



Thinking about Drinking: The **POWER** of **EXPECTATION**

Most of the effects of alcohol result from our expectations, not from the actual chemical. Someone who thinks they're drinking alcohol, but isn't, will act almost as drunk as someone who is drinking the real thing, says Sitharthan Thiagarajan.

Most of us at some time in our lives think that drinking alcohol can do wonderful things to us – and maybe it does. But have you ever thought about *how* alcohol lifts our mood when we are down or helps us to overcome shyness when we have had a few drinks?

Can the “pharmacological” properties of alcohol actually lift our mood when we are sad, stressed, bored or lonely; or assist to enhance our feelings of wellness when we are at a party; or provide us with confidence to engage in activities we wouldn't dare do or normally have second thoughts?

Teen Drinking

Prior to the 1960s there were very few studies conducted on the topic of teen drinking, as the alcohol literature mainly focused on negative social and moral implications of alcohol consumption.

The issue of teen drinking grew in prominence due to increases in driving accidents and alcohol-related aggression and public nuisance – and very soon the scientific community concluded that alcohol use is very prevalent among teenagers and young adults.

Naturally, this was followed by asking why teenagers drink alcohol. Answers to these questions often indicated peer

pressure, parental permissiveness, boredom, parental substance abuse and emotional problems.

Expectations

Next, the interest focused on how decisions to drink are made and the drinker's responses to alcohol. That is, to understand the expectations or personal beliefs about the effects that alcohol consumption will have on one's feelings and behaviours.

Alcohol-related expectations are shaped by a variety of sources. Most of the research with teenagers showed that they anticipate positive effects of

drinking based on what they hear from their peers, observe how their drinking friends behave, see on popular TV or movies, and from their own past direct experience with alcohol and drinking-associated behaviours.

Positive alcohol-related expectations (e.g. “I need to drink to have a good time”) have been identified as risk factors for adolescent drinking and used to predict the onset of drinking and problem drinking among adolescents. Studies by psychologists have identified six common types of changes that college students expect to occur when they drink alcohol. These are:

- “alcohol can make me experience things as more positive and interesting”;
- “alcohol enhances social and physical pleasures”;
- “alcohol can increase my sexual enjoyment and performance”;
- “alcohol can make me feel more powerful and act more aggressively”;
- “alcohol makes me more assertive, less shy, more sociable, more expressive”;
- “alcohol reduces my tension and helps me to relax”.

Manipulating Expectations

If someone thinks that drinking alcohol will make them feel relaxed, be assertive, be very funny, lift their mood or become more sociable, what is the best way of finding out if this is true?

My colleagues and I at the University of Sydney used a special method called “expectancy manipulation design” to determine the effects of alcohol itself, as opposed to believing that alcohol has certain effects. It is very common for people who drink excessively to state that they drink to manage their sad moods. We decided to find out if alcohol *per se* is responsible for reducing negative moods, or is it the belief one has that drinking will assist in lifting spirits.

We recruited 50 people above the age of 18 who acknowledged drinking alcohol to cope with sadness. The study was advertised as an investigation that seeks to explore how alcohol helps people to cope with sadness.

We invited participants to come to the University and informed them that they will be provided with alcohol. This was done to prime their expectations. We breathalysed everyone to make sure that they had not consumed any alcohol previously. All participants were asked to fill out questionnaires, rate their current mood, and to complete a brief scale seeking descriptive information about the last three drinking occasions the participant had consumed alcohol when feeling sad.

Participants were randomly assigned to an alcohol consumption group (AC) or a non-alcoholic placebo group (PG). All participants were seen individually.

When participants from both groups arrived to take part in our study, they were asked to rate their current mood, ranging

Myths About Alcohol

“Alcohol relaxes me”

Alcohol has no favourable effect on mood. In fact, studies have shown that the more a person drinks, the more depressed and anxious they are going to feel. Any temporary perceived positive effect on mood is based on expectancy factors.

“Drinking helps me to socialise better”

When people drink a lot they think that they are very interesting, which is based on their own psychological expectations. Studies have shown that people who consume a lot of alcohol exhibit poor or inappropriate social skills.

“Alcohol will increase my sexual arousal”

Alcohol is a depressant and will not increase arousal. In fact, the pharmacological effects of alcohol will actually reduce sexual arousal.

“Alcohol will make me think clearly and enhance my creativity”

Once again, the disturbing truth is that even low doses of alcohol will have a negative impact on how a person thinks and remembers. Most people who drink a lot, very quickly, on even single occasions will probably experience “blackouts”. These blackouts can be “fragmentary” or “en bloc”. During fragmentary blackouts, memory for certain events is patchy. “En bloc” refers to longer periods of time in which the drinker has absolutely no recollection whatsoever.

We now know that blackouts are very common among teens and even among social drinkers. In particular, single occasion heavy drinkers are not immune to this phenomenon. What is interesting is that even people who believed that they were drinking alcohol (but were given placebo drinks) “experienced blackouts”; that is, they had difficulty remembering events following consumption! The old adage “it’s all in the mind” makes sense.

from 0 indicating “not at all sad” to 100 indicating “very sad”.

We then induced a “negative mood” by simply using the information the subjects provided about the last three occasions they felt sad, asking them to discuss these situations in detail and recording their mood. This is a very commonly used procedure and is very reliable in inducing negative mood.

We then went on to provide alcohol or a placebo drink. However, all of them thought that they were getting real alcohol. After a while their mood was again recorded. In addition, all participants were asked to provide information about how “intoxicated” they felt.

Every one of the participants in the placebo group thought that they were provided with real alcohol, and claimed that they felt more and more intoxicated as they continued to drink.

All participants, regardless of whether they received alcohol



It's not the alcohol that makes you happy: it's the expectation and social environment.

or a placebo drink, reported that their mood deteriorated following negative mood induction but claimed that their mood improved after drinking alcohol. In other words, our study demonstrated that if people thought they were drinking alcohol, even negative moods turned out to become positive moods.

No one is denying that there are specific pharmacological effects of alcohol. However, these effects are of little importance, except as a general backdrop for the powerful expectancy effects.

In addition to our study there are numerous anecdotal stories of how young people became "intoxicated" by drinking from a cask in which wine was substituted.

We also know that some beer lovers refuse to drink light beer, yet when they are presented with light beer but informed it is regular full strength (as part of brand switching experi-

ments) they are not at all aware that they were drinking light beer.

Several investigations have shown that people who are shy become talkative and outgoing after having placebo drinks. Similarly, after consuming placebo drinks, subjects have been known to exhibit aggressive behaviours.

While all this may seem extremely far-fetched, there is ample concrete evidence that what is believed about the effects of alcohol to a very large extent overrides the actual physiological effects of the chemical in terms of behaviour and subjective experience.

Expectations have also been manipulated by using the "balanced placebo design". In this design, four conditions are investigated:

- tell participants that they will receive alcohol, and actually give them alcohol;
- tell participants that they will not receive any alcohol, and not give them any alcohol;
- tell participants that they will receive alcohol, but no alcohol is given (this is the placebo condition, measuring expectation effects); and
- tell participants that no alcohol will be given but actually give alcohol (this measures the pharmacological effects of alcohol, and usually participants are provided with enough alcohol to be legally unfit to drive a motor vehicle).

By using this design, several widely-held beliefs about drinking have been disproved. Interestingly, those who were told that they will get alcohol, but instead received a placebo drink, actually drank a lot, and quicker.

Those who were told that they are drinking a soft drink but actually received alcohol drank less than they usually do, and drank slower. Again and again, it's been shown that expectation effects play a major role in increased violence, stress reduction and decreased inhibitions.

It is clear from these studies that only one pharmacological effect of alcohol comes out clearly and consistently: alcohol makes it harder to think clearly.

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