Thoughts for the week: Why the blue-eyed drink more; Iranian elections

Are you shy and do you drink to cope? You don't happen to be blue-eyed?

Daniel Finkelstein

Did you know that being shy is correlated with having blue eyes? Neither did I. I found out this week from Chris Dillow's Stumbling and Mumbling blog. That isn't so surprising, since this is one of the very best blogs around if you are interested in quirky research and new ideas. More surprising is that neither shyness nor blue eyes was really Dillow's subject. He was debating whether putting up alcohol prices made an impact on binge drinking.

Dillow had stumbled upon a University of Oslo paper by two economists — Jason Shogren and Eric Nævdal — that looks at the relationship between genetic variation and group social behaviour. The paper starts with the observation I began this article with. There is an association between having blue eyes and being shy. One study showed that in a sample of preschool children, 30 per cent of the boys with blue eyes fell into the category of "socially wary" compared with 3 per cent of those without blue eyes. And there is plenty of similar work.

Their next observation is that shy people are more likely to binge drink. Actually, most of the time, the economists don't call it binge drinking. They use a wonderful acronym — EDSS, standing for excessive drinking in social situations. EDSS is well known as a coping strategy for shyness.

Now, if there is a genetic cause, indirectly, behind much binge drinking, it is possible that you will see geographical concentrations of EDSS. You may, for instance, see more EDSS in blue-eyed Scandinavia. And so you do. Even more striking (because it eliminates climate from our list of suspects) is this. Which US states have the biggest problem with binge drinking? Correct. Prevalence of EDSS is in this order: North Dakota, Wisconsin, South Dakota, Minnesota and Montana. And they are? Right again. The states with the largest proportion of citizens with Scandinavian ancestry.

This brings us on to the creation of social norms. As numerous experiments — and common sense — suggest, we copy the behaviour of others. And, in this copying, numbers matter. In her book The Nurture Assumption, Judith Rich Harris shows how our personality is changed by our peer group. You gravitate to people like you and huddle together, but if there aren't enough people exactly like you, you work to fit in with a bigger, somewhat different group. Concentrations of those prone to binge drinking creates a group social norm in which EDSS is more acceptable. The behaviour therefore spreads.

How does all this help with Dillow's problem? What does it tell us about how raising alcohol prices will affect binge drinking?

Raising prices does, as conventional economic theory suggests it would, reduce alcohol consumption. Yet those who stop drinking first will be those who need it least. The first to reduce drinking will be those who don't use it to self-medicate, who don't use it as a coping strategy. That means that those who go on drinking, perhaps those who host the parties and pay for the booze, will be those most prone to EDSS. And the greater concentration in a
social situation of binge drinkers, the more likely are those on the periphery to start joining in, copying the others. Putting up prices may therefore increase binge drinking.

There is nothing simple about social policy, is there?

Last week I wrote about the Iranian election and about tests that could tell you if it was fixed. Unfortunately, nobody had yet conducted such a test. Well, now someone has.

To remind you: the problem with fixing elections is that people are too good at it. Instead of the randomness of real data, you get patterns. People can’t help it. We are pattern-seeking and pattern-making animals and we create them even when trying not to.

So you should be able to conduct a test to see if the data is as messy as you would expect real results to be, or whether there are consistencies that you would expect only if someone had been fixing things. Bernd Beber and Alexandra Scacco first looked at the prevalence of certain digits in the announced results. They found too many 7s and not enough 5s. They concluded that fewer than 4 in every 100 non-fraudulent results would have this feature (two different departures from the expected digit pattern).

Then they looked at adjacent numbers. When people make up numbers they are more likely to make up 23 than, say, 28 or 43 than 47. Looking at the last two digits of the results, you would expect only 30 per cent of the pairs to be adjacent numbers. In Iran they found 38 per cent. This would happen in a fair election only 4.2 per cent of the time. The chance that the election in Iran was fair? On this evidence alone, less than 0.5 per cent.