for.

In Finland¹⁰, three different methods were used in the following order which was not rotated: Graduated Frequency (last 12 months), Beverage Specific Quantity Frequency (last 12 months) and a 7-day recall. Estimates of annual consumption did not differ very much. The highest estimate, 4.6 liters, was derived by the GF method, the lowest, 4.3 liters, with the QF method, while the 7-day recall yielded an estimated 4.5 liters (Mäkelä, et al 2009).

Only eight countries calculated the “coverage rates”¹ and the results are shown in table 3. There was a large variation in coverage rates from 24% in Hungary to 77% in the Czech Republic.

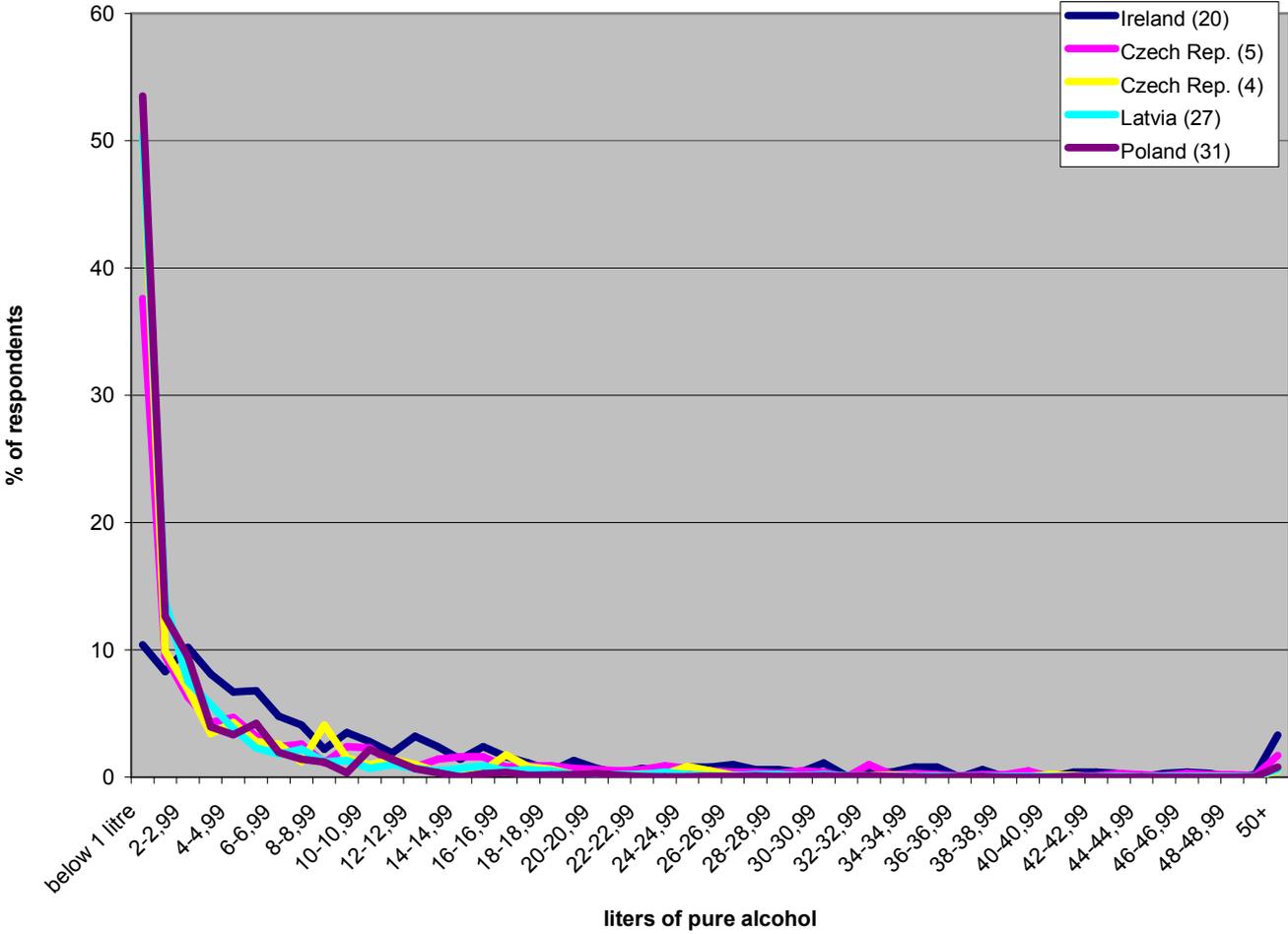
¹ Coverage rate means what percentage of recorded annual consumption (sales statistics) is covered by the estimated annual consumption from the survey data

Table 3. Coverage rates for Eight Countries

Country	Year	Method	Age coverage	Coverage rates	References
Germany	2006	self administrated-mail / telephone	(18-64)	53	¹⁵
Czech Republic	2002	face-to-face	(18-64)	77	⁵
Hungary	2003	face-to-face	(18-54)	24	¹⁷
Ireland	2006	face-to-face	(18+)	65	²⁰
Latvia	2007	face-to-face	(15-64)	29	²⁶
Netherlands	2004	self administrated-mail	(16-65)	70	²⁸
Norway	2004	face-to-face	(15+)	64	²⁹
Poland	2004	face-to-face	(15+)	25	³²

Distribution of annual alcohol consumption was available in only five surveys: Ireland, Latvia, Poland and 2 surveys from Czech Republic (Ireland²⁰, Latvia²⁶, Poland³⁰, Czech Rep^{5; 4}). This is illustrated in Figure 1.

Figure 1. Distribution of annual alcohol consumption in 5 surveys



Each of the distributions shown in Figure 1 was based on the BSQF. Three surveys used 12 months as the reference time period, the exception was Czech Rep⁴ (four-weeks). The distribution curves are similar but the Irish distribution shows more drinkers in the bottom ranges. Comparison of two Czech surveys discloses differences in right side of curve only. The Czech survey covering the population aged 18-64 showed a higher percent of respondents with consumption of 50 liters and above of pure alcohol than the survey covering population aged 15+, as a result the mean consumption in the former survey is much higher. There are two possible explanations for this finding, firstly the difference in the age range of the respondents and secondly the differences in timeframes used. Table 4 shows explanatory data to be read in conjunction with figure 1.

Table 4: Descriptive Statistics (liters pure alcohol) for those countries using the BSQF method to estimate consumption.

Survey	Age range	Year	Method	Mean	Median	Standard deviation
Ireland ²⁰	18+	2002	BSQF (last 12 months)	8.7	3.3	15.3
Czech Rep ⁵	18-64	2002	BSQF (last 12 months)	7.7	2.4	12.4
Czech Rep ⁴	15+	2002	BSQF (last 4 weeks)	4.4	1.0	8.3
Latvia ²⁶	15-64	2007	BSQF (last 12 months)	3.4	1.0	7.8
Poland ³⁰	16+	2002	BSQF (last 12 months)	3.1	0.8	7.6

Heavy volume consumption

The concept of heavy volume consumption varied across those countries surveyed. In different surveys it was related to annual consumption, weekly or daily consumption or it described consumption on one occasion respectively. It was reported according to the number of units (drinks) or in milliliters/grams of pure alcohol. The thresholds of heavy volume consumption applied in particular surveys are presented in table 5.

Table 5. Heavy volume consumption – thresholds

Country	Thresholds	References
Belgium	22+ glasses alcohol beverages per week	2
Bulgaria	6+ standard drinks of alcohol (one standard drink = 50 ml of spirits, appr. 170 ml of wine or 330 ml of beer) at least once per week during the last year	3
Czech Rep.	40 ml for male and 20 ml for female (pure alcohol)	4
Estonia	6+ drinks during one occasion	6
France	21+ units per week for male; 14+ units per week for female	11
Germany	Male > 120 g, female > 80 g	15
Hungary	Last drinking occasion is “today” or “yesterday” and the quantity of last drinking is 40+ ml pure alcohol	18
Hungary	7 (female) or 14 (male) units of alcohol in the previous week, when 1 unit = 15 gram pure alcohol, or at least 3 (for female) or 5 (for male) units of alcohol in a single day.	19
Ireland	14/21 standard units per week (140/210 grams)	20
Italy	Male > 40 gm; female > 20 gm per day/occasion	22
Latvia	At least one episode of absolute alcohol consumption over 60 grams within last 12 months	26
Netherlands	6+ drinks during one occasion	28
Poland	Annual consumption > 10 liters ethanol by male and over 7.5 by female	32
Spain	5+ alcoholic drinks in one session	38
Switzerland	Male: on average 40+ grams of pure alcohol per day Female: on average 20+ grams of pure alcohol per day	40
UK	8 units per day	41
UK	Drinking over recommended 21 units (male), 14 units (female) per week	42
UK	Weekly consumption of 51+ units for male; 36+ units for female	43

There is a large variation in the definition of thresholds used across the surveys. In some countries they are gender specific, The most frequent reference time period was one week (5 surveys), then one occasion (3 surveys) and then one day (2 surveys), in the Polish survey³² only heavy volume consumption is related to annual consumption.

Episodic heavy drinking

Episodic heavy drinking was usually defined as exceeding a given amount of alcohol on one occasion. The thresholds are presented in table 6.

The range for number of units used as a threshold is 3 (Hungary) to 6 (Belgium, Bulgaria, Lithuania, France, Italy). Five and six glasses is the cut-off point most

frequently used. Two countries use ml. of pure alcohol instead of number of drinks (Ireland and Norway). Only two countries had thresholds that differed according to gender (UK and Switzerland).

Some of the surveys reported episodic heavy drinking with reference to a timeframe, namely Belgium, Bulgaria, Greece, Italy and the UK (See table 6).

Table 6. Episodic heavy drinking – thresholds

Country	No of units	Unit definition	Occasion/day	Reference period	References
Belgium	6 glasses		one day	last 6 months	2
Bulgaria	6 standard drinks	spirits 50 ml, wine 170 ml, beer 330 ml		less than once per month last year	3
France	6 units		one occasion		13, 11
Germany	5 glasses		one day	last 12 months and last 30 days	15
Greece	5 drinks		one occasion	last 30 days: - once - 3 times - 10 times	16
Hungary	3-5 drinks and 6+ drinks	about 16 mg pure alcohol		last year	19
Hungary	M: 5 drinks	bottle of beer, glass of wine, 5 cl spirit			18
	F: 4 drinks				
Ireland	75 grams	Pure alcohol	one occasion	Last 12 months	20
Latvia	5+ drinks		daily or party/celebrations		23
Lithuania	6 drinks	vodka 40 ml, wine 120-150 ml, beer 330 ml	at once		27
Italy	6 glasses		one occasion	12 months	22
Italy	5 glasses		in a row in less than 2 hours		21
Norway	10 cl.	Pure alcohol			29
Switzerland	M: 8 drinks		one occasion		40
UK	M: 8 units		one day	last week	42, 43
	F: 6 units				

In some countries drunkenness was used as an indicator of episodic heavy drinking. In one of Spanish surveys the question was formulated as follows: “During the last 12 months, on how many days did you get drunk?” (Spain³⁸). In Czech’s question the drunkenness criteria was more colloquial: “In the past 4 weeks, on how many days did you drink "enough to feel it"”? (Czech Rep⁴). In Hungary drunkenness was defined as heavy drinking during the last month (Hungary¹⁹).

At risk drinking

Some surveys used measures to judge “At –Risk” drinking with reference to “heavy volume consumption” or “heavy episodic drinking”. In Switzerland⁴⁰ “heavy volume consumption” was defined as 40+ grams of pure alcohol per day for males and 20+ for females and “heavy episodic drinking” defined as: 8+ drinks per drinking occasion for males and 6+ for females. The following typology was used to define risky consumption in the Swiss survey⁴⁰:

- regular risky consumers (heavy volume consumption, but no heavy episodic drinking)
- episodic risky consumers (heavy episodic drinking, but no heavy volume consumption)
- risk cumulating consumers (heavy volume consumption and heavy episodic drinking)

In Germany¹⁵ at-risk drinking was defined as follows:

- risky consumption: men > 30 – 60 g, women >20 – 40 g;
- hazardous consumption: men > 60 – 120 g, women > 40 – 80 g;
- heavy consumption: men > 120 g, women > 80 g

In Austria¹ the term problematic consumption was used and defined as drinking 60 g or more (males) and 40 g or more (females) per day/occasion. Hazardous consumption in France¹⁴ was defined as 6+ glasses on the same occasion in the last 12 months.

Alcohol abusers and alcohol dependents

About half of these general population surveys considered alcohol dependence and/or abuse. Alcohol dependence was usually defined with reference to ICD-10 or DSM-IV criteria, whilst the definitions of alcohol abuse went beyond these classifications. There were two main ways in which alcohol dependence/abuse was assessed. Firstly on the basis of volume of alcohol consumed and secondly by means of a screening tests such as AUDIT (Babor et al., 2001) or CAGE (Ewing, 1984).

There were different cut-off points to establish alcohol abuse based upon alcohol consumption, firstly annual consumption of 12 liters of pure alcohol or more (Poland^{30, 31, 32, 33}). Secondly a cut-off of 15-48 units per week for women and 22-48 units per week for men was used (France¹¹). Thirdly the cut-off point was decided upon the basis of number of drinks consumed in a row or frequency of drinking during last 30 days. In addition this was broken down on the basis of two criteria: (1) drinking alcohol 100 times or more in the last 30 days OR (2) having 5 or more drinks in a row (on one occasion) at least 20 times in the last 30 days (Greece¹⁶).

With regard to screening/diagnostic instruments, the German¹⁵ population survey defined both alcohol abuse and alcohol dependence using DSM-IV criteria (Munich Composite International Diagnostic Interview; M-CIDI) - abuse – 1 out 4 items; dependence 3 out of 7 items (Germany¹⁵). The Greek survey uses a number of screening items to assess dependency. These were as follows

- (1) Trying to stop drinking without succeeding;
- (2) Drinking alone;
- (3) Drinking only outside meals;
- (4) Drinking before lunch;
- (5) Others of the opinion that an individual drinks a lot;
- (6) Own opinion that one drinks a lot (Greece¹⁶). In Belgium², Italy²¹, Poland³⁰, and Romania³⁷ the CAGE test was used to identify abuse/dependence, whilst in

Bulgaria³, Czech Republic⁵, Lithuania²⁷ and Switzerland,⁴⁰ the AUDIT was used for the same purposes.

The AUDIT is used differently across countries. In Switzerland⁴⁰ questions 1 to 3 measure hazardous alcohol use and 7 to 10 measure harmful alcohol use. Whilst in Bulgaria³ a total score of 13 points or more for both men and women indicated possible alcohol dependence.

Two surveys allocate abuse/dependence on the basis of alcohol treatment. In Spain the criteria is treatment within the last month or last year (Spain³⁹), whilst in Latvia an abuser is the person who reported that they have been ever treated for alcohol or drug problems (Latvia²⁴).

In conclusion the AUDIT was the most frequently used (10 surveys), followed by the CAGE (5 surveys) and CIDI (1 survey).

Unrecorded consumption

Alcohol derived from unrecorded sources was studied in 5 countries – Estonia, Finland, Latvia, Norway, Poland.

The focus was mostly on the illegal alcohol but unrecorded legal alcohol and methods of purchasing unrecorded alcohol were also under consideration.

In the Polish surveys, the questions on unrecorded consumption were integrated into questions on alcohol consumption. Questions concerning home-made wine and moonshine were included in estimating annual alcohol consumption using the beverage specific last occasion method.

Finland and Norway used the FQ method within the last 12 months to estimate consumption of illegally produced alcohol. In the Estonian survey, respondents assessed their share of illegal alcohol to estimate their consumption over the last month.

The supply side was investigated by questions on purchasing alcohol during travels abroad (Finland¹⁰, Norway²⁹), legal/illegal home production of alcoholic beverages (Finland¹⁰ Norway²⁹) and buying alcohol from unrecorded sources (Finland¹⁰, Norway²⁹, Poland³⁰, Estonia⁷, Latvia²³).

Drinking context

The context of drinking was investigated in 12 surveys from 9 countries. The questions related to the context of drinking covered such issues as:

- Place of drinking (Germany¹⁵, Hungary^{17, 18, 19}, Latvia²⁶, Norway²⁹, Poland^{30, 31}, UK⁴³, Italy²¹, Netherlands²⁸)
- Accompanied or solitary drinking (Hungary^{17, 18, 19}, Netherlands²⁸, Norway²⁹, UK⁴³, Bulgaria³)
- Drinking occasions (Poland^{30, 31})
- Meals associated with drinking (Germany¹⁵, Hungary^{17, 18, 19}, Italy²¹)
- Time of drinking (Poland^{30, 31}, Hungary¹⁷)

As for “place of drinking” the following categories emerged in different surveys:

- in Germany: at home, work place, party, disco, bar, restaurant
- in Hungary: at home, work place, party, disco, bar, restaurant
- in Latvia: at home, friends’ place, workplace, bar/pub, restaurant
- in UK: home; someone else’s home; pub; restaurant; night club; outdoors in a public place (e.g. street, park); other
- in the Netherlands: at home, restaurants, public drinking places (pubs/disco, etc.), para-commercial drinking places (e.g. sport canteens; community houses)
- in Poland: at home; in a restaurant; cafe, bar; at work place; outdoor; other
- in Norway: at home, at others’ home; restaurants and bars; other

There was also a number of differences concerning how data relating “accompanied or solitary drinking” was collected. For example in Norway questions were asked concerning the number and gender of drinking companions, in Hungary questions were asked whether alcohol was consumed as a couple, with a work or schoolmate, or with relatives, friends, alone or others, in Poland the questions were – whether an individual drank alone or in the company of friends or strangers. Finally in the UK⁴³ separate categorizations were used (Spouse/partner; boy/girlfriend; friends; family; work colleagues; other; as well as Alone and (1 other person; 2-5 people; 6-10 people; >10 people, other).

The issue of drinking with meals or not was investigated in Hungary by a direct question with a yes/no answer while in Italy drinking with meals was investigated by asking questions about alcohol consumed with a meal at home or in a restaurant/pizzeria. In Germany, the frequency of drinking with meals was assessed using categories ranging from never to daily.

In Poland length of time drinking was calculated by hours between the beginning and ending of a drinking occasion, but in Hungary this was categorized as follows: weekday mornings, between 10-17, after 17, and at weekends before 10 am. 10-17 and after 17 pm.

Alcohol related problems

Questions on experiences with alcohol related problems were included in 16 surveys from 13 countries. Usually a set of items were included, but in some surveys this consisted of a single question. There was a variety in the types of questions, and some required single responses such as yes or no whilst others used severity or frequency scales. In a few surveys the standardized scales such as the AUDIT (Saunders et al., 1993) were applied.

Usually the lists of problems included:

- accidents (road traffic, work)
- health problems (physical, mental, psychological, sexual)
- legal problems

- family problems
- other interpersonal problems
- victimization
- problems with work
- violence (at home, on the street, at work)

In a few surveys a distinction between the long term and acute consequences of drinking was made. For example, in the UK health-related problems were measured but there was no question to establish whether these were alcohol-related or not (UK⁴¹).

Sampling

Random sampling was the most commonly used method of sampling. Ireland²⁰ was the only country which used quota sampling. Various sampling procedures were applied.

Simple random sampling (e.g. random selection of participants based on a telephone register) was applied in Switzerland⁴⁰ only. In other countries more complex schemes of random sampling were used.

In Austria¹ the multi-stage random sampling (e.g. random sampling based on population register, within each household/last-birthday-method) was used. In Germany¹⁵, two-stage probability sampling was applied: at stage 1, a set of communities stratified by region and community size was selected proportional to population size; at stage 2, individuals were stratified by age groups and randomly selected from population registers. The two-stage sampling method was also used in the Netherlands²⁸. Firstly a random sample of communities (stratified by region and urbanization level) was drawn, then within communities a simple random proportionate (defined by region/urbanization) sample was selected. Latvia²⁶ used the stratified random sampling method (e.g. stratified by planning regions and development index –three ranks).

Belgium and Italy employed variations of the multi-stage cluster method. In Italy a cluster sampling for municipalities was taken and thereafter a random sample of

family households. Belgium also employed a multi-level stratified clustered sample with the addition of the replacement scheme.

The survey in Bulgaria³ was conducted by a national representative sample with proportional selection of the cities and towns and a random selection of individuals.

The multi-stage stratified scheme was applied in Greece¹⁶. The probability sample was four-stage: random selection of towns & villages, followed by a random selection of sampling points (building blocks), thereafter a random selection of households within selected blocks, and finally a random selection of individuals (using the last birthday rule).

Selection of the individuals on the criterion of: “the one whose birthday is nearer” was used also in France¹⁴.

In Portugal³⁴ the sample unit was the address of a flat or a house. The size and selection of the sample were conducted with the following aims: firstly to represent the total population and households in 2001 and secondly to provide an approximately homogeneous distribution in the seven Portuguese regions according to 1989 boundaries. In order to provide an estimation of alcohol consumption in all regions, further selection was carried out in two stages; firstly primary units (areas) and then secondary units (Individual housing). All members living in the house were then interviewed.

Survey administration

Despite growing costs, all but three countries, adopted face-to-face as their major administration approach. A face-to-face approach was used in Austria¹, Czech Republic^{4, 5}, Finland¹⁰, Greece¹⁶, Latvia^{23, 24, 26}, Lithuania²⁷, Poland^{30, 31, 32, 33}, Portugal³⁵, Romania^{36, 37}. In three surveys, in the face-to-face interview the questions on sensitive issues only including alcohol consumption, were self-administered (Belgium², Hungary¹⁷ Spain³⁹).

Four surveys were self-administered with the assistance of an interviewer (France¹², Bulgaria³, Italy²², Spain³⁸). In Bulgaria the interviewer only intervened if the respondent required help to complete the survey.

In several countries the self-administered mailing survey was implemented (Finland⁹, Germany¹⁵, Estonia^{6, 7, 8}, Latvia²⁵). In Germany, people who did not respond to the self-administered questionnaire after the second reminder were invited to answer the questions by telephone (Germany¹⁵).

Telephone interviews were rare, being only used in two surveys (France¹¹, Switzerland⁴⁰). In both countries telephone interviews were supplemented by other methods. In Switzerland, the face-to-face option was used for older respondents, whilst in France the survey consisted of a self-administered questionnaire delivered by the mail and a follow-up telephone interview.

Five computer assisted face-to-face interviews were identified (Finland¹⁰, Italy²¹, France¹³, UK^{42, 43}). In one survey the computer assisted face-to-face interview was supplemented by self completion booklets, and clinical measurements (blood and saliva samples) (UK⁴²). Computer assisted telephone interviews were used in one survey only (France¹⁴).

The response rates varied across different countries and are shown in table 7.

Table 7. Response rates

Country	Administration mode	Response rate (%)	References
Austria	Face-to-face	35	1
Belgium	Face-to-face	61	2
Czech Republic	Face-to-face	71	4
Estonia	Self administrated-mail	50	6
Finland	Face-to-face capi	74	10
Germany	Self administrated-mail / telephone	45	15
Greece	Face-to-face	48	16
Hungary ²	Face-to-face	92	19
Ireland	Face-to-face	70	20
Latvia	Face-to-face	61	26
Netherlands	Self administrated-mail	50	28
Poland	Face-to-face	74	33
Portugal	Face-to-face	81	35
Spain	Face-to-face	50	39
UK	Face-to-face capi	61	43
Switzerland	phone	64	40

In general, surveys with face-to-face administration had higher response rates than telephone and mail surveys. There was a wide range of response rates using face to face administration, the lowest was in Austria¹ (35%) whilst the highest was Hungary¹⁹ (92%).

The response rate in Hungary was so high because the original individuals sampled could be replaced. The highest response rate without "replacements" was observed in Finland¹⁰ (74%) and then in Ireland²⁰ (70%).

² Sample with replacement

DISCUSSION

This review encapsulated 43 surveys from 22 diverse countries representing a variety of drinking patterns. The samples varied widely in age ranges. Out of 43 surveys, six solely focused on alcohol, in 13 alcohol was the main topic, half of the surveys considered alcohol in a wider context without having it as its' primary topic.

The surveys review showed the wide differentiation of survey methodologies applied in European countries.

The main reasons for this are differing:

- drinking patterns
- research traditions
- emphasis placed upon various aspects of alcohol consumption and patterns of alcohol related problems
- research resources e.g. funding, skills

The differences are not limited to methods of measurements but also reflect various different concepts. A good example is indicators of heavy alcohol consumption. Concepts such as heavy episodic drinking, heavy volume consumption or alcohol abuse were defined differently and appear to be tapping different concepts.

The most common measurement of alcohol consumption is based upon the beverage specific quantity frequency (BSQF) method. Methodologies designed to compare different measures of alcohol consumption in a robust manner are required however this could be a way forward to devise a European standard methodology. It is limited when attempting to measure irregular drinking patterns as there is a strong likelihood that an individual will have difficulty in re-calling all drinking occasions. . Other shortcomings of BSQF are that it cannot capture the variations of different types of alcoholic beverages drunk on one occasion, and finally it may not estimate the overall frequency of drinking as it asks about each beverage separately.

The apparently, simpler approach called generic quantity/frequency method has two deficiencies too. Firstly it does not capture the variation of different drinking cultures or those surrounding to different beverages which may or may not be common

across countries. Secondly, it forces respondents to re-calculate their varying drinking practices into a common quantity measure – a standard drink.

There are many issues concerning the concept of a standard drink which make uniformity a difficult goal to achieve. The “standard drink” originated in the United States and contains approx 14 grams of ethanol (Dawson, 2000). European countries do not as a rule have a standard drink, so for example in the United Kingdom the unit is used as the measure for “a drink” and according to Department of Health guidelines this is 8 grams. To give some indication of the confusion there are three measures in which wine glasses are sold in the United Kingdom, 125, 175, 250 mls. The latter equates to nearly 3 units of alcohol depending upon the strength of wine, typically this ranges from 10-14% when alcohol is sold in bars and restaurants. There are even greater problems when considering consumption alcohol at home. Gill and O’May found that the average drink poured at home contained not 1.0 but 2.05 UK units (Gill & O’May, 2007). Only 25% of 297 participants were able to estimate unit content with accuracy. We suggest that one possible way forward is to agree what would constitute a standard drink in terms of grams of alcohol and then ask each country to describe this in the questionnaire in terms of what work best in that setting. e.g In the UK a standard drink could equate to half a pint of beer if it was agreed that a standard drink equated to 8 grams of alcohol.

There was also some inconsistency when considering the time frames by which to measure alcohol consumption, the most common being 12 months, though 30 days was also used. We suggest that there are difficulties with both time frames. It is likely that many respondents find it difficult to recall drinking patterns over a 12 months period, however using 30 days fails to capture irregular drinking patterns and clearly those who have not drunk in that period. It is important to note that “last 30 days” is not necessary representative for the whole year due to seasonal diversity (e.g. there is heavy drinking over the Christmas and New Year period). However there is a need for a degree of cross-country consistency and on balance we feel that “the last 12 months” provides a more comprehensive picture of alcohol consumption and recommend its adoption.

There was also a degree of inconsistency concerning surveying alcohol consumption over a short period. The majority of surveys asked the participants to estimate their alcohol consumption by reference to one day, though some use “an occasion.” There are difficulties in using “an occasion” as it is very imprecise in terms of duration (i.e. how long is an occasion?) and how representative are they of typical drinking. For example a wedding reception or birthday may not be typical. “One day” is more easily understood and defined and we suggest adopting it as a standard time frame when asking about volume of alcohol consumed.

Some comments are needed about capturing information about the types of alcohol consumed. It was more common to use the beverage specific as opposed to generic questions. The generic approach could mean that a respondent considers only the beverage which is the most typical for their regular drinking pattern and do not report beverages consumed irregularly. However, the beverage specific measurement is imprecise and possibly confusing if they don't neatly fit within such basic categories as beer, wine or spirits. On balance we feel that the beverage specific method of assessing alcohol consumption is preferable with an option to ask for a country-specific drink in addition to three major beverages, namely beer, wine and spirits.

Another area that needs to be explored is whether to use a filter question as standard practice- such as “have you drunk any alcohol over the past year?” or to ask a direct question about frequency of drinking. The filter question can lead to an overestimation of the rate of abstainers because it encourages both an interviewer and a respondent to select negative responses and to substantially shorten the interview time. In all Polish surveys with filter questions the abstinence rate was up to two times higher than in surveys without a filter question. (Moskalewicz & Sierosławski, 1991; Sierosławski, 1993). Therefore on balance we feel that questions concerning frequency of drinking without a filter question are preferable.

Another issue that needs to be decided is what is the best way to measure Heavy Episodic Drinking (HED)? There needs to be an agreement as to the amount of drinking that constitutes HED and whether it should differ according to gender and over what timeframe it should be assessed. It was usually defined as exceeding a given amount of alcohol on one occasion or less frequently in one day. We suggest

that it is more difficult to agree upon what constitutes an occasion across different drinking cultures and suggest that questions relating to alcohol consumption on one day are preferable as a reference point compared to one occasion. Only two countries had thresholds that differed according to gender. Taking into account differences in weight as well as alcohol metabolism by females and males we recommend this is adopted more widely.

In some countries questions about drunkenness were used instead of questions about heavy episodic drinking. However the concept of drunkenness is even more problematic because not only it is understood differently “across” countries, often there is not a uniform understanding as to what constitutes drunkenness “within” countries.

Heavy episodic drinking is defined on the basis of exceeding certain thresholds (though these may differ) but this is of limited value as an indicator of drunkenness, because of the many reasons for variations in alcohol tolerance levels. We tentatively suggest that “drunkenness” is not used in cross-cultural surveys.

There were two main ways in which alcohol dependency/abuse was assessed. Firstly on the basis of the volume of alcohol consumed and secondly by means of a screening tests such as AUDIT or CAGE. The second approach seems to be more promising because it includes clinical indicators instead of apparently universal thresholds which ignore significant variation in tolerance and body weights. However this is an area for further research and may involve the use of differing screening tools such as the RAPS (Cherpitel, 2000) and especially for cross-cultural work further statistical testing is required to establish the best cut-off points by which to assess dependency/abuse.

Questions on unrecorded consumption issues are relatively rare in population surveys. This issue is less relevant, where there is not a culture of brewing alcohol in domestic premises and where alcohol is relatively cheap. When purchasing alcohol

it is possible that an individual may be purchasing alcohol that comes from an unrecorded source. Feedback from officials in Spain suggests this may be a bigger problem than thought even in countries where it is thought to be largely irrelevant (Lidia Sigura Personal Communication).

Drinking context seems to be an important factor to explain the volume of alcohol consumed as well as risk of alcohol problems. The drinking context included: place of drinking, type of occasion, company, time of drinking and were investigated through questions about context of usual drinking occasions or last drinking occasion. The description of the last occasion seems to be more precise and linked to the volume consumed; however it may not be representative of a drinking occasion for the individual drinker. There is a wide variety in the types of questions of asked concerning drinking context in the different surveys and in many of the surveys alcohol and drug use questions were asked within the context of wider population surveys and such information may have been regarded as excessive by their host country. One of the tasks for future researchers and policy makers is to devise the requirements of a minimum cross- European data set.

The biggest challenge for general population surveys is typically they have low response rates. Decreasing response rates are a phenomena not restricted to Europe (Weissberg et al., 1989). The non-response rates of 30-64% identified in our review have major implication before conclusions can be drawn relating to generalisability of our findings. Therefore It is important to investigate whether the non-responses are randomly distributed and whether any sample bias exists.

The face-to-face approach was still the most frequent method of administration. Its major disadvantage is high cost. An additional shortcoming is that face to face interviewing may give rise to interviewer bias. This becomes more likely, if the sensitive issues such as alcohol consumption/ problems are being discussed. Telephone interview or mailed questionnaires are other possibilities but both have even lower response rates than face to face surveys. Another problem with telephone or mailing questionnaires is that it is not always possible to discern

whether the targeted person completed the survey. One possible option in such circumstances is self-administration of sensitive parts of the questionnaire during a face-to-face interview particularly in countries where asking questions concerning alcohol consumption are felt to be sensitive. To develop uniformity in this area will be difficult especially in an era of cross-European economic austerity but work should commence to develop minimum sampling standards so that policy makers have robust data on which to make decisions.

CONCLUSIONS

There is a low degree of uniformity across European surveys, as regards sampling, methods of administration as well as age ranges, and especially in relation to alcohol consumption measures both within and between countries.

The results of review suggest that the current position is as follows:

1. Despite higher cost, face to face interviews prevail In Europe having more advantages compared to other administration routes
2. Almost all surveys use probabilistic sampling
3. BSQF is the most prevalent method of estimation of annual alcohol consumption
4. The most common reference time frame for measurement of alcohol consumption is the last 12 months
5. Question on quantity consumed over a short time period use is one day as the relevant timeframe rather than one occasion
6. Unrecorded consumption is measured only in countries where this issue is of concern.
7. The AUDIT is most frequently use screening instrument to measure alcohol abuse/dependence.

Future Tasks for Researchers and Policy Makers.

This review identified following areas of priority with the aim of standardization of alcohol measures across Europe:

- to agree what level of grams of alcohol constitutes a standard drink
- to agree over what time periods should alcohol consumption be measured (we suggest these that these are precise terms rather than general terms such as “an occasion”)
- to refine the measurement of heavy episodic drinking
- to establish the cross-European cut-off points by which to measure alcohol abuse/dependency using agreed screening tools
- to establish the true extent of cross-European unrecorded consumption
- to develop minimum sampling standards for cross-European alcohol surveys

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APPENDIX 1

GENERAL OUTLINE FOR SURVEY DESCRIPTION - Please use one form per survey

Inclusion criteria – general adult population surveys (national and/or regional and/or local), implemented 2000-2008 entirely devoted to alcohol or with alcohol/drinking as an important component

Exclusion criteria – targeted surveys (e.g. patients, professional groups, females), school surveys et cetera

I. GENERAL INFORMATION

	Answers
1. Country	
2. Title of the study	
3. Repeated or single study	
4. Year(s) of the study	
5. Institutions commissioning	
6. Institutions implementing	
7. Name of principal investigator	
8. Age coverage (e.g. 16+, 18+, 18-65)	
9. Geographical area (national, regional or local – which area?)	
10. Context of alcohol questions	1. alcohol only 2. alcohol and other issues (e.g. alcohol and drugs, alcohol and crime) 3. other issues and alcohol (e.g. health, drugs, crime) 4. other, please specify
11. Bibliographic references	

II. DEFINITIONS AND MEASUREMENT

(Please provide theoretical definition, survey question and algorithm of calculation where applicable. In addition please summarise advantages of a definition or measure adopted and than its shortcomings)

	Description	Advantages	Disadvantages
1. Abstainers:			
2. Volume of alcohol consumption:			
3. Unrecorded alcohol consumption:			
4. Heavy volume consumption:			
5. Heavy episodic drinking:			
6. Alcohol abusers:			
7. Alcohol dependency:			
8. Drinking Context: <i>(list of context variables under study with definitions)</i>			
9. Alcohol related problems: <i>(list of problems under study with definitions)</i>			
10. Opinions on alcohol policies incl. impact on different population groups:			

III. SOCIO-DEMOGRAPHIC VARIABLES

(Please provide list of variables)

Variables	Values
1. Gender	1. male 2. female
2. Age
3.

IV. SAMPLING

	Description	Advantages	Disadvantages
1. Sample type			
2. Sampling frame			
3. Sampling procedure			
4. Oversampled (over-represented) groups of any			

V. MODE OF SURVEY ADMINISTRATION

(Please select one applicable mode of survey administration and provide comments)

	Comments
1. Face-to-face interview	
2. Computer assisted face-to-face interview	
3. Telephone interview	
4. Computer assisted telephone interview	
5. Self-administered mailing survey	
6. Self-administered delivered by an interviewer	
7. Other, please specify	

Advantages of chosen option	
Disadvantages of chosen option	

VI. KEY RESULTS

Response rate:

	percent
Response rate:	

Distribution of key variables defined in point II.

(Please provide data according to given categorisation, if it is impossible use own categorization)

1. Non-drinking (abstinence)

1.1. 12-month abstainers

	percent
12-month abstainers	

1.2. Long live abstainers

	percent
Long live abstainers	

1.3. Non-drinkers defined in other way

Definition	percent

2. Volume of alcohol consumption

2.1. Volume of average annual alcohol consumption in litres of 100% alcohol (distribution, mean, median, standard deviation) – *if other measures then average annual consumption go to 2.4.*

Statistics for whole population	total	wine	beer	spirits
mean				
median				
standard deviation				

2.2. Percentage of registered consumption covered by survey (coverage rate)

	total	wine	beer	spirits
Coverage rate				

2.3. Percentage distribution of alcohol consumers (annual consumption)

	total		total		total
below 1 litre		42-42.99		84-84.99	
1-1.99		43-43.99		85-85.99	
2-2.99		44-44.99		86-86.99	
3-3.99		45-45.99		87-87.99	
4-4.99		46-46.99		88-88.99	
5-5.99		47-47.99		89-89.99	
6-6.99		48-48.99		90 litres and more	
7-7.99		49-49.99			
8-8.99		50-50.99			
9-9.99		51-51.99			
10-10.99		52-52.99			
11-11.99		53-53.99			
12-12.99		54-54.99			
13-13.99		55-55.99			
14-14.99		56-56.99			
15-15.99		57-57.99			
16-16.99		58-58.99			
17-17.99		59-59.99			
18-18.99		60-60.99			
19-19.99		61-61.99			
20-20.99		62-62.99			
21-21.99		63-63.99			
22-22.99		64-64.99			
23-23.99		65-65.99			
24-24.99		66-66.99			
25-25.99		67-67.99			
26-26.99		68-68.99			
27-27.99		69-69.99			
28-28.99		70-70.99			
29-29.99		71-71.99			
30-30.99		72-72.99			
31-31.99		73-73.99			
32-32.99		74-74.99			
33-33.99		75-75.99			
34-34.99		76-76.99			
35-35.99		77-77.99			
36-36.99		78-78.99			
37-37.99		79-79.99			
38-38.99		80-80.99			
39-39.99		81-81.99			
40-40.99		82-82.99			
41-41.99		83-83.99			

2.4. Other measures of annual alcohol consumption

Definition of measure	total	wine	beer	spirits

3. Unrecorded alcohol consumption

3.1. Volume of unrecorded alcohol consumption in litres of 100% alcohol (mean, median, standard deviation)

Statistics	total	wine	beer	spirits
mean				
median				
standard deviation				

3.2. Other measures of volume of unrecorded alcohol consumption

Definition of measure	total	wine	beer	spirits

4. Heavy alcohol consumers

4.1. Heavy alcohol consumers

	percent
Heavy alcohol consumers	

4.2. Other measures of heavy alcohol consumers

Definition of measure	result

5. Heavy episodic drinking

5.1. Heavy episodic drinking

	percent
Respondents reported at least one of occasion of heavy episodic drinking	

5.2. Other measures of heavy episodic drinking

Definition of measure	result

6. Alcohol abusers and dependency

6.1. Alcohol abusers

	percent
Alcohol abusers	

6.2. Alcohol dependents

	percent
Alcohol dependent	

6.3. Other measures of alcohol abusers or dependents

Definition of measure	result

7. Opinions on alcohol policies incl. impact on different population groups

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APPENDIX 2

1.	Austria	Austrian representative survey on substance use – 2004-2008
2.	Belgium	Health Interview Survey 1997-2001-2004-2008
3.	Bulgaria	Use of psychoactive substances among the general population in Bulgaria
4.	Czech Rep	Sample Survey of the Health State of the Czech Population – 1993-2002
5.	Czech Rep	Gender, Culture and Alcohol Problems A Multi-national Study (GENACIS) – 2002
6.	Estonia	Estonia 2003 - Work, Family and Leisure
7.	Estonia	The consumption and marketing of illegal alcohol in Estonia (based on the judgments of inhabitants) 2004
8.	Estonia	“Alcohol consumption and alcohol policy 2007 (based on the judgments of inhabitants)”
9.	Finland	“Effects of major changes in alcohol availability” or “Nordic tax study” – 2003-2006
10.	Finland	Juomatapatutkimus, Drinking Habit Survey – 1968-2008
11.	France	ESPS Enquête santé et protection sociale 2004 (Health and Social Protection Inquiry)
12.	France	ESCAPAD 2005
13.	France	ES Enquête Santé 2002-2003
14.	France	Baromètre santé 2005
15.	Germany	Epidemiological Survey of Substance Abuse (ESA) – 1995-2006
16.	Greece	Greek National Population Survey on Licit and Illicit Substance Use
17.	Hungary	ADE 2000 (National survey on alcohol and other drugs) – Hungarian data collection of GENACIS Project
18.	Hungary	Hungarostudy 2002 – National Health Survey
19.	Hungary	ADE 2003 (National alcohol and other drugs survey)
20.	Ireland	National drinking survey – 2002
21.	Italy	Italians and alcohol – 1991-2005
22.	Italy	Multi-purpose family Survey of Aspects of everyday life – ISTAT (National Institute of Statistics, Rome) – 1993-2007
23.	Latvia	Alcohol use patterns in Riga city – 2002
24.	Latvia	Drug abuse prevalence in Latvia – 2003
25.	Latvia	Health Behavior among Latvian Adult Population - 2006
26.	Latvia	Drug abuse prevalence in Latvia - 2007
27.	Lithuania	Prevalence of psychoactive substances in Lithuania - 2004
28.	Netherland	Problem drinking in the Netherlands
29.	Norway	General adult population survey
30.	Poland	Psychoactive substance, Attitudes and Behaviors - 2002
31.	Poland	Psychoactive substance, Attitudes and Behaviors - 2003
32.	Poland	Health Status of the Poland’s Population in 2004
33.	Poland	Psychoactive substance, Attitudes and Behaviors - 2006
34.	Portugal	Inquérito Nacional de Saúde 2005/2006
35.	Portugal	Inquérito Nacional ao Consumo de Substâncias Psicoactivas na População Geral, Portugal, 2007
36.	Romania	Drugs and other psychoactive substances use - 2004

37.	Romania	Drugs and other psychoactive substances use - 2007
38.	Spain	ESTUDES -National Survey on Drug Use in Secondary Education – 1994-2006
39.	Spain	EDADES – 1995-2008
40.	Switzerland	Swiss Health Survey – 1992-2007
41.	United Kingdom	General Household Survey – 2006
42.	United Kingdom	Health survey for England – 1991-2008
43.	United Kingdom	Opinions (omnibus) survey – 1990-2008