



## Exploring the alcohol-behaviour link: Myopic self-enhancement in the absence of alcohol consumption as a function of past alcohol use

Antony C. Moss\*, Ian P. Albery, Khaleda Rahman

School of Applied Sciences, London South Bank University, London, UK

### ARTICLE INFO

#### Article history:

Received 11 March 2016

Received in revised form 27 July 2016

Accepted 28 July 2016

Available online 28 July 2016

#### Keywords:

Alcohol

Alcohol myopia theory

Alcohol expectancy theory

Self-enhancement

Placebo

Priming

### ABSTRACT

Dual process accounts of the alcohol-behaviour link hypothesise that differences in drinking patterns will moderate the effects of exposure to alcohol-related cues on behaviour, such as when a placebo is administered. We test this hypothesis by adapting a paradigm used in alcohol myopia research to examine the effects of alcohol-related priming on self-enhancement behaviour amongst social drinkers. Participants were asked to engage in a computerised self-rating task prior to being exposed to alcohol related and/or motivational primes. A staged computer error then occurred, and participants were then asked to complete their self ratings again – this method allowed for an immediate assessment of the impact of alcohol and motivational primes on self enhancement. As predicted by alcohol myopia theory, the overall effect of priming with alcohol-related cues was not significant irrespective of response-conflict manipulations. However, drinker type moderated this effect such that heavier drinkers self-enhanced more after exposure to alcohol-related cues, but only in high-conflict conditions. This suggests that the efficacy of a placebo may be significantly moderated by individual differences in reactions to alcohol-related stimuli, and that dual process accounts of the effects of alcohol on behaviour better explains this variation than alcohol myopia theory.

© 2016 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Alcohol is necessary for a man so that he can have a good opinion of himself, undisturbed by the facts.

[Finley Peter Dunne, Humorist and Writer, 1867–1936]

An association between alcohol consumption and behavioural change is perhaps self-evident. Not only do we intuitively know that the consumption of alcohol leads to changes in individuals' behaviour, but there is a significant body of evidence which supports this assumption. For example, administration of alcohol in laboratory settings has been shown to increase helping behaviour (Steele, Critchlow, and Liu, 1985), decrease cooperation amongst groups (Hopthrow, Abrams, Frings, and Hulbert, 2007) and is associated with increased aggression (e.g. Bushman and Cooper, 1990). However, a particular difficulty in this field of research is that these associations are neither universal, nor consistent within individuals over time. This variability in responses to alcohol, both within and between individuals, was perhaps most vividly illustrated by MacAndrew and Edgerton (1969) in their seminal anthropological work. Throughout their text, the authors systematically

presented evidence which at once confirmed and refuted a range of different drunken stereotypes – illustrating that hardly any truisms about alcohol are true all of the time. It is therefore vital that theories attempting to explain the effects of alcohol on behaviour must be able to account for this variability.

Alcohol myopia theory (Steele and Josephs, 1990) has tried to explain the alcohol–behaviour link by positing that alcohol diminishes our capacity to process information, so our attention is drawn to only the most salient behavioural cues. Myopia theory also states that behavioural change is not inevitable under conditions of alcohol consumption and is only hypothesised to occur when impelling and inhibiting behavioural cues are near-equally salient – in the language of myopia theory, when *response conflict* is high. Response conflict occurs in circumstances where individuals are faced with more or less competing behavioural response options. Myopia theory posits that it is only when there are strongly competing alternatives (i.e. high response conflict) that alcohol consumption affects behaviour. In such situations, one's limited cognitive capacity (the psychopharmacological effect of alcohol consumption) will be diverted to only one set of cues leading to extreme responses which are not moderated by other information (e.g. Steele and Southwick, 1985). The counter-intuitive prediction of myopia theory is, therefore, that when response conflict is high an individual should behave the same as, or even more prudently than, they would when sober (e.g. MacDonald, Fong, Zanna, and Martineau, 2000).

\* Corresponding author at: School of Applied Sciences, London South Bank University, London SE1 0AA, United Kingdom.

E-mail address: [mossac@lsbu.ac.uk](mailto:mossac@lsbu.ac.uk) (A.C. Moss).

In an attempt to provide a reconceptualisation of the alcohol–behaviour link, we (Moss and Albery, 2009, 2010) have argued that the evidence for myopia theory is persuasive to the extent that, under conditions of high response conflict, individuals have been shown to respond in a myopic fashion (see Steele and Southwick (1985), for a meta-analytic review). However, one weakness in the myopia literature is that individual expectations are not taken in to account when considering behavioural changes. Research in the alcohol expectancy literature has demonstrated that the expected effects of alcohol predict behavioural change when participants are led to believe that they have been or are currently consuming alcohol. For example, the alcohol-aggression link has been shown to be moderated by expectations that aggression will occur after drinking (Quigley and Leonard, 2006). Furthermore, the use of subliminal priming techniques has shown that expectancy effects persist when individuals are not aware that alcohol-related thoughts are active in memory (Friedman, McCarthy, Förster, and Denzler, 2005). We posit that, unlike myopia effects which are limited to conditions of actual consumption of alcohol, expectancies operate both before and after the consumption of alcohol begins (labelled the Pre-consumption and Consumption phases of drinking). Therefore, whilst myopia researchers have traditionally predicted (and indeed found) no behavioural changes under control and placebo conditions, expectancy theory makes no such prediction. On the contrary, expectancy research typically demonstrates that behaviour changes as a function of beliefs about alcohol consumption, irrespective of whether it has actually been consumed.

Given the evidence that expectancies can affect complex social behaviours, we argue that it is possible that many of the effects observed in the myopia literature may be in part driven by the activation of expectancies, rather than being wholly dependent on the effects of alcohol consumption. We argue that expectancies moderate the effects of exposure to alcohol-related cues (including but not limited to actual drinking) on behaviour and decision making. In other words, the implication of expectancy research is that alcohol-related behavioural change is not merely the result of impairments in cognitive processing as posited by myopia theory. As we (Moss and Albery, 2009) have argued, the utility of expectancy theory is that it allows for an extension of alcohol myopia theory to include behavioural change under conditions of exposure to alcohol-related stimuli irrespective of actual alcohol consumption (e.g. cues in a bar environment, or thoughts about consuming alcohol). For example, Monk and Heim (2013) demonstrated that alcohol expectancies change when measured in alcohol-related vs. non-alcohol-related contexts, suggesting that alcohol-related behavioural change is indeed not dependent upon actual consumption. However, whilst expectancy theory is useful in this regard, it is not well suited to explaining the strong effects of response conflict, accounted for by myopia theory. Rather, expectancy research typically asserts that the activation of alcohol-related expectancies will predict behavioural change, and response conflict in paradigms testing the theory is not accounted for, or directly manipulated.

We suggest here that the effects of exposure to alcohol related cues and the consumption of alcohol will be moderated by expectancies about the effects of alcohol, but only under conditions of high response conflict. As demonstrated by the myopia literature, high response conflict is necessary for behavioural change to be observed, as the absence of such conflict will, by definition, mean that there are no salient competing response options apparent to the individual. However, contrary to the suggestions of myopia theory, behavioural change in our model is not limited to conditions of actual alcohol consumption. To test these predictions, we replicated a study from the alcohol myopia literature (Banaji and Steele, 1989) which had previously shown behavioural change only under conditions of alcohol consumption (and not in a placebo condition) and high response conflict, to examine whether the activation of alcohol-related representations could lead to the same kind of behavioural change when no alcohol had been administered. That is, we predicted that seemingly myopic responding could occur under conditions of sobriety.

## 1. The current study

In myopia research, it is common to use placebo groups to control for the belief that alcohol is being or has been consumed. However, based on expectancy models of alcohol-related behaviour change, this kind of experimental control would be inadequate to control for individual differences in the expected effects of consuming alcohol. In other words, placebo groups in the alcohol myopia literature are not homogeneous. Given the evidence from the expectancy literature that alcohol-related representations in memory differ widely between individuals (Rather and Goldman, 1994), it must be assumed that a placebo would affect participants in different ways based on the expectancies which they hold in relation to alcohol consumption. Specifically, heavier drinkers tend to hold more strongly active alcohol-related representations in memory (Christiansen, Goldman, & Inn, 1982) and show greater reactivity to alcohol-related cues (e.g. Rather and Goldman, 1994; Sharma, Albery, & Cook, 2001).

Following this reasoning we argue that placebos in alcohol research serve to activate alcohol-related representations, including expectancies, in memory. We also posit that the nature of the expectancies activated, and the degree to which they affect behaviour, will vary as a function of past drinking. In order to test our primary hypothesis that individual differences in drinking behaviour will moderate the effects of expectancies on behaviour, we sought to directly activate alcohol-related expectancy representations using a supraliminal priming strategy. If placebo effects are caused by the activation of expectancies, then the direct activation of such mental representations should be capable of producing a 'placebo-like' response. To achieve this we adapted one of the classic tests of alcohol myopia by Banaji and Steele (1989) which demonstrated that alcohol consumption led to self-enhancement under high response conflict. Our model suggests that similar response patterns should be shown under high response conflict conditions, in the absence of actual alcohol consumption, when participants are exposed to drinking-related cues. This effect would be stronger for heavier social drinkers because of their increased reactivity to drinking-related cues compared to lighter social drinkers.

In their original study Banaji and Steele (1989) asked participants to rate a number of trait dimensions for personal importance, and to provide both ideal and actual self ratings. During a later alcohol administration session, participants were asked to provide actual self ratings again whilst being presented with their original ideal and actual self ratings. Response conflict was considered to be high when a participant had identified a trait as being important and where there was a large self-reported discrepancy between their actual and ideal self ratings. As such, participants were faced with competing goals to (a) provide accurate and truthful responses given their previous ratings; and (b) to reduce the ideal-actual self-discrepancy for a trait they had identified as important. Low response conflict traits were those which were unimportant and had a low self-reported actual-ideal discrepancy.

Amongst those participants who were given alcohol, significant increases in actual self ratings were shown for those traits where there was a high level of response conflict (i.e. where the traits were rated as being important, and a high ideal-actual discrepancy was evident). Such self enhancement effects were not found for low conflict traits, or at all amongst the placebo and control groups. Moreover, as is the case in most myopia research, no direct analysis was conducted on the basis of drinker type differences, meaning that whilst a placebo per se did not affect responding, it is not possible to conclude from their findings that this was the case for all participants in that condition. This is a fundamental omission given the findings from the expectancy literature that exposure to alcohol-related information differentially affects different types of drinker, and the claims made in our model which suggest that such expectancy differences should be evident under conditions of high response conflict even if no alcohol has been consumed. To address this issue, in the present study we sought to partially replicate

Download English Version:

<https://daneshyari.com/en/article/7261380>

Download Persian Version:

<https://daneshyari.com/article/7261380>

[Daneshyari.com](https://daneshyari.com)