The brief alcohol intervention

Daniel Regan looks at an evidence-based strategy for reducing harmful drinking

Excessive alcohol use is common, and associated with many adverse social, economic, and mental and physical health consequences. But the next time you hear someone lecturing about the perils of the demon drink, stop them right there. Let them know that boring people with hard-hitting facts is no use. Point them in the direction of research on effective interventions to reduce harmful drinking, in which psychology plays a major role.

This article considers one of the primary methods: to screen for harmful drinking, and then deliver specific brief interventions that are recognised as the primary effective strategy for reducing harmful drinking. The manner in which modern technology is impacting the delivery of these interventions is also discussed.

The majority of people in the Western world drink, to some degree or other. For many, this can get out of hand. Alcohol-related deaths in 2009 were 8664 in Britain alone, while the social and economic costs of excessive alcohol consumption to the European Union are thought to be in the neighbourhood of €100–300 billion annually. Big neighbourhood.

Many efforts have been made to reduce the amount of heavy drinking in different societies at different times. One of the most memorable, and wrongheaded, was American ‘Prohibition’ – the Noble Experiment, 1920–1933, which, under the Volstead Act, banned the sale, manufacture and transportation of alcohol. What started out as misguided moralising by the Prohibition Party and Woman’s Christian Temperance Union, among others, largely to reduce apparently harmful drinking habits ‘transported’ into America by immigrant communities such as the Germans and Irish, ended up facilitating an explosion in organised crime and networks for the distribution of illicit goods. The lessons are utilised in the drugs trade to this day.

While prohibition was a better strategy for nurturing a ruthless mafia than it was for reducing harmful drinking, there are some that work. The ability to reliably screen for harmful drinking, using valid psychometric instruments, is the essential first step. The main screening tool is the Alcohol Use Disorders Identification Test (AUDIT) developed for the World Health Organization for use within primary-care settings. This provides scores based on the quantity, frequency and behavioural outcomes of an individual’s drinking.

**Psychological components of interventions**

Most interventions contain certain psychological components – including feedback, assessment, information, advice – which in general lie within three broad areas: educational-based, cognitive/behavioural skills-based, and feedback-based (Larimer & Cronce, 2007; Moyer et al., 2002).

Certain findings have tended to emerge consistently: educational components, when used alone, have little or no effect on reducing harmful consumption (Larimer & Cronce, 2007). This means that simply preaching to people about the ‘Evils of Alcohol’ won’t do much good. In fact, there is some
suggestion that these kinds of interventions may actually work in the opposite direction to that intended (e.g. young male drivers exposed to dangerous driving facts report a greater intention to drive fast after exposure: Carey & Sarma, 2010). On the other hand, interventions providing behavioural skills have shown to be far more effective (Larimer & Cronce, 2007), suggesting that providing people with the necessary tools to make informed choices, instead of simply lecturing them, pays dividends.

Feedback
The primary psychological component influencing the reduction of harmful drinking, particularly among college students, appears to be the provision of feedback (Larimer & Cronce, 2007; Walters & Neighbors, 2005). Feedback signifies the presentation of discrepant information, such as a personal drinking profile (e.g. you drink this much), risk factors (e.g. genetic risk of alcoholism) and normative comparisons (e.g. beliefs about peers’ drinking) (Walters & Neighbors, 2005). Alcohol-reduction programmes, featuring personalised feedback at their core, have shown to be effective in reducing excessive drinking in college students and associated problems in several long-term follow-up studies (Marlatt et al., 1998).

The main element of feedback is provision of normative information about where an individual’s own drinking lies in relation to others’ drinking (i.e. social-norms: Lewis & Neighbors, 2006). Essentially many young adults, particularly in college settings, overestimate the amount of drinking done by their friends/peers. Since these social norms are thought to be one of the strongest predictors of drinking (Lewis & Neighbors, 2006), corrective feedback, providing a realistic picture of the amount of drinking actually being done on campus, is crucial in addressing these misperceptions.

(An aside: Are they misperceptions? If Larry thinks his friends/peers drink more than they do, and he increases his drinking, Larry’s drinking then becomes a social norm for someone else: Moe. Moe is now not incorrect in thinking that Larry drinks more… because Larry does. And around and around we go.)

However, there are those who suggest a ‘boomerang’ effect may occur with this strategy. While most students overestimate how much their friends/peers drink, it has been suggested that 20–50 per cent may actually underestimate (Schultz et al., 2007). Therefore, the real potential exists that some students might actually increase their consumption to remain consistent with this now officially prescribed social norm (Schultz et al., 2007). This, some cynics in the audience might contend, is why social-norms feedback is the harm-reduction approach most championed by the alcohol industry, who fund up to 20 per cent of certain campus alcohol initiatives, particularly in America (Wechsler et al., 2004). This boomerang issue is one which merits attention.

**SBIs in primary-care**
Research on SBIs has principally been done within primary-care settings (i.e. hospitals, student clinics). In these settings, they have demonstrated up to a 20 per cent reduction in alcohol consumption among non-dependent, harmful drinking populations (Kaner et al., 2009; VanBeurden et al., 2000). A meta-analysis of randomised controlled trials found that SBIs consistently and significantly reduce harmful drinking (Moyer et al., 2002). Along with the obvious physical and mental health benefits of successful SBIs, the economic benefits to implementing interventions at primary-care level are considerable. In an American context the benefit–cost ratio was found to be almost $60,000 in total benefit for every $10,000 invested (Fleming, 2000). Recent figures from the UK Department of Health suggest potential savings through interventions of almost £20,000 per 100,000 population (due to decrease in hospital visits, less criminality, less absenteeism, etc.).

Furthermore, the ‘numerals-needed-to-treat’ harmful drinking and mild alcohol dependence (NNT: average number of patients needing specified treatment to get one positive outcome) demonstrated that pound-for-pound, SBIs are simply one of the best health-behaviour-change interventions on the market.

**Computer-delivered interventions (CDIs)**
SBIs have been used across wide range of settings and populations, and by a wide variety of providers (Moyer et al., 2002; VanBeurden et al., 2000). Importantly, considering the high level of alcohol-related problems shown among heavy-drinking college respondents, SBIs have demonstrated clear ability to reduce alcohol consumption among college students and associated problems.
students (Carey et al., 2007; Saltz et al., 2007). Allied with the huge amount of time spent online by most college students, this suggests the move towards developing CDIs is an interesting one.

In fact, it appears to be an extraordinarily good move. Research has shown that CDIs possess a wide range of advantages over individual face-to-face interventions (IFFs: i.e. primary-care), including uniformity of intervention delivery, 24-hour access (Fornoy et al., 2008), and the ability to deliver more inexpensively (Walters & Neighbors, 2005). CDIs also possess the ability to be tailored to the needs of an individual, or specific sample group (Kypri et al., 2008). This is critical, because health-behaviour change models suggest that the ability to tailor content contained in interventions improves the likelihood of successful behavioural outcomes.

There is a growing body of research demonstrating the ability of CDIs to reduce harmful drinking (Kypri et al., 2008). A recent comparative study showed that both CDIs and IFFs were equally effective at reducing the quantity and frequency of alcohol use (in comparison to the control group: Butler & Correa, 2009). While IFFs were given more favourable ratings (i.e. the warm-fuzzy factor of physical presence), the relative cost–benefit associated with CDIs, suggest that if they are equally effective, CDIs may be undertaken with greater frequency, thus facilitating wider participation. This will always be the big factor. Both good, but one is cheap… cheap wins.

Many universities now access commercially available CDIs. One major example is the e-CHUG, developed at San Diego State University. This can be specifically tailored to the needs of each campus, provides feedback for each student, and is currently in use at about 530 campuses worldwide. ‘Down Your Drink’ is a UK-developed CDI, and research has promoted its feasibility (Linke et al., 2004). Further examination among UK university samples provides additional strands of support for the use of CDIs, or at least continued research into their use (Bewick et al., 2008). Many universities internationally have embraced the CDI approach to such an extent that some, including the University of Limerick in Ireland, ‘strongly expect’ (i.e. require?) all incoming students to complete an online brief intervention.

However, these are very early stages in research regarding CDIs. While the e-CHUG research group claim that 12 outcome studies, conducted across various campus communities have demonstrated it significantly reduces students’ risky drinking behaviours, these are limited, albeit positive, research findings. Constituent parts of CDIs, such as duration of effects, or degree of intervention dosage (Kypri et al., 2008) are not yet fully understood. There also is much variability in the various online sites (e.g. length, cost) as well their theoretical bases (e.g. health-education principles: Saltz et al., 2007, p.28).

Conclusion
On balance, it has been demonstrated that SBIs are a valuable tool in reducing harmful drinking, and can justifiably be said to have ‘the largest evidence base of effectiveness of any intervention in the alcohol field’ (Drummond, 2004, p.378). The role of psychology in augmenting understanding of key factors – how much, how often, and through what medium interventions should be delivered – is critical for the further development of reliable and effective SBIs to combat harmful drinking.

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