

Alcohol and Aggression: Researching the Link using Self-Reported Questionnaires - An Example

INTRODUCTION

In the "synthesis model of aggression", Brewer (2003) noted that the general potential for aggression becomes specific and actual because of disinhibiting factors. These are the removal of brakes that normally stop aggression, and one such is alcohol. Alcohol is estimated to be involved in half of violent crimes (eg: Alcohol Concern 2001; Pernanen et al 2002) (1).

Plant et al (2002) summarised the research as following: heavy and "problem" drinking is associated with violence and victimization of violence, especially for males, but most drinking does not result in aggression, and there is ample aggression without alcohol.

The link between alcohol and aggression has a number of aspects:

- i) The amount of alcohol consumed as in "heavy episodic drinking" (Wells et al 2005) or "binge drinking" (Brewer 2004);
- ii) The frequency of drinking alcohol;
- iii) The social context of drinking - eg: competitive games or situations in bars, or having friends who drink heavily.

From a research point of view, it is a question of how to study the relationship between alcohol, and aggression. In lab experiments, it is possible to control the amount of alcohol consumed and the variables that lead to aggression. But these tend to be small scale studies and not measuring behaviour in "real life".

The easiest way to study alcohol consumption in the "real world", on a larger scale, is through the questionnaire method. This involves asking respondents about their behaviour in a series of questions from an interviewer or on a self-reported questionnaire. But can the answers be trusted?

EXAMPLE OF QUESTIONNAIRE RESEARCH

Wells et al (2005) used data from the US National Longitudinal Survey of Youth (NLSY) which is based on self-reported questionnaires. The researchers took the

information of 738 17-21 year-old drinkers (375 males and 363 females) from three cohorts (1994, 1996, and 1998) using the Young Adult Self Report Booklet (YASRB) (which asked about a whole series of behaviours as well).

The key questions were as follows:

i) Measure of aggression (outcome variable): "how often have you gotten into an argument or fight during or after drinking in the previous twelve months?", and the response choices were "never", "once in a while", "fairly often", or "very often";

ii) "Heavy episodic drinking" (HED): "how many days have you had five or more drinks on the same occasion during the past thirty days?". This was an open-ended question;

iii) Drinking volume: calculated from the number of drinks taken;

iv) Drinking frequency: the frequency of use of alcohol in the previous twelve months with eight response options from "one-two days in past twelve months" to "daily";

v) Usual drinking location: response choices of "at home, in somebody's car, dances, at parties, at friends' homes, in bars, at relatives' homes, or other" (p936);

vi) Typical drinking companions: response choices of "alone, friends, a date, parents, brother or sister, other relative, other adults, or other" (p936);

vii) Peer drinking: "how many people of your age that you hang out with drink alcohol at least sometimes?".

The results showed that alcohol consumption was "significantly and positively associated with fights after drinking" (p937) (table 1).

Table 2 compares the gender differences between alcohol consumption and fights.

Many aspects of alcohol consumption were linked to aggression, but multivariate analysis did not find the factors as causal. For example, drinking frequency, but not HED, was significant for aggression.

EVALUATION OF METHODOLOGY

The use of questionnaires in research is by far the

		NO FIGHTS	FIGHTS	
Number of individuals		484	254	
	Male (%)	58.6	41.5	
	Female (%)	62.8	37.2	
HED	Yes (%)	43.3	56.7	0.0001
	No (%)	69.0	31.0	
Drinking frequency (mode)	"every other month"		"1-2 times a month"	0.0001
Total number of drinks in past 30 days (mean)	11.3		34.0	0.0001
Location	private homes 62.6%		public places 55.5%	0.01
Drinking companions	family/other adults (79.3%)		alone/ date/ other (52.1%)	0.0001

(After Wells et al 2005)

Table 1 - Drinking variables and fighting.

		MALE	FEMALE
HED	Yes (%)	52.3	62.6
	No (%)	35.5	26.4
Total number of drinks in past 30 days (mean)		42.5	23.2

(After Wells et al 2005)

Table 2 - Gender differences in alcohol consumption and fighting.

easiest way to gain a large amount of data, but as a method it faces a key problem here - the trustworthiness of the replies.

Respondents may give false information to the researcher in a number of ways: as a direct lie, through memory errors, or from misunderstanding the question.

1. Direct lie

The respondent knowingly gives the researcher the wrong information, maybe to maintain their impression of themselves, or to hide a crime. There is no way of checking the answers to the questions about how much or how often alcohol is drunk, or the number of fights had.

Some individuals may over-inflate their alcohol consumption to give the impression of a "bit of a lad" or a "good-time girl", or under-report the number for health reasons or gender aspects. For example, the response option of "daily" to the question about frequency of use of alcohol could make the respondent feel like an alcoholic if chosen (which is socially unacceptable for most people). This is sometimes called the "social desirability bias" (Coolican 1994).

While fighting can end up as a criminal offence if caught, and respondents may not want to admit to lots of fights. Other respondents over-report fights to show how "tough" they are.

2. Memory error

Questions involving time periods in the past can produce mistakes in recalled information. For example, the question on HED uses the "past thirty days", and the one on drinking frequency, the "previous twelve months". Both are difficult time periods to gain accurate answers from memory. Some respondents will drink (and fight) so regularly that underestimates are given. A respondent who has one fight in a year, and that was an exceptional event, is more likely to recall accurately that fight. But will they tell the truth about such an event that is possibly shameful for them?

3. Misunderstanding the question

It may seem that the questions used by Wells et al are not difficult to understand, but respondents may have their own definitions of fighting and of drinking. For example, a fight is not a fight, for some, unless blood is drawn, or an individual ends up in the hospital, or the police make arrests. Otherwise it is a "bit of a laff" and not a fight.

While some individuals may not see certain drinks as alcohol; eg: "designer drinks" like "Vodka Kick" (easy-to-drink high alcohol-by-volume). Measuring HED is difficult for researchers let alone ordinary drinkers when no clear definition was used. In other studies, terms like "binge drinking" or "risky single occasion drinking" were used with varying amounts of alcohol applied (Brewer 2004).

Because of the problems of self-reported questionnaires here, alternative methods could be tried instead or as well as. For example, Graham and Wells (2001) used observations of aggression in bars to supplement their thirty-four interviews.

Student observers noted 117 incidents of aggression over ninety-three nights (between 00.00 and 02.30) in Ontario, Canada. The majority of offenders were male (74%), and the most common apparent triggers for aggression were "trouble-making and offensive behaviour" (26.0% of cases) followed by "interpersonal and relationship issues" (14.2%). But the observers were not able to categorise the triggers in 38.5% of cases.

FOOTNOTE

1. The link between alcohol and crime generally occurs in different ways (Purser 1995 quoted in Alcohol Concern 2001):

- a) Offences which specifically mention alcohol- eg: drinking and driving;
- b) Offences against the Licensing Law - eg: serving under-aged drinkers;
- c) Offences committed while under the disinhibiting effect of alcohol - eg: alcohol as "Dutch courage" in burglary;
- d) Offences resulting from an alcohol problem - eg: stealing money to buy alcohol;
- e) Offences where alcohol used as excuse - eg: "date rape".

A fuller exploration of the relationship between alcohol and crime can be found in McMurrin (2003).

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