Alcohol Policy, Norms and Drinking Habits in Different European Countries

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Introduction

Most of us believe that alcohol policy, norms and behaviour in relation to use of alcohol are different in different parts of Europe. We often talk about “Nordic” as opposed to “continental” drinking habits. It may seem to be a paradox that in the Nordic countries, where we have the strictest alcohol policies, we see the most drunk people in public places, whilst in the southern parts of Europe, where alcohol policies are the most liberal, people seem to behave in a much more civilized way, even if they have drunk quite a lot [1]. This article is an attempt to understand this paradox, or, more precisely, it deals with understanding the dynamics between policy, norms and behaviour in relation to alcohol consumption, and what effect this has in different parts of Europe.

The most difficult point in this project is to find a simple way of describing norms for alcohol use in different countries with different cultures. How can we measure people’s norms about alcohol use? What is acceptable use and what do people react negatively to?

The method of measurement: What does «alcohol abuse » mean?

One way of approaching this problem was introduced about 50 years ago by a young sociologist called Lise Paulsen. She was appointed by the Norwegian Institute for Alcohol Research in 1963, to examine what people in Norway meant by the concept alcohol abuse. She had noticed that everyone agreed that what they called alcohol abuse, should be reduced. When it came to discussions about practical alcohol policy, however, there was much disagreement. Suddenly people disagreed about what should be changed, and in particular, which measures should be implemented to bring about change. She believed that the concept alcohol abuse was the origin of what one calls false agreement, in other words, that the concept was understood in different ways. She decided to use this aspect as a description of the drinking situation.

She needed to grade these three aspects, frequency, degree of intoxication, and sociability, so that one has a varied menu of descriptions to assess. She believed that three grades for each aspect were sufficient. The levels were described as follows:

1. Frequency
   - A few times a year
   - A couple of times a month
   - A couple of times a week

2. Intoxication
   - Mildly intoxicated
   - Fairly intoxicated
   - Strongly intoxicated

3. Sociability
   - With the family
   - With friends
   - Alone

By combining all three levels with all three aspects, she obtained in total $3 \times 3 \times 3$, equal to 27 different descriptions of alcohol habits. These could be regarded as a scale from the most careful alcohol use, described as “drinks a few times a year, with the family, and becomes mildly intoxicated,” to the most extensive use, described using this scale as: “drinks a couple of times a week, alone and becomes strongly intoxicated”.

In the autumn of 1964, these descriptions were presented to a representative sample of 500 people over 20 years of age in five towns in eastern Norway and five towns in western Norway. The descriptions were printed on cards, which were presented one at a time to the people in the sample, who then said whether they meant that the
different descriptions could be characterized as abuse or not. If someone expressed doubt, the card was put at the back of the pile and presented again at the end of the interview. If the person was still in doubt, this was registered. Paulsen published an article based on the answers, where she could describe normative dividing lines in different groups of the population. We will come back to some of her results later. The interesting thing here is the method she developed and used in her study.

25 years later, in 1989, Oddvar Arner, another researcher at the same research institute, decided to carry out a new study using the same method, in order to look at developments in norms for alcohol use. However, in Paulsen's material, he found that the differences in the assessments were small for those relating to descriptions of drinking "with the family", or "with friends". The differences were mainly between drinking alone or in social situations. Therefore, Arner decided not to include descriptions that included the social alternative "with the family". Thus, there were then only two levels of sociability: "alone" and "with friends", and the number of descriptions to be characterized was reduced to $3 \times 3 \times 2$, equal to 18. On the other hand, Arner used a sample of over 1200 respondents aged 15 years and older, representative of the whole country. So in order to compare his results with those of Paulsen, he had to construct a sub-sample of respondents from the areas that Paulsen's respondents were from, and in the same age group – 20 years and older. This sub-sample had just over 500 respondents.

Seventeen years later, in 2006, a new study was carried out using the same method [3]. Respondents in a sample of 950 persons aged 15 years and older, representative of the whole country, were presented with the same descriptions as those that had been used in Arner's study. The respondents were asked whether they meant that these descriptions represented alcohol abuse or not. Nordlund also constructed a sub-sample, which corresponded to the one Arner had constructed in order to compare his results with those of Paulsen. This sub-sample included 463 respondents.

**Changes in norms in Norway**

Table 1 shows the proportion of respondents in the comparable sub-samples who answered that they would characterize each of the 18 descriptions as alcohol abuse. The 18 descriptions are ranged in descending order according to the proportion of respondents in the 1964 study who answered that the descriptions represented alcohol abuse.

| Description                                           | 1964 | 1989 | 2006 |
|-------------------------------------------------------|------|------|------|
| Drinks a couple of times a week, alone, and becomes strongly intoxicated | 97   | 93   | 80   |
| Drinks a couple of times a week, with friends, and becomes strongly intoxicated | 96   | 88   | 78   |
| Drinks a couple of times a week, alone, and becomes fairly intoxicated | 95   | 86   | 81   |
| Drinks a couple of times a week, with friends, and becomes fairly intoxicated | 92   | 80   | 61   |
| Drinks a couple of times a month, alone, and becomes strongly intoxicated | 92   | 74   | 66   |
| Drinks a couple of times a month, alone, and becomes fairly intoxicated | 90   | 66   | 51   |
| Drinks a couple of times a month, with friends, and becomes strongly intoxicated | 89   | 62   | 47   |
| Drinks a few times a year, alone, and becomes strongly intoxicated | 85   | 51   | 40   |
| Drinks a couple of times a week, alone, and becomes mildly intoxicated | 82   | 69   | 52   |
| Drinks a couple of times a month, with friends, and becomes fairly intoxicated | 80   | 45   | 33   |
| Drinks a few times a year, alone, and becomes fairly intoxicated | 79   | 40   | 34   |
| Drinks a few times a year, with friends, and becomes strongly intoxicated | 77   | 37   | 29   |
| Drinks a couple of times a week, with friends, and becomes mildly intoxicated | 75   | 53   | 39   |
| Drinks a couple of times a month, alone, and becomes mildly intoxicated | 66   | 35   | 27   |
| Drinks a few times a year, with friends, and becomes fairly intoxicated | 60   | 28   | 18   |
| Drinks a few times a year, alone, and becomes mildly intoxicated | 56   | 23   | 15   |
| Drinks a couple of times a month, with friends, and becomes mildly intoxicated | 46   | 15   | 13   |
| Drinks a few times a year, with friends, and becomes mildly intoxicated | 27   | 10   | 10   |

Table 1: Proportion of respondents in the comparable sub-samples in 1964, 1989 and 2006 who meant that the different descriptions of alcohol habits indicate alcohol abuse.
It can be rather difficult to see the pattern in all these figures, but we can mention some examples. To take the extremes: Drinking a couple of times a year with friends and becoming slightly intoxicated was regarded as alcohol abuse by over a quarter of the population over 20 years of age in eastern and western Norway in 1964, but by only 10% in 1989, and the same in 2006. In 1964, 97% of respondents meant that drinking a couple of times a week alone and becoming strongly intoxicated represented alcohol abuse, while only 80% thought this in 2006. Also, drinking a couple of times a month with friends and becoming strongly intoxicated (description no. 7) was regarded as alcohol abuse by 89% of respondents in 1964, while under half of the respondents meant the same in 2006. We could go through all the descriptions in this way, and see that there has been a considerable change in norms for what is accepted as alcohol use and what is regarded as alcohol abuse during this period.

A simpler way of presenting this change is to calculate the mean numbers of descriptions that were regarded as alcohol abuse for each of the studies (Table 2). We then obtain a clear presentation of how the trend has developed in a clearly liberal direction. The differences from 1964 to 1989, and from 1989 to 2006, are both statistically significant.

Table 2: Mean number of descriptions regarded as alcohol abuse

| Year | Mean number of descriptions regarded as alcohol abuse | N |
|------|-------------------------------------------------------|---|
| 1964 | 13.8                                                  | 500 |
| 1989 | 9.3                                                   | 506 |
| 2006 | 7.7                                                   | 463 |

Pairwise t-tests, p<0.05

Table 3: Mean number of descriptions regarded as alcohol abuse among women and men in 6 age groups in the sample from 2006 (N=950).

| Age          | Women | Men | Total |
|--------------|-------|-----|-------|
| 15-19        | 7.4   | 6.3 | 6.8   |
| 20-29        | 6.9   | 5.3 | 6     |
| 30-39        | 7.3   | 6   | 6.7   |
| 40-49        | 7.3   | 6.6 | 7     |
| 50-59        | 8.5   | 7.5 | 8     |
| 60+          | 10.1  | 9.6 | 9.9   |
| Total        | 8.2   | 7.1 | 7.7   |

Gender diff: Mann-Whitney z=3.115, p<0.001

Figure 1: Mean number of descriptions regarded as alcohol abuse, for 7 levels of own consumption.

International Comparisons

We can also describe differences in what is meant by alcohol abuse between different groups of the population. For example, if we look at the total sample for 2006 (Table 3), we find that women on average regard more of the descriptions as alcohol abuse: They have slightly stricter norms for alcohol use. Similarly, norms become stricter with increasing age, with the exception of the youngest age group: Those under 20 years of age have somewhat stricter norms than those who are older. The same differences are found in the samples from 1964 and 1989.

In 2009 the so-called AMPHORA project began, which was a project predominantly financed by the EU, with many sub-projects involving researchers from most of the European countries. We then had the opportunity to contact participants from some of these countries, that could be interested in being involved in such international comparisons. We wished to get participants from countries with clear differences in alcohol culture and alcohol policy. We ended up with six countries in addition to Norway that were willing to participate (Table 4).

Table 4 also shows when the data were collected, who were responsible for the interviews, and the number of people interviewed in each country. Unfortunately, it turned out that Italy could only be represented by the region of Tuscany in this study.
The descriptions of alcohol habits that were used in the Norwegian studies were translated to the languages of the different countries. Even though the descriptions are simple and standardized, translation can lead to problems. Translation of descriptions of frequency and context was unproblematic, but when translating grade of intoxication, words and expressions with slightly different nuances in the different languages could easily be introduced. This is a general problem with most international questionnaires. We tried to reduce this problem as much as possible, partly by having two independent translations, and partly by having two independent back-translations. Our partners in the different countries meant that we had got exact translations without appreciable differences in cultural interpretations.

| Country         | Sampling period | No. of resp. | Field work by |
|-----------------|-----------------|--------------|---------------|
| Finland         | March-10        | 1021         | TNS Gallup    |
| Germany         | March-10        | 1005         | IPSOS         |
| Tuscany (Italy) | April-11        | 1000         | Sociolab      |
| Norway          | March-06        | 950          | Synovate      |
| Poland          | April-10        | 1004         | TNS OBOP      |
| Slovenia        | Oct-Nov 2010    | 1069         | UTRIP         |

Table 4: Sampling period, number of respondents and the bureaus responsible for the field work in the seven countries.

The way in which the surveys were carried out followed the same procedure that was used in the Norwegian surveys. The descriptions were presented one at a time on printed cards, and the respondents were asked whether they meant that the descriptions indicated alcohol abuse or not. The few cases in which doubt was expressed were also treated in the same way as in the Norwegian survey.

Using the answers from the different countries, we calculated the proportion of respondents in the samples who meant that the different descriptions indicated alcohol abuse. This produced a large number of rather disorderly figures. So in order to obtain a more systematic picture of the results, we have presented these proportions graphically in Figure 2. Here, the descriptions are ordered in a way that give relatively small fluctuations (but of course in the same order for all countries). However, we cannot deny that it gives a rather unclear picture. The only thing that seems clear is that the two Nordic countries stand out from the other countries, by generally having a much lower proportion of respondents who assessed the different descriptions as alcohol abuse.

Figure 2: Proportion of respondents from the samples from 7 European countries who meant that each of the 18 descriptions was expressions of alcohol abuse (Per cent)

We can demonstrate this more clearly by looking at the mean proportion of answers from the different countries that conclude with alcohol abuse. We regard this as an expression of the general “normative climate” regarding alcohol use in the different countries. These mean proportions are presented graphically in Figure 3.

We see that there are three levels for the mean number of assessments of alcohol abuse. The Nordic level represents the most liberal view. Tuscany and Slovenia stand out by being on their own level, with the strictest assessment of alcohol abuse. Poland, Germany and Spain are on a level that lies between these two extremes. The differences between the three levels are statistically significant, but the differences between the countries in each level are not.

We also see, with the exception of Spain, that the countries at each level are neighbouring countries. This indicates that fairly large areas of Europe in general have a relatively uniform understanding of norms for alcohol use. Norms for alcohol use can be said to vary geographically throughout Europe in a way that justifies the often used, but seldom defined, concept alcohol culture.
Figure 3: Mean number of descriptions of drinking habits that are regarded as alcohol abuse in seven European countries.

We can also look at how the mean number of descriptions that are characterized as alcohol abuse varies among the population in these countries. Table 5 shows that women are somewhat stricter than men in their view of what is alcohol abuse in all the countries. We also see that the view of alcohol abuse becomes stricter with increasing age (with a few exceptions) in all the countries.

| Gender | Norway | Finland | Germany | Poland | Spain | Tuscany | Slovenia |
|--------|--------|---------|---------|--------|-------|---------|---------|
| Men    | 7.2    | 7.5     | 11      | 10.5   | 10.8  | 12.1    | 11.4    |
| Women  | 8.2    | 8.9     | 11.8    | 12.2   | 12.2  | 13.3    | 13.7    |

| Age | 15-29 | 30-49 | 50-64 | 65+ | Total | N |
|-----|-------|-------|-------|-----|-------|---|
| Men | 6.5   | 6.9   | 8.5   | 10.1| 7.8   | 935|
| Women | 7.5 | 7.4 | 8.8 | 9.7 | 8.2 | 1018|
| | 10.6 | 11.4 | 11.9 | 12.4 | 11.4 | 986|
| | 10.3 | 11.4 | 11.5 | 12.4 | 11.4 | 984|
| | 10.2 | 11.5 | 12.2 | 12.3 | 11.5 | 1071|
| | 8.9 | 12.2 | 12.8 | 12.3 | 12.7 | 1000|
| | 10.6 | 12.2 | 14.3 | 14.3 | 12.8 | 1058|

Note: Sampling weights applied.

Table 5: Mean number of descriptions assessed as alcohol abuse, by age and gender.

Formal regulations: alcohol policy

Rules and regulations regarding alcohol in society are naturally not only informal and unwritten, not only attitudes and norms. In addition we have formal and written rules and regulations, in other words legislation and provisions that constitute alcohol policy in society. The reciprocal relationship between informal norms, formal alcohol policy and people's behaviour can be described simply in the model shown in Figure 4.

What is important here is that people's norms and behaviour forms a continuous feedback process, which is the natural way of regulating behaviour [4,5]. But this regulation is often regarded as inadequate. Formal rules and regulations regarding behaviour are also needed. These often arise as a result of normative pressure on the authorities from organizations, groups and influential individuals. In the long term, such rules and regulations can also be changed when politicians are changed after an election. Much of the power in this system is conveyed through communication, to a large degree through the media. The media are not included in this figure, because the media work on every level in the system.

Figure 4: The relationship between informal norms, formal alcohol policy and people's behaviour.

We have shown how the informal rules and regulations vary, so now we want to know what the formal rules and regulations are in the different parts of Europe. In order to do this, we use some of the results from another part of the AMPHORA project: a newly developed scale for assessing how comprehensive and restrictive alcohol policy is in different countries.

This scale (the AMPHORA scale) was developed by Thomas Karlsson, Mikaela Lindeman and Esa Österberg at the National Institute for Health and Welfare (THL) in Finland. They sent out a questionnaire to central persons in all the European countries, with detailed questions about alcohol policy in six main areas (Table 6).

The six areas are weighted slightly differently. For example, control of production, retail sale and distribution counts for 25% of the total index, as does taxes, excise duties and price. Public policy counts for 5%. The maximum number of points is 160 [6]. Several scales have been developed for measuring the extent and restrictiveness of alcohol policy, but when they are compared, they turn out to be fairly similar.

| Area                                   | Max points | %  |
|----------------------------------------|------------|----|
| Control of production, retail sale and distribution | 40 | 25 |
| Age limits and personal control        | 24         | 15 |
| Control of drunk driving               | 24         | 15 |
| Control of advertising, marketing and sponsoring | 24 | 15 |
| Public policy (Public prevention, campaigns, etc.) | 8 | 5 |
Here we shall look at the results of the assessments according to the AMPHORA scale for the seven countries in this study. We recalculated the results for the seven countries to construct an index, by dividing the points for each country with the maximum possible number of points (160). This index is shown in Figure 5.

As expected, Norway has the highest number of points, in other words, Norway has the strictest alcohol policy, with Finland in second place. Germany and Tuscany/Italy are assessed as having the most liberal alcohol policies.

Figure 5: The score for the seven countries using the AMPHORA scale for measuring the magnitude and restrictiveness of the alcohol policy.

However, we are interested in comparing this measure of the comprehensiveness and strictness of the alcohol policy with what we have called the normative climate in these countries. In other words, we want to compare the informal and formal rules and regulations for the use of alcohol. In order to do this, we constructed a normative index in a corresponding way to the policy index that is we divided the mean number of descriptions of drinking habits that were assessed as alcohol abuse with the maximum possible number (18). In this way we obtained a common measure for making such a comparison that are two indices both varying from 0 to 1. Both indices are shown graphically in Figure 6. The graphical presentation of the normative climate is naturally exactly the same as that shown in Figure 3, apart from the fact that the scale here goes from 0 to 1.

Seen in relation to each other, these two indices show something interesting. The normative climate is quite strict in the countries where the alcohol policy is most liberal, that is in Germany, Spain and Italy, whilst the normative climate is most liberal in the countries where the alcohol policy is the strictest that is in Norway and Finland. Poland and Slovenia are rather different, because, despite having a relatively high normative index, they also have a relatively high policy index, though not as high as the policy index for the two Nordic countries. According to the project’s coordinator in Slovenia, this is the result of new and relatively strict rules and regulations that were introduced recently, because there was no written alcohol policy during the communist period. But according to the same source, enforcement of the rules and regulations is relatively weak, so that in reality they are not as strict as they appear to be in the figure.
Conclusions and discussion

In general, there seems to be a certain complementarity between the formal and informal rules and regulations for the use of alcohol, between norms for the use of alcohol and policy measures. Maybe one can say rather casually that one gets the alcohol policy one deserves. If norms are too liberal, and behaviour thus too liberal, then stronger formal rules and regulations must be introduced in order to maintain civilized and reasonably safe social conventions. But if people generally have strict norms for drinking behaviour, and people therefore behave in a civilized way even if they have drunk alcohol, there is less need for so many strict formal rules and regulations. This can be seen as an answer to the paradox I mentioned in the introduction, that is why one sees the most intoxicated people in public places in the Nordic countries, which have so strict alcohol policies, while the southern countries seem to manage perfectly well without so strict alcohol policies.

During the last few years, alcohol policy and alcohol consumption have had a tendency to converge in the European countries [6-9], but there are still large differences in norms for alcohol consumption. As we have seen, norms have developed in a clearly liberal direction in Norway, and the development in Finland has gone in the same direction [10]. However, we know little about developments in the countries further south.

But the most important question is, of course: Which countries have the greatest alcohol problems? Are they the Nordic countries with their strict policies, or the southern countries with their liberal policies? The answer is that the problems are different. In the Nordic countries, where norms allow greater and more frequent intoxication, the proportion of damage associated with intoxication is higher, while in the southern countries there are many more injuries and diseases associated with high consumption [11]. So neither of the two regulation structures is sufficiently effective to prevent the damage caused by alcohol [12-16].

One can also ask oneself when and how these differences in alcohol culture in Europe have arisen. But this is a difficult and complex question [17-21]. All the large political, religious and philosophical movements that have dominated Europe have had an influence, often expressed very clearly through partly brutal use of power and oppression from different quarters throughout history. In other words, this is a question that should perhaps be dealt with by historians.

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