

**Commentary on Melson et al. (2011):
Pluralistic ignorance is probably real but important questions remain about its
relation to drinking and role in intervention**

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Many studies, mostly involving US college students, ostensibly show that young people tend to believe that more of their peers engage in heavy episodic drinking [1], illicit drug use [2] and risky sex [3] than actually do so. College students are also found to misperceive injunctive norms, thinking that their peers are more permissive of certain risk behaviours than they really are [4]. These errors of judgement have been framed in terms of *pluralistic ignorance* [4], described as a phenomenon in which “a majority of group members privately reject a norm, but assume (incorrectly) that most others accept it” [5].

Given the tendency for over-estimation of behavioural and injunctive norms to be positively correlated with the subject’s own risk behaviour (e.g., heavier drinkers tend to over-estimate their peers’ drinking more than moderate drinkers [6]), norm misperceptions are a potentially important target of intervention. To be effective this approach requires individual behaviour to be at least in part caused by norm misperception, e.g., by drinking to fit in with peers. Programs to correct norm misperceptions have become almost synonymous with prevention on US college campuses [7] and have been used in some other countries ([8]), the rationale being that heavy drinkers will adjust their behaviour to align more closely with actual norms [9]. In addition to this *broadcast* approach, in which a whole campus or group is subject to a marketing campaign, several individually focused interventions rely on the provision of normative feedback and correction of norm misperceptions by clinicians [10] or computer programs [11].

The pervasiveness of these interventions makes the hypothesis posed by Melson et al. [12] provocative and important, namely, that norm misperceptions are merely

artefacts of the way data are collected rather than real errors of judgement. They suggest that by providing reports of perceived peer behaviour and attitudes alongside reports of their own behaviour and attitudes, respondents are prompted to cast themselves in a favourable light compared with peers. Melson and colleagues randomised Scottish secondary school students to answer a “multiple-target” questionnaire (including both self- and peer-referent items) or “single-target” questionnaires, containing either self-referent or peer-referent items.

They find no difference in responses to frequency of consumption and intoxication measures between the multiple-target condition and either of the single-target conditions, i.e., no evidence of artefact in relation to perceived behavioural norms. They critical findings those responding to the multiple-target questionnaire judged their peers to have more liberal attitudes toward alcohol than those randomised to the single-target peer-referent questionnaire. The finding is limited by possible ordering effects (acknowledged by the authors), and generalisability is limited by the sample’s youth relative to most research on this topic. The findings arguably support the notion that apparent pluralistic ignorance of injunctive norms, but not behavioural norms, is partly due to the way we ask the questions.

The paper raises important issues regarding the widespread use of social norm interventions despite a lack of high quality studies demonstrating their effectiveness [13] and particular studies suggesting their ineffectiveness [14, 15]. Furthermore social norm interventions may displace more effective interventions. In a study of 747 US college campuses, Wechsler and colleagues found that campuses employing social norm programs were less likely to implement effective policies such as restricting

alcohol availability on campus, than were campuses that did not employ social norms interventions [15].

It is critical to note the differences, both theoretical and empirical, between broadcast normative feedback and personalised interventions, where the message can be individually tailored. In the broadcast approach the influence may be harmful particularly if students believe they can safely increase their alcohol consumption to meet the norm. Is it responsible to broadcast the norm where the norm is unhealthy? At some New Zealand universities, hazardous drinking is the norm, with more than 60% of students classifiable as hazardous drinkers on the basis of their AUDIT scores [16]. In the personalised approach, for which empirical evidence is promising [13], messages are tailored to optimise the motivational effect of normative information on the individual. For example, with a patient whose drinking exceeds the norm for episodic drinking but not weekly consumption, a common scenario among college students, only the episodic normative feedback is provided (e.g., [17]). While the broadcast approach is appealing because of the potential for mass dissemination, with information technology it is possible to provide individualised intervention to students at numerous, entire campuses simultaneously [18].

If misperception of injunctive norms (i.e., thinking others are more permissive of risky drinking than they actually are) is a driver of drinking behaviour, and the degree or prevalence of misperception is less than estimated using the standard (“multiple-target”) procedure, as suggested by Melson and colleagues, the study offers a possible explanation for the poor efficacy of broadcast social norm interventions. Correcting behavioural norm misperceptions appears to at least partially mediate the effects of

individualised feedback interventions [19]. A challenge now is to determine whether correcting injunctive norm misperceptions affects subsequent drinking.

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