

A comparison of young Victorians' reports of harms from others' alcohol or drug use: Does the social standing of substances affect how much harm is perceived?

Background: Harms from alcohol experienced by someone other than the drinker have received increasing attention of late, but have not been compared to harms from others' drug use. The aim of the current study is to compare the reported harms that are attributable to the alcohol use of others to those attributable to drugs, distinguishing between different types of harm in order to highlight how reported harms may be influenced by perception and social standing of use of the substance.

Method: Respondents aged 16-24 from Victoria, Australia, completed the Victorian Youth Alcohol and Drug Survey (n=5,001), including questions on demographics, drug and alcohol consumption, on the types of harms they experienced attributable to drugs and alcohol, as well as harms they perpetrated after using drugs or alcohol.

Results: For both drug and alcohol related harms, reports of harms loaded into two groups using multiple correspondence analysis: tangible harms such as assault, and amenity impacts such as being annoyed by people under the influence. Amenity impacts attributed to alcohol were more likely to be experienced by those who reported drug use and vice-versa, while the tangible impacts were more likely to be reported by those who used both drugs and alcohol.

Conclusions: Reports of amenity impacts from others appear to be influenced by the perception of the drug in question more than tangible impacts such as assault. Particularly for amenity impacts, the greater stigma attached to drug use may make respondents more likely to consider themselves harmed by drugs than they would when compared to alcohol, something that needs to be taken into account when assessing harms by either alcohol or drugs.

Keywords: Alcohol; youth; harm to others; fear of crime; Australia; victimization.

There are well-established traditions of measurement of harms stemming from alcohol consumption and from drug use. In the context of the burden of disease, there has been substantial work on the contributions of alcohol and of drugs as risk factors to the health of the user (e.g., Lim et al., 2012). Studies in the cost-of-illness tradition (e.g., Collins & Lapsley, 2009) have extended the range of problems covered to include harm at the level of society and major social institutions, but have included only a little of the harms or costs specific to others around the drinker or drug user (Room et al., 2010). Please note that in this paper the term drugs potentially refers to both illegal drugs as well as analgesics and tranquillisers for non-medical purposes.

Harms attributable to the alcohol consumption of others are common in societies with relatively high levels of alcohol consumption. One study found that 60% of Americans surveyed reported at least one problem attributable to the drinking of others in their lifetime, and 34% reported two or more problems (Greenfield et al., 2009). Compiled results from three Canadian studies found that between 14-16% of participants (aged 18 or over) were verbally assaulted and 3-4% were physically assaulted in the past 12 months by someone who the respondent believed had been drinking. Furthermore, 30-33% experienced at least one harm, ranging from being insulted or humiliated to physical assault (Giesbrecht et al., 2010). More than half of the respondents in a New Zealand study who reported being physically or sexually assaulted stated that they believed the perpetrator had been drinking (Connor et al., 2009).

Harm from others' drug use has been less studied. In a population survey in the Nordic capitals of Copenhagen, Helsinki, Oslo and Stockholm, Melberg et al. (2011) found that over 20% in each capital reported that at some time in their lives they had feared violence from a drug user they knew personally, and between 5% and 9% had experienced this in the last 12 months.

The experience of harm from the drinking or drug use of others is inconsistent across age groups. Young people are more likely to harm others when drinking and be harmed by others who are drinking as well (Williams, 2000a, 2000b). For instance, 73% of adult respondents in an Australian

study were harmed by other's drinking, but this went up to 89% for females aged 18-29 and 85% for males aged 18-29 (Laslett et al., 2010). Australians aged 18-19 are more likely to experience verbal or physical assault from people who had been drinking than other age groups (Australian Institute of Health and Welfare, 2011). In a New Zealand study 5% of respondents over 18 had been physically assaulted, but this went up to 12% when the age group was restricted to those aged 18 to 25 (Connor et al., 2009). Another New Zealand study found that 18% of male and 13% of female university students surveyed had been physically assaulted by someone who had been drinking (Langley et al., 2003). Less attention has been paid to the distribution by age of being harmed by others' drug use. Melberg et al. (2011) did not find a significant relation with age in the Nordic capitals. However, this was tested in a multiple regression in which the number of drug users the respondent knew was a strong predictor, which is likely to be correlated with age.

It should be noted here that alcohol use in Australia is much more common than drug use; in 2010 80.5% of Australians aged over 14 consumed alcohol in the past 12 months, compared to 12% who used a substance other than alcohol or tobacco (AIHW, 2011). A comparison of harms experienced due to a range of drugs, both legal and illegal, can be found in a controversial paper where rankings by an expert group of the intrinsic harm of different psychoactive substances found that alcohol causes more harm to others than any other drug and was the most harmful drug overall (Nutt et al., 2010). Although the methodology in this paper was criticised (e.g., Britton et al., 2011; Rolles & Measham, 2011), and the higher prevalence of alcohol use not accounted for, the idea that the legality of various drugs is not in line with the amount of harm they cause is widely accepted (e.g., van Amsterdam et al., 2010).

The use of alcohol and drugs are viewed differently within a society. Although alcohol addiction is the fourth most stigmatized condition (of a selection of conditions including being a criminal, having HIV, etc.) in expert rankings made in 14 societies, drug addiction is first (Room et al., 2001). Results of a British survey showed that the majority of adults perceive persons with a substance-use disorder

as unpredictable, dangerous and their problems as self-inflicted (Crisp et al., 2000). The perceived unpredictability of a drunk person, and even more of someone affected by drugs, can in itself create fear in others, regardless of how the alcohol or drug user behaves. The harms to others from drinking or drug use can thus be considered to have two aspects: tangible impacts such as assault, and harms which are a matter of fear or perception. This distinction parallels the distinction in the criminology literature between victimisation and the fear of crime (Garafalo, 1979). These fears and perceptions can substantially impair neighbourhood amenity and constrict people's lives, if avoiding drunk people at the tram stop means that people stay at home. In this context neighbourhood amenity refers to how comfortable and welcoming an urban environment is. But, as the criminology literature has found, fear of crime and actual victimisation do not necessarily go together; many of the most fearful have not themselves been victimised (Skogan & Maxfield, 1981). It is well established in the criminology literature that, at the population level, trends over time in fear of crime do not necessarily match or even go in the same direction as trends in actual crimes (Cordner, 2010).

One of the factors which has been found to influence fear or perception of harm is the affinity and similarity of the person in question to those in their environment. For instance, the Nordic study already cited found that only half as much harm was anticipated by someone who has family or friends with a drug problem as those without affected family or friends would anticipate in their situation (Melberg, 2011). Furthermore, those who do not use drugs may perceive more danger, risk or even harm from someone who they think is under the influence of drugs than those who do use. Given the higher rate of alcohol use compared to drug use in Australia (Australian Institute of Health and Welfare, 2011) and alcohol's everyday visibility, combined with the recurring moral panics surrounding drug use (Reinarman & Levine, 1997; Zajdow, 2008), the perception of harms attributable to drugs may well differ from the perception of harms attributable to alcohol.

The Victorian Youth Alcohol and Drugs Survey (VYADS) asked young Australians from the state of Victoria about how they were harmed by others who were drinking or under the influence of

drugs, and also a couple of questions on how they may have inflicted harm on other people themselves while they were drinking or using drugs. As such all items in the study will be covering the reporting of harm, rather than a more objective measure. Young people are over-represented among drug users and those drinking to intoxication, as well as in alcohol- and drug induced social disorder as both perpetrators (Williams, 2000b) and victims (Williams, 2000a); we are thus measuring and analysing perceptions in the quadrant of the population most likely to be intimately involved, on both sides, in harms from drinking and drugs.

This study investigates the prevalence of alcohol- and drug-attributed harms reported by Victorians aged 16-24, and what can predict the experience of these harms. We examine the interrelations of reports of different indicators of harm, testing whether distinct types of harm can be found in the results. The profiles of reported types of harm for drugs and for alcohol are compared, to shed light on the potential role in the reports of perceptions as well as tangible experiences, and how these may differ for drugs and alcohol. Further light on this issue is shed by comparing the rates of experienced physical and verbal assaults attributed to the drug or alcohol use of others to the rates of admitted perpetration on others of physical and verbal assaults.

Method

Sample

Data for this paper came from the VYADS survey (Victorian Drug and Alcohol Prevention Council, 2010), collected between September and November 2009. Using random digit dialling and computer assisted telephone interviewing, 5001 people (50.5% female) aged between 16 and 24 were interviewed by Social Research Centre staff on their current drug and alcohol use and experiences. Participants were all living in Victoria, with 70% of them living in metropolitan Melbourne. Household landlines were called and, where there was more than one potential respondent in the household, the person in the house with the most recent birthday was selected for the survey. The

response rate for the survey was 71% (Victorian Drug and Alcohol Prevention Council, 2010). The sample was overall representative of the general population of Victorians aged 16-24 and was compared data on this group from the Australian Bureau of Statistics (ABS). There were some minor discrepancies. In particular there was under-representation of participants aged between 22 and 24, and over-representation of rural participants and females. Therefore data were weighted to match the ABS estimates on age, sex and rural versus urban status.

Measures

The full VYADS aims to ascertain the drug and alcohol consumption and attitudes of young people. On average it took 17.2 minutes to complete and included fairly detailed questions about demography and the respondent's alcohol and drug consumption and attitudes. Of particular interest in the current study were two sets of eight questions asked of participants about what harms they experienced due to the drinking or to the drug use of others (see Table 1). Six of the eight items were essentially the same in the drug and the alcohol series, while the other two items in each series differed somewhat to reflect the different circumstances of alcohol and drug use in Victoria, reflecting their different legal status. Two other pairs of questions asked about harms the respondent had inflicted on others while under the influence of alcohol or drugs.

Please note that the questionnaire asked about "drugs" in general, without further clarification. In Victoria in 2009, this is likely to have been interpreted primarily in terms of illegal drugs, of which the most commonly used were cannabis, ecstasy and amphetamines (Victorian Drug and Alcohol Prevention Council, 2010). However, less commonly used drugs such as heroin and cocaine may have also been on the respondent's minds.

Analyses

All data analysis was conducted with Stata version 12.1 (StataCorp, 2011). As well as frequencies and logistic regressions, Multiple Correspondence Analysis (MCA) was used. MCA arranges the

items in a two-dimensional loading plot, analogous to a two-dimensional factor analysis for categorical variables, with positive and negative responses to each item both displayed.

Results

12-month prevalences of experienced harms from drinking and drug use.

The results presented are mainly based on the reported prevalence of a range of harms attributed to alcohol and drugs (Table 1), both experienced and perpetrated. Overall there was a higher rate of harms attributed to the drinking of others than was attributed to the drug use of others. This is especially the case for two items, verbal and physical assault, with more than twice as many respondents stating they experience this from someone who was drinking. However the prevalence of some of the other types of harms were quite similar. For instance, similar proportions of respondents stated that they avoided drinkers or drug users (60.9% and 58.9% respectively). Comparing the prevalence of positive responses to each item, the rank ordering of the items was similar for alcohol and for drugs, though for three items (feeling unsafe in public places, and verbal and physical abuse) there were substantially more positive responses for alcohol than for drugs. The items on witnessing public drug use and on noise from drinkers differ substantially in content, and therefore cannot be directly compared.

Respondents were also asked about harms they caused to others under the influence of alcohol or drugs. The items on harms perpetrated by respondents had lower prevalence rates than the corresponding items on the same harms being experienced. The ratio of the harms experienced to perpetrated did however vary. There were 5.4 times more verbal assaults attributed to someone who was on drugs than there were people acknowledging that they verbally abused someone else while using drugs, while there were only 2.2 times more for alcohol. Similarly, there were 3.7 times more physical assaults attributed to the drug use of others than of oneself, while for alcohol there were 2.4 times more. The ratio of perpetrated to experienced assault was higher for drugs than for alcohol.

While the ratio was at or below 2.4 for alcohol for both types of assault, it was higher for drugs, and particularly for verbal assault, which was reported by more than five times as many respondents as stated they verbally assaulted someone else while under the influence of drugs.

Patterns of specific harms experienced

MCAAs were conducted separately on the alcohol and the drug items to ascertain the response patterns for harms from others' alcohol and drug consumption. The items are grouped in a similar fashion in the results, regardless of the drug type in question. Verbal assault, physical assault, being put in fear and being in a car accident loaded separately from the other four items in both analyses. In the content of the groups of items, there is a consistent theme for both alcohol and drugs: the second set of four items described more subjective harms related to fear or amenity, rather than tangible harms that are centred on a particular event. The possible exception to this is being put in fear; however, the question's wording implies a particular event rather than a general impression, suggesting that this split in items between amenity impacts and tangible harms is suitable.

Rates of experience of amenity and tangible harms from others' drinking and drug use

As can be seen in Figure 1, there were more respondents that had not experienced any tangible harms attributable to the drug use of others (74.8%) than there were respondents that had not experienced any tangible harms attributable to alcohol use of others (57.1%). A large majority of respondents had experienced amenity impacts both for alcohol (80.5%) and for drugs (73.3%), and these rates were closer together than the rates for tangible harms. The overall rates of experiencing any harm from alcohol (84.9%) and from drugs (75.6%) essentially reflected the rates for amenity impacts; only a few respondents reporting tangible harms did not also report amenity impacts.

Predictors of tangible and amenity harms from others' drinking and drug use

Ordinary least-squares regression models were developed to predict the number of each type of harms attributable to drugs or alcohol that were experienced by the sample. Table 2 shows the models

predicting separately the number of amenity impacts and of tangible harms reported for alcohol and for drugs. Significant predictors of amenity impacts are fairly similar for those attributable to drugs and those attributable to alcohol (Models 1 and 2). Females were more likely to report amenity impacts, as were those who lived outside metropolitan areas and with a more negative view towards drinking. Heavy drinking (defined as seven or more drinks in a session) by the respondent was a positive predictor for both types of amenity impact, particularly when attitude to drinking was controlled (multivariate models) and for tangible harms from drug use. Finally, consumption of drugs other than party drugs were a positive predictor and use of party drugs a negative predictor of alcohol amenity impacts. Conversely, only “other drug” use was a positive predictor of amenity impact from others’ drug use.

Tangible impacts, shown in the right-hand half of Table 2, had different significant predictors than the models predicting amenity impact. Respondents aged 16-17 were less likely than older respondents to experience tangible harm attributable to alcohol, while there was no strong relationship with gender and tangible harm in the multivariate models. Interestingly, a less positive attitude to drinking was a significant positive predictor of harm in the bivariate models, but this relationship was reversed when all the other variables were controlled for. Furthermore, all types of drug and alcohol use in the past twelve months were predictors of tangible harm from alcohol, while only drug use and heavy drinking twice a week or more were positive predictors of tangible harm from drugs.

Overall, the demographic profiles of those being harmed could best be divided by the type of harm experienced: females and those who live outside metropolitan areas were more likely to report amenity impact, while younger respondents aged 16-17 were less likely to report tangible harm. In terms of the consumption patterns of those being harmed, there seems to be a tendency towards a stronger relation of amenity impacts with consuming something other than the substance the harm was attributed to, while tangible harms are more strongly predicted by the respondent’s consumption of the same substance.

Discussion

The primary aim of this study was to investigate the prevalence of harms experienced by Victorians aged 16-24 attributed to the alcohol and drug use of others. The majority of young Victorians experienced some harm attributable to the drug and alcohol use of others. Based on the MCA, the harms asked about were divided into two categories, amenity and tangible harms. The latter tend to be more serious and have objective consequences, while the former reflect fears and distaste for perturbation of good order – a dichotomy somewhat resembling the distinction between victimisation and fear of crime in the crime literature. The rates of amenity impacts experienced attributable to drugs and alcohol were similar, while the prevalence of tangible impacts attributable to alcohol was nearly double the prevalence of such impacts attributable to drugs. In interpreting this result, the much higher rates of use for alcohol, compared to drugs, should be kept in mind.

The rate of physical assault attributable to the drinking of others in the current study on a young sample, 9%, is fairly similar to the rates of 12.3% of adults found in New Zealand by Connor et al. (2009) and 7% found for Australian general population in the National Drug Strategy Household Survey (AIHW, 2011). Eighty-five percent of respondents in the current study experienced an alcohol-related harm of any kind from strangers or known drinkers, similar to the 85% and 89% for males and females respectively found by Laslett and colleagues for a similar age-group (2010). The items used in that study were similar to ones used in the current study, making it the most direct comparison. It is important to take into account with such comparisons that the number of and type of harm items asked differs between surveys, and that the percentage of respondents reporting any of the harms will be affected by both the number and type of harms listed in any given survey.

The results of the MCA analyses were similar for harms attributable to drugs and those attributable to alcohol. In both analyses there was a clear differentiation between harms that were focused on a particular event and harms that expressed fears and loss of amenity. Verbal and physical assault, a car accident and being put in fear by a person were grouped together in the harm event group and could

all be considered more serious harms. The second group, amenity impacts, is more subjective, in that a situation that one young person might consider unsafe may not be considered unsafe by another. At first glance, the finding that being put in fear was grouped with the tangible harms as compared to, say, feeling unsafe may seem anomalous, however the fear item's wording seems to have been interpreted in terms of to a specific event rather than a general recurring issue. The similarity in the rate of amenity impacts attributable to alcohol and drugs, especially when compared to the different rates of experienced tangible harms, along with the much higher prevalence of use of alcohol, could be indicative of a greater general fear of crime from drugs than from alcohol, in line with previous research (Cordner, 2010; Crisp et al., 2000; Room et al., 2001; Skogan & Maxfield, 1981).

This interpretation was supported by the finding that there was a higher ratio of harm experienced to harm perpetrated for harms attributable to drugs than for harms from alcohol. Taking into account the expected discrepancy between the percentages of those who acknowledge harming others and those who reported being harmed, the ratio of harms experienced to those perpetrated was higher for drugs than it was for alcohol.

There are a few possible explanations for this finding. Firstly, it must be acknowledged that this could be a reflection of reality. Based on these results alone, it is possible that those who harm others while under the influence of drugs perpetrate more harms than those who harm others while under the influence of alcohol. Or perhaps drug-related assaults on those aged 16-24 are more likely to be perpetrated by those over 24. However, given the research into perception of harms and the perception of drug use, another explanation is that these findings are a reflection of the attitudes towards, and fear of, those who use drugs, as against the normalisation of heavy alcohol consumption in Australia. In support of this, there was little difference between drug- and alcohol-attributed amenity impacts, the more subjective of the two harms categories, while the prevalence of tangible impacts, the more objective category, was nearly twice as high for alcohol-attributed harms as for

drug-attributed harms. This is especially telling as many of the amenity impacts stem from consumption or intoxication in public places, which would presumably be more common for alcohol.

Overall, the more subjective amenity impacts were better predicted by use of whichever substance (drugs or alcohol) the respondent did not consume themselves, while the more objective harms were better predicted by the drug of choice of the person experiencing these harms. This is generally in line with the finding in previous research that those with less experience of drug use anticipate more harm from that drug (Melberg, 2011). It is possible that those harms that seem to involve less close interaction with the person or people doing the harming can more readily be attributed to the drug that the respondent does not use, while the more objective harms, which would involve more close interaction, can be more accurately attributed to the drug of choice of the person being harmed, who is more likely to be around people consuming the same substances as them. However, this interpretation should be viewed with caution as there were exceptions to this rule; for instance drug use was a strong predictor of tangible harm attributed to both drugs and alcohol.

Limitations

Although harms experienced at the hand of family or friends could be fairly accurately attributed to the perpetrators' drug or alcohol use, in the current study respondents would need to make a decision about what influence the perpetrator was under where the perpetrator are not known to them, which would be the case for many of the harms discussed in this paper. How this attribution was made and how accurately would be an interesting area for future research. A further limitation is that the harms described were not, by necessity, the same for alcohol as they were for drugs, as such comparisons of the number of harms experienced need to be interpreted with caution. Concerning the analysis on harms experienced versus those perpetrated, the comparison is limited in scope, as only the verbal and physical assault items were comparable. The difference between harms experienced and perpetrated is large but not surprising; it could reflect a number of factors as noted above. The ratios are therefore a

very rough proxy for the discrepancy between the acknowledgements of harms experienced to perpetrated.

The high rates of harms experienced by young people attributed to either drugs or alcohol indicate that this group in society is bearing a large burden of harm from the drug consumption of others, regardless of the substance's legal status. In this study, young people were more likely to perceive harms from others' drinking than others' drug use. However, this difference is reduced for amenity impacts, and the ratio of harms received to harms perpetrated is higher for drugs than it is for alcohol. Such findings suggests that the greater stigma associated with drug use may inflate the perception of harm from drugs or alternatively reduce the perception of harm from alcohol. The impact of such perceptions on drug and alcohol policy, or alternatively how increasing the awareness of this distortion could impact on policy debates is worthy of future research.

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