

Original Article

Outdoor music festivals: Cacophonous consumption or melodious moderation?

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Abstract

Large outdoor music festivals have emerged as part of a general expansion of licensed recreational activities, but in research terms they have been largely impenetrable due to commercial sensitivities. These sensitivities notwithstanding, the number and scale of such events necessitate a greater understanding of alcohol and drug use and the potential to promote normative protective behaviours in this context. This study examines self-reported alcohol and drug behaviours of 1589 attendees at a music festival in Scotland during the summer of 2008. Similarities between the outdoor rock music festivals and the dance club scene are considered alongside the challenges associated with risk reduction in these settings. Results show that alcohol was consumed by the majority of samples; however, negative consequences were reported by a minority of respondents, suggesting evidence of controlled hedonism within a situation traditionally associated with unrestrained excess. Similarly, the majority of samples did not use drugs. The majority also report a number of self-regulating protective behaviours suggesting that alcohol and drug use is contained within a developing social culture of ‘controlled intoxication’. Results further suggest that although music festivals are transitory events, there is a degree of consistency amongst attendees. Music festivals may therefore be atypical but potentially effective environments to increase protective behaviours using normative messaging and modern communications media. This study was resourced exclusively by local alcohol and drug partnerships.

Introduction

Concern has been expressed throughout Europe about the increasing risk of alcohol-(and drug-)related harm to music festival attendees (EMCDDA, 2006). Research studies at music festivals are relatively rare but not the least because of the powerful commercial interests involved and their reluctance to support research that might attract negative publicity. As a result, most of the UK-based studies have tended to focus on the dance club scene and it is to this body of literature that the author of this study looked first.

Music festivals and 'clubbing' venues and attendees have much in common, for example, the creation of a festival atmosphere, loud popular music, the search for temporary freedom from the restraints imposed by work or study and according to some authors such as Measham (2006), evidence of a single-minded determination by attendees to get drunk.

Differences also exist in that the late 1990s dance club scene is associated with weekend recreational consumption of club drugs such as ecstasy, lysergic acid diethylamide (LSD), amphetamine and cannabis. Alcohol was not a prominent feature of the clubbing scene at that time. This situation has now changed and alcohol's status in the music and dance scene has been re-established. The EMCDDA (2006) reports evidence that alcohol producers and manufacturers are now beginning to capitalize on this potentially lucrative music market, targeting new drinks at younger age groups, especially young women. This report raises important concerns about the health risks of festival attendees and the risk of excessive drinking, which may be combined with illegal drugs. Other researchers express similar concerns with the introduction, by some alcohol producers, of flavoured alcoholic drinks and ready-to-drink mixers; aspirational advertising campaigns and the remodelling and growth of licensed recreational sites to appeal to a broader range of customers (Duff, 2005; Measham, 2006; Parker, Aldridge, & Measham, 1998).

In general terms, the dance and music scene has tended to be characterized by an ethos of premeditated intoxication and a growth in licensed entertainment (Measham, 2006). Large outdoor music festivals have emerged as part of this general expansion, but in research terms have been largely impenetrable. Commercial sensitivities notwithstanding, the number and scale of these events necessitate a greater understanding of alcohol and drug behaviours in this context and the potential for risk reduction. A web-search using the works 'UK rock festivals' provided 25 licensed and heavily promoted events across the UK (Table I).

Among the unique aspects of this type of event are their duration, 2–5 days, and the tens of thousands of people using temporary camp-site facilities. This raises a number of public health concerns as well as the question of the efficacy of risk reduction efforts in this context.

Demand reduction in the UK has tended to focus on promoting sensible (daily) drinking levels, essentially recommending that women do not exceed three units of alcohol a day and that men do not exceed four units a day. In the context

Table I. The UK multi-day rock festivals in 2009.

Name	Location	Duration	2009 Dates
Glastonbudget	Leicestershire	3 days	May
Wychwood	Cheltenham	3 days	May
Isle of White Festival	Isle of White	3 days	June
Download Festival	Leicester		June
Rock Fest	Loch Ness, Scotland	3 days	June
Glastonbury	Somerset	5 days	June
Hyde Park Calling	London		Dates to be confirmed
Guilfest	Surrey	3 days	July
T in the Park	Kinross, Scotland	3 days	July
Oxegen	Ireland	3 days	July
Latitude	Suffolk	4 days	July
Secret Garden Party	Cambridgeshire	4 days	July
Truck Festival	Oxfordshire	2 days	July
Rock and Blues cancelled - council-denied licence application	Derbyshire	4 days	July 24
Gig in the Park	Suffolk	3 days	August
Bloom Festival	Cheltenham		Dates to be confirmed
Beautiful Days	Devon	3 days	August
Green Man	Wales	3 days	August
'V' Festival	Essex	2 days	August
'V' Festival	Staffordshire	2 days	August
Leeds	Leeds	3 days	August
Reading	Reading	3 days	August
Last Days of Summer	Northampton		August, dates to be confirmed
County Picnic	Co Laois, Ireland	3 days	September
Loopallu Fest	Ullapool, Scotland	2 days	September
Guitarfest	Birmingham		September, dates to be confirmed

of outdoor music festivals, attention is drawn to a credibility gap between the message and the party mindset of those attending. In terms of supply reduction, the relaxation of licensing hours, increased availability and affordability through supermarkets and other outlets add to the challenge for advocates of restraint.

The overall wisdom of investing limited resources to influence powerful commercial interests which may only exist in an area for a short period of time has been questioned (Mistral, Velleman, Mastache, & Templeton, 2007). This report by UKCAPP (2007) compares the partnership risk reduction activity and community action programmes to 'a barricade of small sandbags attempting to hold back the effects of a huge rising flood of alcohol consumption'. Other researchers express similar views (Berridge, Thom, & Herring, 2008). In contrast, the EMCDDA (2006) encourages a degree of optimism, particularly in regard to demand reduction among attendees. The authors speculate that 'For the majority of people, particularly young people, across the Europe, drink and drug use are

still not necessarily an integral element of dance music settings. For most people it is the music and the social aspects that are the most central experiences in this environment'. Concerns about the alcohol and the drug use of young adults transcend countries, cultures and social classes, for example, Hunt and Laidler (2003) consider the dance club scene to be emerging as a 'global phenomenon'. While this phenomenon is thought to develop at different speeds and subject to various local influences it is, nonetheless, connected worldwide by the relative ease of travelling and social networking sites.

Several studies emphasize the importance of setting and are worth mentioning here. Loud music and 'clubbing' environment were associated with increased use of both alcohol and drugs and a need for more information among 18–30-year olds (The Health Promotion Agency Ireland, 2006). Bellis, Hughes, and Lowely (2002) demonstrated that music and dancing events were associated with the highest levels of consumption. Similar findings were demonstrated in research focusing on Edinburgh night clubs and pubs (Riley, James, Gregory, Dingle, & Cadger, 2001). A key finding in this study is the dominance of alcohol in the dance scene. Again, authors point to the shift from previous studies in which dance drug users were thought to avoid alcohol and raise concerns about the use of alcohol in conjunction with other drugs. There is no satisfactory explanation as to why this transformation has occurred.

There is general agreement in the literature that both alcohol and drugs now dominate the increasing range of licensed recreational activity across the UK (Measham, 2004). The harm associated with this type of activity is also well-researched and accepted (EMCDDA, 2006; Riley et al., 2001). There is less agreement, however, on what can be achieved by attempting any type of intervention when personal, group, commercial and environmental factors combine to create a context geared to unrestrained overindulgence.

Risk reduction efforts in the 'club scene' have benefited from two UK Government publications: 'The national safer clubbing guidelines on good practice' (Webster, Goodman, & Whalley, 2002) and 'Good practice in managing the evening and late night economy', Office of the Deputy Prime Minister (2004). No good practice guidelines have been produced for music festivals where efforts are still largely progressed locally, by alcohol and drug partnerships (ADPs), giving rise to a variety of local responses. The purpose of this study is to further our understanding of drug and alcohol use and protective normative behaviours in the context of large scale outdoor music festivals.

Methods

Participants

The population of interest are individuals attending licensed music festivals in Scotland. Festival attendees come from all parts of Scotland; therefore, the results of this work are thought to be of interest to Scotland as a whole. A total of 1589 festival attendees voluntarily took part in an anonymous survey.

Measures

After reviewing the literature on this topic, a questionnaire was designed based on the studies of licensed dance events in the UK and identified gaps in the existing literature. Questions included:

- demographics data: age and gender,
- frequency of attending music festivals,
- alcohol and drug use,
- when alcohol was purchased, that is, before or at the event,
- getting home from the festival,
- negative consequences of alcohol or drug consumption,
- protective normative behaviours.

No quantity questions were included in the survey because, under these conditions, self-reported quantity measures are known to be of limited value (Brener, Billy, & Grady, 2003; Midanik, 1989).

Procedure

Data collection

Data collection was undertaken by 12 trained volunteer interviewers at the music festival site. Volunteers were supported and supervised by professional staff who distributed manageable numbers of questionnaires, 10, to each interviewer. Upon completion of the allocated forms, interviewers returned to the ADP area for a well-earned rest and debrief. Professional staff retained completed forms in a safe area during the festival.

Results

Characteristics of the sample

A total of 1589 respondents completed the survey at the event. This consisted of 715 male respondents (45%) and 874 female respondents (55%), with a mean age of 23 years and a standard deviation of 7.3 years. The majority of the respondents (68%) had attended this festival previously, whereas the remainder were attending for the first time. The majority of the sample (77%) also reported attending between one and two music festivals a year, suggesting that although music festivals are transitory events there is a degree of consistency amongst attendees.

Geographical breakdown

Survey respondents provided the following information about their home location (Table II). There was no statistical difference between geographical area on any drug use or alcohol use.

Table II. Home post code area of attendees.

Post code area	Percentage (%)	Number
Edinburgh	19	301
Glasgow	17	270
Kirkcaldy	15	238
Dundee	10	159
Aberdeen	8	127
Falkirk	6	95
Perth	5	80
Paisley	4	64
Motherwell	3	48
Inverness	2	32
Kilmarnock	2	32
Dumfries	1	16
Galasheils	1	16
Outside Scotland	7	111

Note: Percentages have been rounded to the nearest whole number.

Analysis

In all cases, where Chi-square tests were carried out, results are based on the raw scores and not the percentages.

Alcohol use

The majority of participants ($n = 1398$, i.e. 88%) reported drinking alcohol when attending the festival, with males significantly more likely to do so than females ($\chi^2 = 27.4$, $df = 1$, $p < 0.001$). The likelihood of attendees drinking alcohol was also found to increase with age ($rpb = 0.073$, $p < 0.05$).

The most popular alcoholic beverage consumed by attendees was beer (consumed by 58% of those who drank alcohol), followed by spirits (48%), cider (45%), wine (29%), a mixture of drinks (25%) and alcopops (20%). It was noted that males were significantly more likely to report drinking beer ($\chi^2 = 2.5$, $df = 1$, $p < 0.01$), whereas females were significantly more likely to report drinking wine ($\chi^2 = 8.4$, $df = 1$, $p < 0.01$).

Most respondents brought alcohol to the event and topped-up by purchasing more during the event itself. A total of 78% of respondents who drank alcohol reported bringing alcohol with them to the event, whereas 72% also reported buying alcohol at the event. Older adults (25 years and above) were found to be significantly more likely to bring alcohol with them ($rpb = 0.132$, $p < 0.001$), whereas young adults (16–24 years) were significantly more likely to buy alcohol at the event ($rpb = -0.124$, $p < 0.001$). A minority (24%) stated that they obtained alcohol from their friends at the festival, with males being significantly more likely to do so than females ($\chi^2 = 39.67$, $df = 1$, $p < 0.001$), as were older adults compared to younger adults ($rpb = 0.204$, $p < 0.001$). However, the strength of all age effects on both the source of alcohol and choice of alcoholic beverage were relatively weak, suggesting that age is not a major factor in determining these alcohol behaviours.

Table III. Age and illegal drug use at festivals.

Age	Percentage (%)	Number
<18	20	318
18–24 years	32	509
25–35 years	28	445
35+ years	17	270
Missing data	3	47

Note: Percentages have been rounded to the nearest whole number.

Illegal drug use

In contrast to alcohol use, the majority of respondents (68%) did not report any type of drug use while attending the festival. However, it should be noted that those individual who used one drug also tended to use other drugs. The most commonly reported drug was cannabis, used by 24% of the sample. This was followed by ecstasy (16%), cocaine (13%), amphetamines (8%), LSD (6%) or other (4%). Only 2% of the sample reported using the bogus drug semeron, suggesting that individuals were not simply reporting using every drug. Individuals who reported using this bogus drug were excluded from the analysis. These findings are consistent with those reported by other researchers (Neighbors et al., 2007), where alcohol was the most prevalent substance, the second most prevalent being cannabis, followed by stimulants.

Age and ‘any’ illegal drug use

Table III illustrates that attendees in the age groups under 18 years and over 35 years were least likely to use illegal drugs. The 18–24-year group were most likely to do so.

Gender

There were marked gender differences in reporting drug use. Males were almost twice as likely to do so (41%) compared to females (22%). ($\chi^2 = 62.68$, $df = 1$, $p < 0.001$), Table IV list the results for specific substances.

A greater proportion of males also reported experiencing negative consequences as a result of using alcohol or drugs at festivals. Males were more likely to report collapse (6% *vs.* 2%); more likely to be affected by heatstroke (13% *vs.* 8%); more likely to vomit (14% *vs.* 8%); more likely to be involved in a fight (9% *vs.* 3%) and more likely to report unsafe sex (10% *vs.* 3%).

Getting home

The majority of respondents, 72%, reported that they would not drive themselves home after the festival. The study did not consider driving under the influence and it is not known whether the 28% who intended to drive were affected in this way.

Table IV. Gender and specific drug use.

Drug	Total (%)	Number	Male (%)	Male number	Female (%)	Female number	Statistical significance
Cannabis	24	386	32	232	17	154	$\chi^2 = 58.03$, $df = 1$, $p < 0.001$
Ecstasy	16	256	22	160	11	96	$\chi^2 = 57.2$, $df = 1$, $p < 0.001$
Cocaine	13	203	17	129	9	74	$\chi^2 = 42.28$, $df = 1$, $p < 0.001$
Amphetamine	8	131	10	71	6	60	$\chi^2 = 14.82$, $df = 1$, $p < 0.001$
LSD	6	91	8	57	4	34	$\chi^2 = 21.17$, $df = 1$, $p < 0.001$
Other	4	62	6	43	2	19	$\chi^2 = 6.54$, $df = 1$, $p < 0.05$

Notes: Festival goers who used one drug, tended to use others as well, hence the numbers in this table will not add up 100%. Percentages have been rounded to the nearest whole number.

Negative experiences

Negative experiences were in the minority. The two most common negative experiences reported by participants were vomiting (10.4%) and heatstroke (10.2%). A number of other experiences were reported by participants, which included engaging in unsafe sex (5.9%), fighting (5.8%), collapsing (3.8%) or other consequences (3.3%). Males were significantly more likely to experience collapse ($\chi^2 = 15.6$, $df = 1$, $p < 0.001$), heatstroke ($\chi^2 = 7.9$, $df = 1$, $p < 0.01$), vomiting ($\chi^2 = 17.8$, $df = 1$, $p < 0.001$) and fighting ($\chi^2 = 27.9$, $df = 1$, $p < 0.001$) compared to females.

Protective behaviours

It is important to stress the majority of protective behaviours evident in the sample. The majority brought sunscreen (51%), brought water (72%), ate while consuming alcohol (68%), stayed in groups of friends (68%) and kept mobile phone numbers (67%).

Other protective behaviours were evident among the attendees, though by no means the majority. These included bringing condoms (23%), pacing the consumption of alcohol (39%) and avoiding mixing alcohol and drugs (28%). Table V breaks down protective behaviours by gender. In terms of age, the under 18 years age group were most likely to bring water and stick with friends (79%). This age group were also most likely to keep safe mobile numbers (74%).

Discussion

This study used self-reported data, taking advantage of the relative ease and low cost with which they are gathered. Self-report data have become a popular way of measuring and describing the prevalence of many behaviours, including alcohol

Table V. Protective behaviours by gender.

Protective behaviour	Total (%)	Number	Male (%)	Male number	Female (%)	Female number	Statistical significance
Bring water	72	1144	68	486	75	658	$\chi^2 = 7.75$, df = 1, $p < 0.001$
Eat prior to drinking alcohol	68	1081	65	465	71	616	$\chi^2 = 42.28$, df = 1, $p < 0.05$
Stick with and look out for friends during the festival.	68	1081	59	422	75	659	$\chi^2 = 51.26$, df = 1, $p < 0.001$
Keep safe mobile phone numbers	66	1049	66	472	66	577	n/s for gender
Bring sunscreen	51	810	41	293	59	517	$\chi^2 = 46.92$, df = 1, $p < 0.001$
Pace alcohol consumption by alternating alcoholic and non alcohol drinks	29	461	26	186	32	275	$\chi^2 = 7.90$, df = 1, $p < 0.001$
Avoid mixing alcohol and drugs	28	445	26	186	29	259	n/s for gender
Bring condoms	23	365	35	250	13	115	$\chi^2 = 107.82$, df = 1, $p < 0.001$

Note: Percentages have been rounded to the nearest whole number.

and illegal drug use in the general population. However, the validity of self-reported data is sometimes called into question (e.g. Babor, Steinberg, Anton, & Del Boca, 2000; Cooper, Sobell, Sobell, & Maisto, 1981; Freier, Bell, & Ellickson, 1991; Midanik, 1988; Patrick et al., 1994). The data presented here are no better and no worse than other data of this type. Midanik (1989) acknowledged the variability in results obtained from using this type of methodology and suggests that the important issue is to understand the conditions in which self-reports are likely to vary. In this survey, all efforts were made to ensure that conditions were favourable, for example, the anonymity of respondents, the inclusion of a bogus drug 'semeron' and the information gathered was unlikely to be considered 'sensitive' by respondents in this context (Babor & Del Boca, 1992).

Despite the above limitations, results from the self-reported survey suggest several important points about the behavioural norms of festival attendees in general. While the statistical significance was relatively weak, finding that there is not a strong relationship between two factors is just as important as finding that there is one. The fact that there are no major effects of age and gender on alcohol use, for example, is interesting. This finding suggests that health messages and campaigns should not just focus on young adults, as they often do, but should include older adults as this group are no less likely to get drunk. Older adults do not appear to behave markedly more safely than teenagers as might be expected.

Alcohol was consumed by the majority of the sample; however, negative consequences of drinking were only reported by the minority of respondents, supporting Measham’s (2006) findings that within an environment historically associated with unrestrained hedonism, behaviour is contained and intoxication is controlled. Similarly, the majority of the samples did not use drugs, which is perhaps in contrast to the stereotypical image of a music festival attendee. Participants also engaged in a number protective behaviours including; 72% do not drive themselves home, the majority brought sunscreen and water, ate while drinking alcohol, stayed with groups of their friends and kept safe mobile numbers.

It is possible that these behaviours could be used as the basis for a social norms approach (McAlaney & McMahon 2007; McMahon, McAlaney, & Edgar 2007) to risk reduction in this and similar settings. This technique is based upon disseminating healthy norm messages amongst a population, which, taking advantage of the fact that individuals are driven to match the norm, encourages that behaviour. For example, advertising the fact that most people who go to music festivals take bottled water would encourage those who have not previously done so to do so in future. This should reflect in numbers reporting ‘dehydration’ as a negative consequence. If this approach is taken then it would be necessary to take gender effects into account, for example, it would be important to use norm messages which were targeted at both males and females. Given that the results demonstrate what appears to be a group of attendees who regularly come to the festival this effect could become cumulative from year-to-year. This approach of increasing rates of protective norms by praising the behaviour of the healthy majority has been used extensively in the American college system and appears to be a cost-effective method of reducing harm (Perkins, Haines, & Rice, 2005). Figure 1 illustrates the logic of social norms interventions.

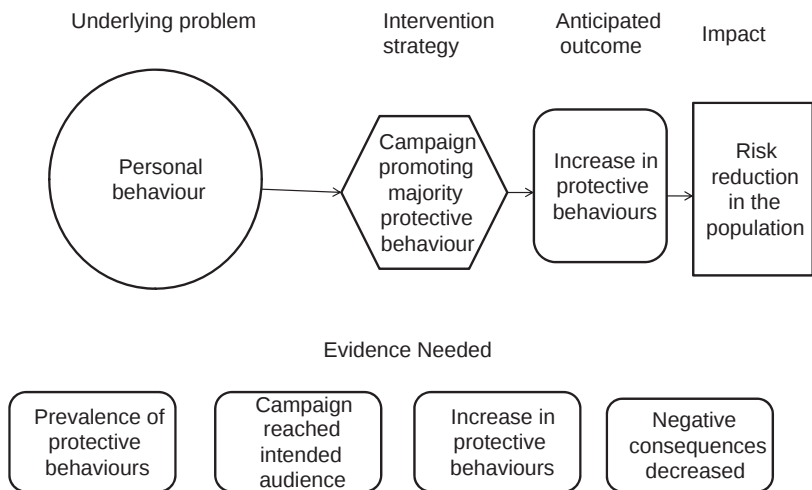


Figure 1. The logic of normative interventions.

A study by Measham and Brain (2005) explored the relationship between practices of self-regulation and social regulation and found that when drinkers discussed their desired and actual levels of intoxication in detail, they were bordered by concerns about health, personal safety and image. These factors were also found to interact with age and gender to produce a complicated set of influences on drinking practices resulting in controlled hedonism. These authors conclude that evidence is now beginning to emerge supporting the idea of a changing culture of intoxication. This emerging culture maintains some features of determined drunkenness as part of broader risk-taking, but this is thought to be restricted by what the authors refer to as being 'bounded by occasion and location'. It is within these contexts that risk reduction and demand reduction efforts could be developed.

The challenge faced by public health advocates is daunting when measured against a landscape of industry deregulation that has increased the availability of alcohol in 'on' and 'off' sales-licensed premises and through extended trading hours permitted by the 2003 Licensing Act. Scottish legislation differs from the rest of the UK legislation. In England and Wales, legislation controls only the purchaser, in Scotland, legislation regulates both retailers and purchaser by restricting alcohol promotions and sales tactics thought to support irresponsible consumption. The so-called 'happy hour' and drink-all-you-can promotions fall within the 2005 Scottish Licensing Act that came into effect on 01 September 2009. A key feature of the UK Licensing Legislation is to jettison statutory permitted drinking hours, accepting requests to sell alcohol 24 h a day.

Cacophonous consumption or melodies moderation? Results presented here suggest the answer lies somewhere in-between. Alcohol use at music festivals is the norm but negative consequences are uncommon. Drug use is minority behaviour. This reflects the shift previously noted by Riley et al. (2001) and Measham (2004, 2006): alcohol is the drug of choice at clubbing venues and outdoor music festivals alike. Among the minority who use drugs, alcohol is no longer avoided, making poly-drug use a concern in this group. The impact of normative messages remains unknown in this context and requires further exploration. Findings presented elsewhere, however, suggest that the sustained delivery of normative messages using new technologies could produce measurable reductions in problem behaviour and increases in protective behaviour. Recent work by Bewick, Trusler, Mulhern, Barkham, and Hill (2008) highlights the potential of web-based normative messaging for this age group.

No paper-based public health information was disseminated at this festival; the authors piloted a viral information campaign from a dedicated website which could be accessed from three independent sources: a popular social networking site, the official festival website and from the web address printed on retained souvenirs from the 2007 event. A detailed breakdown of information accessed and time spent on each page will be the subject of a later publication. Tentative findings, however, suggest that considerable value can be derived from investing time to build online communities in advance of outdoor festivals.

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