

# **Minimising harm from alcohol misuse: Challenges to the development of effective policy**

Dr Andrew Percy

Senior Lecturer

School of Sociology, Social Policy and Social Work

QUB

John Moriarty

Research Assistant

Institute of Child Care Research,

QUB

Successive substance misuse strategies in Northern Ireland and elsewhere have been underpinned by the goal of minimising the harm accruing from the use of alcohol and other drugs. However, what it means for a person's alcohol use to cause harm is an evolving concept. As the understanding of harm changes, the type of evidence needed to estimate the scale of harm and to evaluate the success of a given initiative changes also.

This paper does three things. We first highlight a recent model by Laslett and colleagues for estimating the harm of one individual's alcohol use to other individuals, the centrepiece of a report to the Alcohol Education and Research Foundation (AERF) in 2010. This model has been hugely influential in identifying areas where harms from alcohol use accrue and in attempting to quantify those harms (e.g. the cost of injuries inflicted during intoxication). We suggest three ways in which this model could be improved by accounting for: (a) the influence of one individual's drinking on the drinking behaviour of their peers; (b) the level of use which triggers a given harm; and (c) the degree of time-lag in each of the domains of harm.

Secondly, we explore specific challenges to developing effective policy on adolescents' drinking behaviours, drawing on research which specifically elicits the perspectives of young people on why they drink.

Thirdly, we examine the relative harms of allowing moderate levels of drinking among mid-adolescents versus promoting zero use up until late adolescence.

## **Understanding harms and costs of alcohol use**

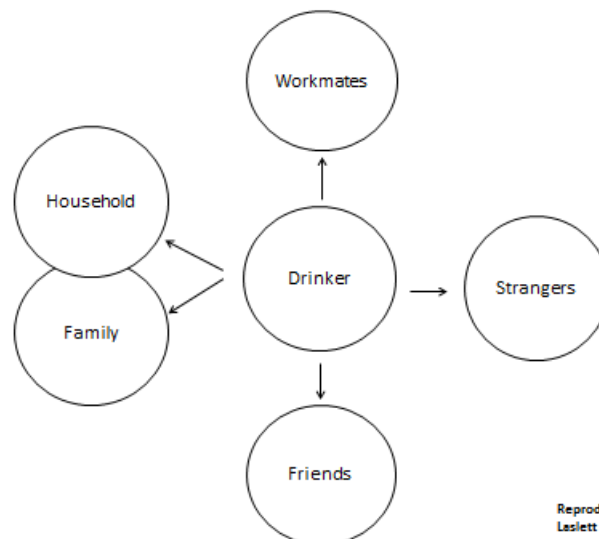
When judging the impact on society of alcohol use (or any behavioural phenomenon), the simplest measure is at the level of the individual: how many people are involved and how much does their drinking affect them? Though highly quantifiable, this

is a limited approach, in that it overlooks the effects on those not involved, assuming implicitly that only a person's own drinking affects their outcomes and not that of others.

Another approach is to evoke the public purse and to estimate the monetary cost of drinking outcomes: loss of productivity through alcohol's ill-effects; monies spent through hospitalisation, law enforcement, repairing damage, etc. Minimising such expenditure is the government's prerogative, as well as increasing the well-being of citizens. However, this approach is limited in three key respects. First, it tends to overlook or be insensitive to the cost incurred through third party harms. Second, cost and harm are not the same. Because costs are inevitably expressed in monetary terms, the felt experience of harm and the drive for citizens' welfare can be lost in the calculation of costs. Third and relatedly, the bottom-line cost of alcohol use creates the erroneous sense that costs of alcohol use are born equally by all taxpayers, overlooking that both harms and costs are usually born by those closest to users.

The model of Laslett and colleagues is designed to increase sensitivity to some of these overlooked cost structures. The authors identify key relationships through which an individual's alcohol use incurs a cost via its effect on another individual. These are the family and household, the workplace, friendship and the public space in which fellow citizens (i.e. strangers) are affected. Their model stands up to empirical scrutiny as tested through survey responses on effects of another's drinking and analysis of multiple data sources including hospital admission and police call-out records. Through this more comprehensive evaluation of costs, it is estimated that the cost to others of alcohol use may be equal to the cost to the drinking individuals.

The report of Laslett and colleagues also highlights the extent of alcohol-related harm born by persons closest to the user who are often non-consenting parties to their use. Examples include work colleagues and employers whose productivity is hampered by alcohol-induced impairment; and, more starkly, the range of suffering visited on children from Foetal Alcohol Syndrome to witnessed and direct experience of domestic abuse.



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Laslett et al. 2010, p.5

The strength of this model is that it gives a framework for evaluating how effectively any intervention or initiative reduces harm and in which of the identified areas harms are reduced. However, there are three ways in which we argue that this model can be improved upon:

1. The model should allow for the existence of behavioural feedback loops (i.e. the degree to which my drinking influences that of my friends, family and colleagues and vice-versa). The model as it stands makes too “black and white” a distinction between harming oneself through alcohol use and harming others. We argue that an important grey area is created by behavioural influence. Where an individual models drinking behaviour for another person who then goes on to drink, the harms to the second person accrue partly from their own use and partly as an externality of the first person’s drinking.
2. The model should better account for the dynamic nature of alcohol use both at the individual and the population level. An increase can come about through distinct events and a good model will differentiate between different levels of drinking. People can easily transition between zero alcohol use, mild, moderate and severe use. A good model for evaluating intervention will pinpoint the levels of alcohol use on which it has an impact and the change in harms emanating from this. There should also be a clear indication as to which arena of harms will be most affected by an increase or decrease in alcohol use.
3. The model should have a clearer time dimension. It should distinguish between harms incurred in the short run (e.g. injury or road collision during intoxication) versus harms incurred in the long run (e.g. debilitating illness caused by one’s own alcohol use or that of another person). This point interacts with point (2) above, in that the effects of a given intervention on both short and long run behaviour should be clear in order to calculate harm accurately over time.

### **Translating research on alcohol related harms into effective policy**

Longitudinal studies have consistently shown that excessive alcohol consumption during adolescence (typically defined in terms of high frequency and quantity) increases the risk of later problems including problem drinking, reduced employment prospects, poor mental health, violent behaviour, and later social and legal problems.

This weight of empirical evidence highlights the need for effective alcohol interventions aimed at reducing these risks. However, the translation of epidemiological research on adolescent alcohol related harms into effective prevention policy is complex and challenging. From our desire to generate policy relevant advice and guidance, researchers have a tendency to alter their work in subtle ways to make it more appealing,

more user friendly and more transferable. In the alcohol prevention field, it is possible to identify a number of translational problems that may influence the quality of subsequent policy developments.

1. **Reduce diversity:** We have a tendency to ignore the considerable heterogeneity that exists within drinking and the heterogeneity of outcomes that this influences (both positive and negative). Rather than discuss the different patterns in which teenagers drink, we create a binary distinction between the teenage drinker (poor outcomes) and the non-drinker (good outcomes). In effect, we drop the “excessive” from excessive alcohol consumption.
2. **Downplay continuity:** We consider teenage drinking to be qualitatively different from adult drinking. We create another binary distinction between the uncontrolled teenager consumer and the moderate controlled adult imbiber. We recognise the continuity within problematic drinking outcomes but fail to acknowledge this in relation to other drinking patterns. We also fall into the trap of viewing teenagers today as different from ourselves as teenagers.
3. **Dismiss social context:** To further reduce complexity, we minimise the role of social context. We see the problem of drinking as located within the individual (or their parents) and therefore we see the solution as located there as well.

To explore the complexities surrounding the development of alcohol interventions aimed at reducing the harm and the translational problems outlined above, we will examine some recent research (both qualitative and quantitative) undertaken with a oft time neglected subpopulation of drinkers, the moderate underage drinker.

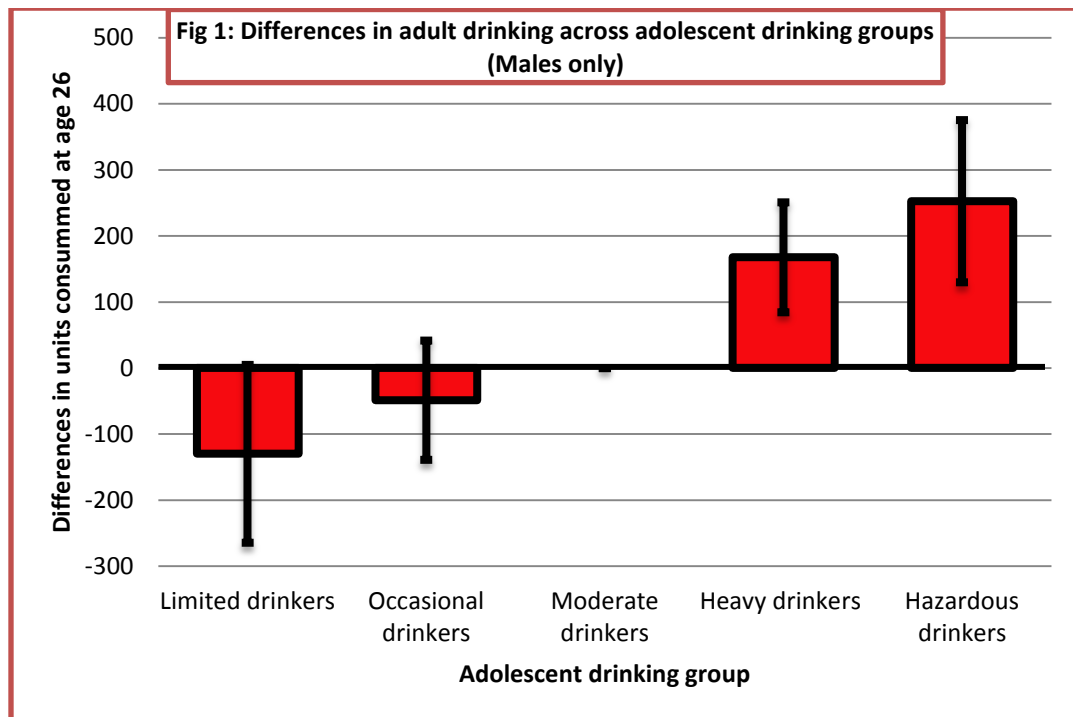
### **1. Do different patterns of teenage drinking produce different adult outcomes?**

The majority of adolescents are neither high volume drinkers, nor are abstainers, but rather report more moderate alcohol consumption. Recent longitudinal studies examining the trajectories of teenage drinking have consistently shown a large proportion of teenage drinkers who appear to exert a substantial degree of control over their own consumption. Likewise, in-depth qualitative research has highlighted considerable variation across adolescent drinking friendship groups in terms of their group drinking culture, drinking “style” and acceptable levels of intoxication. Such diversity in drinking styles and short-term outcomes associated with underage drinking suggests potential diversity in the longer term outcomes of different adolescent alcohol consumption patterns.

Figure 1 presents findings from the secondary analysis of the British Cohort Study, a longitudinal study of teenagers born in 1970. This analysis takes groups of teenage drinkers when aged 16 (as classified by a process known as latent class analysis) and examines differences in their adult alcohol consumption ten years later (at age 26). Moderate drinkers are the benchmark against which the other drinking classes are compared (they are set to

zero). Boys who were moderate drinkers at age 16 tended to be moderate drinkers at age 26. No significant differences were detected in adult drinking between moderate, occasional and limited drinkers at age 16. While differences were detected between the groups at 16 these had disappeared to a large degree by age 26. However, heavy and hazardous drinkers consumed significant more alcohol at age 26 than the other groups. So, is adolescent drinking associated with heavy drinking in adulthood? The answer is YES, but only for certain groups (those excessive drinkers at age 16).

Similar results are also found when you examine heavy sessional drinking (drinking more than twice the daily limit in a usual drinking session). Heavy and hazardous teenage drinkers are more likely to be heavy sessional drinkers in early adulthood than moderate teenage drinkers. No differences were found between moderate, limited and occasional drinkers.



There is a strong continuity between adolescent and early adult drinking. Those young people who drank more alcohol than their peers in adolescence also drank more alcohol than their peers in early adulthood. Consumption patterns established in adolescence persisted, to a large degree, into early adulthood. Those who drank at moderate levels in adolescence tended to drink at more moderate levels in early adulthood, whilst those who drank more heavily in adolescence continued to drink more heavily in early adulthood. Young people who appear to possess a degree of self-regulation over their alcohol consumption in adolescence maintain this regulation into adulthood. Not only is there a conservation of consumption between adolescence and adulthood, but there also

appears to be a conservation of alcohol self-regulation. The increasing opportunities to consume alcohol that accompanies the transition to adulthood (the legal age to purchase and consume alcohol within the United Kingdom is 18) does not appear to result in a significant escalation in consumption amongst moderate drinkers relative to other adolescents.

If we extend this analysis outwards to look at non-drinking outcomes, we see that moderate drinking is associated with few serious health or social harms. Moderate drinking is not associated with poor educational qualifications, increased malaise, smoking, socio-economic status, pay, employment status or other health and social harms. In fact, variations in teenage drinking explained little of the variations in young adult outcomes. In contrast, childhood hyperactivity, teenage smoking and parental socio-economic status were all more important predictors of adult.

By creating a binary distinction (drinkers versus non-drinkers) we miss the complexity in teenage drinking and the young adult outcomes of teenage drinking. Not all underage drinking is associated with negative adult outcomes. Moderate drinking teens appear to be at no greater risk of problem drinking or other problems in young adulthood than those young people who didn't engage with alcohol at age 16.

## **2. How different is teenage drinking from adult drinking?**

We have a tendency to portray teenage drinkers as hordes of young people trying to drink themselves into oblivion, a style of drinking very different from adult drinking. However, when teens are asked about how and why they drink, they describe drinking alcohol to be sociable, to celebrate, to commiserate, to relax, to have a good time with friends, essentially the same reasons that adults tend to consume alcohol.

In a large scale qualitative study of teenage drinking we found that teenagers enjoy the loss of inhibitions and the fun associated by being drunk. It is also the intoxicating effect of alcohol that creates many of the alcohol related risks that young people encounter when drinking. However, this drinking is not uncontrolled hedonism. Rather, they want to get drunk to experience the pleasurable effects of alcohol without "getting wasted".

Teenage drinking groups evolve a range of strategies and techniques to regulate their level of intoxication, to avoid the complete loss of control. In fact, many of the strategies used by teens would be the same strategies used by adults when drinking. These include pacing yourself with others in the group (matching your consumption to someone who gets drunk at the same rate as you), waiting for the onset of initial indicators of drunkenness (e.g. light head, slurring speech), to simple intuition about when they had had enough (the magic x factor referred to by several underage drinkers).

However, when examined closely these strategies (when employed by teenagers) are less than convincing as effective methods to avoid the social and physical harms associated with alcohol consumption. When used by adults the main aim is to avoid the social stigma of being drunk in front of others, in addition to any other problems or harms.

For teenagers, the main purpose is to achieve an appropriate level of intoxication without adult detection. The primary risk, as perceived by the young drinkers, is the chance of being detected by their parents. They walk the “intoxication tightrope”, which involves the purchase of alcohol, drinking to an acceptable level of intoxication that allowed them and their friends to experience the enjoyable aspect of drinking, but also permitting them to sober up before having to go home.

While almost every teenage drinking session reported to us involved some degree of intoxication, the goal of drinking with your friends was to have a good time. Passing out, behind sick, getting into a fight or getting caught by your parents were never regarded as positive events. This loss of control can be considered as a failure on the part of the young people to exercise an appropriate level of self-regulation over both internal and external motivations to continue drinking. Young people who engaged in these behaviours were considered to be novices, not able to manage their drinking.

As a result, even moderate drinkers, while at low risk of developing chronic health or social problems as a result of their drinking (see above), were at risk of harm due to the acute effects of alcohol intoxication (overshooting the described level of drunkenness). The harms that moderate teenage drinkers are very similar to the harms that adult drinkers face, however, their limited experience with alcohol increases their vulnerability.

By creating the distinction between adult and teenage drinking, we fail to recognise that many young people are trying to achieve the same engagement with alcohol that adults enjoy, and use many of the same techniques and strategies that adults use to regulate consumption. We also ignore the fact that many teenagers develop a degree of regulation over their consumption, but that this skill is gained through simple trial and error with many harmful incidences along the path to controlled adult drinking.

### **3. Is it the individual or does social context (people and places) matters in alcohol related harms?**

While many of the early sociological studies of teenagers focused on the group or the gang, such as Whyte’s famous study of “Street Corner Society” undertaken in the 1940s, more recent studies of teenagers have focused almost exclusively on the individual, examining adolescents engaging with alcohol, drug use and crime as isolated individual independent cases. Looking at the research literature, we seem to have forgotten that these behaviours are almost exclusively undertaken within groups.

Young people very rarely, if at all, drink on their own (this is one difference between adolescent and adult drinking). There is no fun in that. Drinking is something that you do with your friends. As a result, many aspects of teenage consumption behaviour (types of drinks consumed, desired level of intoxication, pace of drinking) are all negotiated at the group level and not the individual.

Peer drinking groups develop their own “drinking culture”. This is not simplistic peer influence, but a complex process of cultural evolution over time. It is also at this group

level that young people acquire the strategies and techniques by which they monitor their drink behaviour and try to avoid harm. By developing and providing alcohol intervention aimed only at the individual, we miss the opportunity to shape the actual drinking culture of teenage peer groups.

Other aspects of social context, in particular the environment in which alcohol is consumed, also play an important role in alcohol related harm. For example, many of the techniques used to limit consumption developed within groups are rigid and context dependant. Techniques used to regulate consumption when drinking out on the street, such as purchasing a set number of drinks, do not work so well when the young person moves to drinking at a house party. If, as is often the case at such parties, a communal pool of alcohol drinks has been provided by the hosts of the party (in some cases this may be liberally minded parents), the teenager is able to access further alcohol after they have drunk what they brought with them. If they were out drinking on the street, the opportunity to top-up their supply of drinks may be limited as the likelihood of getting served again after they had been drinking or finding someone to buy them more alcohol late at night is likely to be low. At a house party where free drinks are provided, this is not a problem. They no longer have a finite number of drinks that they can consume on an evening. In addition, these available drinks may not be their normal brand, for example high strength spirits rather than beer or cider, which they have limited experience in consuming. In situations such as this, the young person is more vulnerable to overshooting their desired level of intoxication. Many of the skills they developed to control their consumption may be highly situational specific, in that they only work effectively in certain drinking contexts. If the context changes they may be ill equipped to deal with the new drinking environment. As a result, many of the worst experiences on alcohol that young people reported involved going to a house party for the first time, drinking in a pub/club for the first time, drinking with a new group of people, or drinking on holidays.

To overcome this, young people may have to develop a new range of skills and strategies to deal with the changing local drinking environment if they are to avoid any unwanted outcomes. They are back in the cycle of trial and error, with its numerous risks.

### **Education for least harmful alcohol use: A possible alternative?**

There is little evidence within this body of work to suggest that reducing the consumption of moderate adolescent drinkers would result in significant reduction in young adult risk. This is in stark contrast to those teenagers drinking at higher levels. Here, lower levels of adolescent consumption should lead to lower levels of risky adult drinking.

Prevention programs aimed at older adolescents need to take into account the level of alcohol consumed. While it would be impractical to have a multitude of programmes to cater for all possibilities, individual programs might justifiably be tailored to include messages that are salient for the heterogeneity of participants. Whilst moderate drinking in



adolescence does not appear to increase the risk of adverse alcohol-related outcomes in early adulthood, this does not suggest that such drinking is entirely risk free. In fact, moderate drinkers remain at risk of serious short-term health and social consequences associated with the acute effects of alcohol intoxication, including, but not limited to vomiting, unconsciousness and injury. Even teenagers engaged in controlled alcohol consumption will occasionally overshoot their desired level of intoxication, increasing potential exposure to negative consequences. Being intoxicated and in the company of other intoxicated people also increases the risk of getting into fights and other harmful situations. Rather than concentrating on the long term harms associated with heavy drinking and abstinence based outcomes, there is a case for suggesting that prevention activity with teenage moderate drinkers should focus on a reduction in the risk of short term harms resulting from acute intoxication. Such prevention programs could also aim to reinforce and strengthen the emerging alcohol self-regulation skills exhibited by these young people, replacing the trial and error methods with controlled drinking skills training.

With prevention activities for heavy or hazardous adolescent drinkers, there is a stronger case for retaining a focus on the reduction of alcohol consumption towards more moderate levels. Traditional universal prevention programs, focused on preventing or delaying onset in alcohol use, provide little help or advice to those young people who have initiated into alcohol. Such programmes ignore the main alcohol related risks faced by these teenagers, while concentrating on outcomes that may not be relevant for many within this population.

While most young people eventually gain a high degree of self-regulation over their alcohol consumption by early adulthood, this experience is gained through trial and error, over an extended period of time. Applying a neuro-developmental approach, it can be argued that risky behaviour by adolescents is not the result of a lack of knowledge about risk or the way teenagers think about risk, but it is a relatively normative activity that diminishes with time as young people gain greater cognitive self-regulation. Within our current society, however, we leave many of our young people to develop this alcohol self-regulation on their own, with only their peer group for help and advice. It is unsurprising that problems and mistakes occur along the way. In light of this, it may be more advisable to attempt to provide some pragmatic advice, guidance and skills to young teenage drinkers so as to increase their level of self and group regulation of consumption and intoxication, and to accelerate this traditional social learning process. In other words, we should attempt to teach young drinkers how to drink sensibly. A key point to note here is that this recommendation is aimed at teenagers who have already established a regular drinking culture and not at young people who have had limited exposure to alcohol intoxication.

**Related publications**

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