

\*(Note that this is a mainstream article and when the researchers herein say "intelligence" they mean "intellect".)

### **More intelligent people are more likely to binge drink and get drunk**

<http://www.psychologytoday.com/blog/the-scientific-fundamentalist/201010/why-intelligent-people-drink-more-alcohol>

Published on October 10, 2010 by Satoshi Kanazawa in 'The Scientific Fundamentalist

Drinking alcohol is evolutionarily novel, so the hypothesis would predict that more intelligent people drink more alcohol than less intelligent people.

The human consumption of alcohol probably originates from frugivory (consumption of fruits). Fermentation of sugars by yeast naturally present in overripe and decaying fruits produces ethanol, known to intoxicate birds and mammals. However, the amount of ethanol alcohol in such fruits ranges from trace to 5%, roughly comparable to light beer. (And you can't really get drunk on light beer.) It is nothing compared to the amount of alcohol present in regular beer (4-6%), wine (12-15%), and distilled spirits (20-95%).

Human consumption of alcohol, however, was unintentional, accidental, and haphazard until about 10,000 years ago. The intentional fermentation of fruits and grain to yield ethanol arose only recently in human history. The production of beer, which relies on a large amount of grain, and that of wine, which similarly requires a large amount of grapes, could not have taken place before the advent of agriculture around 8,000 BC and the consequent agricultural surplus. Archeological evidence dates the production of beer and wine to Mesopotamia at about 6,000 BC. The origin of distilled spirits is far more recent, and is traced to Middle East or China at about 700 AD. The word alcohol - al kohl - is Arabic in origin, like many other words that begin with &quot;al,&quot; like algebra, algorithm, alchemy, and Al Gore.

Human experience with concentrations of ethanol higher than 5% that is attained by decaying fruits is therefore very recent.

More importantly, any unintentional, accidental, and haphazard consumption of alcohol in the ancestral environment, before the advent of agriculture about 10,000 years ago, happened as a result of eating, not drinking, whereas alcohol is almost entirely consumed today by drinking, not eating. (deep-fried beer is a very recent exception). The hypothesis would therefore predict that more intelligent individuals may be more likely to prefer drinking modern alcoholic beverages (beer, wine, and distilled spirits) than less intelligent individuals, because the substance and the method of consumption are both evolutionarily novel.

Consistent with the prediction of the hypothesis, more intelligent children, both in the United Kingdom and the United States, grow up to consume alcohol more frequently and in greater quantities than less intelligent children. Controlling for a large number of demographic variables, such as sex, race, ethnicity, religion, marital status, number of children, education, earnings, depression, satisfaction with life, frequency of socialization with friends, number of recent sex partners, childhood social class, mother's education, and father's education, more intelligent children grow up to drink more alcohol in the UK and the US.

The data come from the National Child Development Study (NCDS) in the United Kingdom. There is a clear monotonic association between childhood intelligence (measured before the age of 16) and the frequency of alcohol consumption in their 20s, 30s, and 40s. "Very bright" British children grow up to consume alcohol nearly one full standard deviation more frequently than their "very dull" classmates.


There is a clear monotonic association between childhood intelligence and the quantity of adult alcohol consumption. "Very bright" British children grow up to consume nearly eight-tenths of a standard deviation more alcohol than their "very dull" classmates.

The association between childhood intelligence, measured in junior high and high school, and adult alcohol consumption seven years later in the National Longitudinal Study of Adolescent Health (Add Health) data in the United States, is clear and nearly monotonic. The more intelligent Americans are in their childhood, the more alcohol they consume as young adults.

It is important to note that both income and education, as well as childhood social class and parents' education, are controlled in multiple regression analyses of these data from the US and the UK. It means that it is not because more intelligent people occupy higher-paying, more important jobs that require them to socialize and drink with their business associates that they drink more alcohol. It appears to be their intelligence itself, rather than correlates of intelligence, that inclines them to drink more.

Indicators of alcohol consumption in the Add Health data include the frequency of binge drinking (drinking five or more units of alcohol in one sitting) and the frequency of getting drunk.

That such behavior is detrimental to health and has few, if any, positive consequences, is irrelevant for the hypothesis. It does not predict that more intelligent individuals are more likely to engage in healthy and beneficial behavior. Instead, it predicts that more intelligent individuals are more likely to engage in evolutionarily novel behavior. Since the consumption of modern alcoholic beverages - including binge drinking and getting drunk - is evolutionarily novel, the hypothesis would predict that more intelligent individuals are more likely to engage in it, and the empirical data from the UK and the US confirm it.

© Copyright 2002-2013 Sussex Directories, Inc. 

## **More Intelligent People Are More Likely to Binge Drink and Get Drunk**

Intelligent people are more likely to do stupid things

Published on February 13, 2011 by Satoshi Kanazawa in 'The Scientific Fundamentalist'

Not only are more intelligent individuals more likely to consume more alcohol more frequently, they are more likely to engage in binge drinking and to get drunk.

In an earlier post, I show that, consistent with the prediction of the hypothesis, more intelligent individuals consume larger quantities of alcohol more frequently than less intelligent individuals. The data presented in the post come from the National Child Development Study in the United Kingdom. The NCDS measures the respondents' general intelligence before the age of 16, and then tracks the quantity and frequency of alcohol consumption throughout their adulthood in their 20s, 30s, and 40s. The graphs presented in the post show a clear monotonic association between childhood general intelligence and both the frequency and the quantity of adult alcohol consumption. The more intelligent they are in childhood, the more and the more frequently they consume alcohol in their adulthood.

There are occasional medical reports and scientific studies which tout the health benefits of mild alcohol consumption, such as drinking a glass of red wine with dinner every night. So it may be tempting to conclude that more intelligent individuals are more likely to engage in such mild alcohol consumption than less intelligent individuals, and the positive association between childhood general intelligence and adult alcohol consumption reflects such mild, and thus healthy and beneficial, alcohol consumption.

Unfortunately for the intelligent individuals, this is not the case. More intelligent children are more likely to grow up to engage in binge drinking (consuming five or more units of alcohol in one sitting) and getting drunk.

The National Longitudinal Study of Adolescent Health (Add Health) asks its respondents specific questions about binge drinking and getting drunk. For binge drinking, Add Health asks: "During the past 12 months, on how many days did you drink five or more drinks in a row?" For getting drunk, it asks: "During the past 12 months, on how many days have you been drunk or very high on alcohol?" For both questions, the respondents can answer on a six-point ordinal scale: 0 = none, 1 = 1 or 2 days in the past 12 months, 2 = once a month or less (3 to 12 times in the past 12 months), 3 = 2 or 3 days a month, 4 = 1 or 2 days a week, 5 = 3 to 5 days a week, 6 = every day or almost every day.

There is a clear monotonic positive association between childhood intelligence and adult frequency of binge drinking. "Very dull" Add Health respondents (with childhood IQ < 75) engage in binge drinking less than once a year. In sharp contrast, "very bright" Add Health respondents (with childhood IQ > 125) engage in binge drinking roughly once every other month. The association between childhood intelligence and adult frequency of getting drunk is equally clear and monotonic. "Very dull" Add Health respondents almost never get drunk, whereas "very bright" Add Health respondents get drunk once every other month or so.

In a multiple ordinal regression, childhood intelligence has a significant ( $p < .00001$ ) effect on adult frequency of both binge drinking and getting drunk, controlling for age, sex, race, ethnicity, religion, marital status, parental status, education earnings, political attitudes, religiosity, general satisfaction with life, taking medication for stress, experience of stress without taking medication, frequency of socialization with friends, number of sex partners in the last 12 months, childhood family income, mother's education, and father's education. I honestly cannot think of any other variable that might be correlated with childhood intelligence than those already controlled for in the multiple regression analyses. It is very likely that it is childhood intelligence itself, and not anything else that is confounded with it, which increases the adult frequency of binge drinking and getting drunk.

Note that education is controlled for in the ordinal multiple regression analysis. Given that Add Health respondents in Wave III (when the dependent measures are taken) are in their early 20s, it may be tempting to conclude that the association between childhood intelligence and adult frequency of binge drinking and getting drunk is mediated by college attendance. More intelligent children are more likely to go to college, and college students are more likely to engage in binge drinking and get drunk. The significant partial effect of childhood intelligence on the adult frequency of binge drinking and getting drunk, net of education, shows that this indeed is not the case. It is childhood intelligence itself, not education, which increases the adult frequency of binge drinking and getting drunk.

In fact, in both equations, education does not have a significant effect on binge drinking and getting drunk. Net of all the other variables included in the ordinal multiple regression equations, education is not significantly correlated with the frequency of binge drinking and getting drunk. Among other things, it means that college students are more likely to engage in binge drinking, not because they are in college, but because they are more intelligent.