



Impulsivity and drinking motives predict problem behaviours relating to alcohol use in University students



Katy A. Jones^{*}, Alexandra Chrysanthakis, Madeleine J. Groom

Division of Psychiatry, Institute of Mental Health, University of Nottingham Innovation Park, Triumph Road, Nottingham NG7 2TU, UK

HIGHLIGHTS

- Impulsivity predicts alcohol consumption and risky behaviours in UK students
- These results are comparable to those previously reported in US students
- Binge drinking of wine, beer and spirits was prevalent in this sample
- Drinking to alleviate negative emotions increased risk-taking
- Sensation seeking increased alcohol consumption and risk-taking

ARTICLE INFO

Keywords:

Alcohol
Impulsivity
Urgency
University students
Drinking motives

ABSTRACT

Aims: This study used a four-factor model of impulsivity to investigate inter-relationships between alcohol consumption, impulsivity, motives for drinking and the tendency to engage in alcohol-related problem behaviours.

Methods: 400 University students aged 18–25 completed an online survey consisting of the following measures: Urgency, Premeditation, Perseverance and Sensation Seeking Scale (UPPS) to measure impulsivity; Student Alcohol Questionnaire to assess drinking quantity, frequency and rates of problem behaviours; Drinking Motives Questionnaire to assess motives for drinking.

Results: The majority of the sample (94.5%) drank alcohol at least monthly. Path analysis revealed direct effects of urgency, sensation seeking and premeditation, as well as the quantity of alcohol consumed, on the tendency to engage in risky behaviours with negative consequences. The effect of urgency was mediated by drinking for coping motives and by a combined effect of drinking for social motives and consumption of wine or spirits. Conversely the effect of sensation seeking was mediated by the quantity of alcohol consumed, irrespective of drink type, and the effect of premeditation was mediated by the consumption of wine and spirits, in combination with enhancement motives.

Conclusions: Sensation seeking, urgency and lack of premeditation are related to different motives for drinking and also demonstrate dissociable relationships with the consumption of specific types of alcohol (beer, wine and spirits) and the tendency to engage in risky behaviours associated with alcohol consumption. Screening for high levels of urgency and for severe drinking consequences may be useful predictors of alcohol-related problems in UK University students aged 18 to 25 years.

© 2013 Elsevier Ltd. All rights reserved.

1. Introduction

At a general population level across the United Kingdom (UK), the magnitude of alcohol-related harm has significantly increased with serious problems such as excessive drunkenness in public, damage to public property, driving whilst intoxicated and physical violence

becoming more common (National Institute for Health & Excellence, 2011). A recent UK Government Alcohol Strategy Report presented to Parliament stated that, ‘50 years ago the UK had one of the lowest drinking levels in Europe, however it is now one of the few European countries whose consumption has increased over that period’ (United Kingdom Department of Health, 2012, p. 3). As highlighted in the report, a key priority for 2014 is the identification of harmful drinkers (defined as those who engage in risky and hazardous behaviours that may cause damage to themselves or others when drunk) (Babor, Higgins-Biddle, Saunders, & Monteriro, 2001) at a younger age with a particular emphasis on tackling the motives for drinking in order to prevent

^{*} Corresponding author at: Division of Psychiatry, Institute of Mental Health, University of Nottingham Innovation Park, Triumph Road, Nottingham NG7 2TU, UK. Tel.: +44 115 82 84339.

E-mail address: Katy.Jones@Nottingham.ac.uk (K.A. Jones).

associated negative consequences (United Kingdom Department of Health, 2012).

Students represent a potentially unique hazardous and heavy drinking population wherein drinking with relative frequency and consuming extreme quantities of alcohol is a key component of the University experience (Adams, Kaiser, Lynam, Charnigo, & Milich, 2012; Hingson, Heeren, Zakocs, Winter, & Wechsler, 2003; Webb, Ashton, Kelly, & Kamali, 1996). Recent research has shown that alcohol-related harms (e.g. unintentional injury, driving or committing assault or sexual assault whilst intoxicated, engaging in unplanned or unprotected sexual activity) have become increasingly prevalent in a University population (Hingson, Heeren, Winter, & Wechsler, 2005; Hingson et al., 2003; Vik, Carrello, Tate, & Field, 2000). However, the majority of research measuring the range and type of alcohol-related harms in a University student population has been conducted in the United States of America (USA), a drinking culture that varies in subtle but important ways to the UK. For instance, young people can purchase alcohol legally at the age of 18 in the UK, but not until 21 in the USA. This may potentially lead to differences between USA and UK university students because in the UK drinking amongst university students is commonplace and generally tolerated whereas in the USA, illegal alcohol consumption by students may be penalised. If research in this field is to drive change in government policies around alcohol consumption in young people it is imperative that governments have data from their own countries to use as a basis for these policy changes.

Personality factors and motives for drinking may represent useful indices to gauge individual level of risk for harmful drinking during adolescence (Cyders, Flory, Rainer, & Smith, 2009) and in the future (see Ham & Hope, 2003). In particular, studies have found that the personality construct, impulsivity, the tendency to act without considering the consequences, is associated with greater and more risky alcohol consumption (Adams et al., 2012; Cyders et al., 2009; Magid, MacLean, & Colder, 2007) and with increased risk of future alcohol and substance abuse (Verdejo-Garcia, Bechara, Recknor, & Perez-Garcia, 2007). In addition, motives for drinking may mediate relationships between impulsivity and harmful drinking (Adams et al., 2012; Cooper, 1994; Ham & Hope, 2003; Magid et al., 2007). The Drinking Motives Questionnaire (DMQ) relates to a model of drinking motives in which four factors describe self-reported reasons for consuming alcohol. These comprise social motives (drinking in social settings for positive social reinforcement), conformity motives (drinking to avoid social censure or rejection), enhancement motives (drinking to enhance positive mood) and coping motives (drinking to alleviate negative emotions) (Cooper, 1994).

Different aspects of impulsivity have been linked to specific drinking motives and alcohol use outcomes in students aged 18 to 25 years in the USA. Specifically, using the UPPS (urgency, premeditation, perseverance, sensation seeking) model of impulsivity (Whiteside & Lynam, 2003), Adams et al. (2012) reported relationships between problematic drinking and sensation seeking (a tendency to seek out and enjoy novel and exciting experiences) and (lack of) premeditation (the tendency to engage in behaviour without being able to anticipate the consequences before-hand), both of which were mediated by drinking for enhancement motives. Conversely, relationships between urgency (the tendency to engage in impulsive behaviour to alleviate a negative emotion) and problematic drinking were mediated by drinking for coping and enhancement motives. Lack of perseverance (an inability to maintain focus on a task, particularly when the task is long and/or boring) was not found to be an important predictor of problematic drinking. Using an alternative model of impulsivity comprising two factors (impulsivity and sensation seeking) Magid et al. (2007) reported that the relationship between sensation seeking and alcohol-related problem behaviours was mediated by drinking for enhancement motives and by the amount of alcohol consumed, whereas the impulsivity factor was directly related to problem behaviours but also mediated through drinking for coping motives.

Based on these findings, we developed a model of relationships between impulsivity, drinking motives, alcohol consumption and alcohol-related outcomes, which we tested in a sample of UK university students. Predicted paths between each variable are shown in Fig. 1. We tested direct and indirect effects of three of the UPPS factors (urgency, sensation seeking, premeditation) on the tendency to engage in risky behaviours with negative consequences when drinking alcohol, measured with the Student Alcohol Questionnaire (SAQ; Engs & Hanson, 1994). We chose negative consequences as the dependent variable as this may be a more sensitive indicator of alcohol outcomes than drink quantity in a cohort who may be expected to consume large amounts with some regularity. We did not include the perseverance factor in the model because, firstly, the definition of this factor does not lend itself to clear predictions about alcohol-related harm; secondly, a previous study found that it was not a significant predictor of alcohol outcomes (Adams et al., 2012) and thirdly, in an initial analysis, we found that this factor did not predict negative consequences in our sample, either directly or through other mediating variables.

We predicted that alcohol consumption would mediate effects between specific UPPS factors and negative consequences. Specifically, based on previous evidence that sensation seeking leads to increased quantity of alcohol consumption but not directly to alcohol-related problem behaviours, whereas urgency shows the opposite profile (reviewed in Stautz & Cooper, 2013) we predicted a significant direct effect of urgency on negative consequences with no mediation through the quantity of alcohol consumed but an indirect effect of sensation seeking on negative consequences mediated by the quantity of alcohol consumed, with no direct effect on negative consequences (shown in Fig. 1). To ensure this distinction between urgency and sensation seeking was supported we also modelled unpredicted indirect effects of urgency on negative consequences via alcohol quantity and the unpredicted direct effect of sensation seeking on negative consequences (these paths are not shown in Fig. 1). In line with Adams et al. (2012) we predicted a direct effect of premeditation on negative consequences as well an indirect effect mediated by the quantity of alcohol consumed as this particular factor could be associated both with consuming more alcohol than intended and engaging in behaviours without thinking through the consequences.

We further predicted that drinking motives would mediate relationships between impulsivity and negative consequences. Specifically, the effect of urgency on negative consequences would be partially mediated by drinking for coping motives and the paths from sensation seeking and premeditation to negative consequences would be mediated by drinking for enhancement motives, as reported by Adams et al. (2012). Although neither Adams et al. (2012) nor Magid et al. (2007) found social motives to be a significant mediator, in the UK drinking at university is a typical part of peer interactions and so could prove to be an important mediator. We therefore included this factor in the model. Finally, and in line with the findings of Magid et al. (2007) we predicted that conformity motives would have a direct effect on negative consequences but would not mediate relationships between any impulsivity factor and negative consequences. To determine whether this focussed prediction was supported, we also modelled additional unpredicted indirect effects from each UPPS factor through conformity motives, and also through units consumed of each drink type (these paths are not shown in Fig. 1).

We modelled consumption of different drink types (beer, wine, spirits) separately. It has been suggested that preferences for particular drinks are associated with different drinking patterns (Gronbaek, Jensen, Johansen, Sorensen, & Becker, 2004; Jensen et al., 2002). For instance, spirits raise blood alcohol more quickly than other drinks (faster feelings of intoxication) and may therefore be used by those who drink to get high or enhance an experience whereas wine drinkers are more moderate in their drinking habits (Gronbaek et al., 2004). However, the extent to which drink preference is related to impulsivity

Download English Version:

<https://daneshyari.com/en/article/899006>

Download Persian Version:

<https://daneshyari.com/article/899006>

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