

Teenage kicks?

*Young people and alcohol:
a review of the literature*

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1 INTRODUCTION

Although young people are, by most standards, one of the healthiest groups in the population (Brannen *et al.*, 1994), concern is frequently expressed about the extent to which they engage in 'risky' behaviour and the degree to which they are, themselves, a source of 'risk' (Muncie, 2000). While this reflects broader processes by which young people are subject to a great deal of stigmatisation (Griffin, 1993), alcohol occupies an interesting role in this regard. On the one hand, young Britons grow up in what is often described as a 'wet culture', one in which drinking alcohol is widespread and socially accepted as a legitimate and pleasurable activity. On the other hand, considerable concern is often expressed about the amount that young people drink and the way in which they do so. This somewhat schizophrenic view is reflected in this review, the first part of which considers the available evidence about young people's patterns of drinking and highlights different interpretations of it – including those which rest on the view that learning to drink is a normal part of adolescent development. The second part of this review focuses on the personal and social 'harms' that are associated with alcohol use. We conclude with a general discussion of the role alcohol has in young people's lives and a series of recommendations for future policy development and research.

Identifying the literature

Information on which the literature review is based was collected via electronic social science bibliographic databases, library catalogues, organisations with a particular focus on young people and/or alcohol, and national newspapers.¹ In addition, searches were conducted of the catalogues at the British Library, the British Library of Political and Economic Science and the Institute of Education. Unpublished, 'grey' literature is not always included in academic databases and library catalogues, and thus an additional search was conducted using SIGLE (System for Information on Grey Literature in Europe) which is provided by the British Library.

A considerable amount of information was gathered from national organisations with a specific interest in young people and/or alcohol such as Alcohol Concern, The Institute of Alcohol Studies, the Portman Group, Drugscope, the National Youth Agency and the National Children's Bureau. Factsheets and publication lists were collected from these organisations and, where possible, online library catalogues were searched.

The searches of these various resources were initially fairly broad – key terms included young people, drinking, drunkenness and alcohol. As the literature review progressed, more specific searches were conducted using key words such as binge drinking, alcopops, morbidity and mortality. The review focused primarily on literature relating to the United Kingdom, although the searches identified many articles and reports about other countries. While many of these items were excluded, others were retained on the basis that they provided further information on key issues, some of which were poorly covered in the UK literature – examples of this included issues relating to alcohol use and unemployment and alcohol use and ethnicity.

The literature review coincided with an increase in press interest in young people and alcohol, and national newspapers proved to be a useful source of information. Links provided in electronic versions of newspapers such as the *Guardian* and the *Observer* proved to be particularly valuable. As well as providing up to date coverage of important issues, these resources signposted the way to reports produced by research organisations and by pressure groups.

Definitions

The focus of this literature review is on 'young people'. This term can best be viewed as an umbrella term which includes those variously referred to as 'children', 'adolescents', 'teenagers' and 'young adults'. Definitions of young people typically focus on the ages 14–25, although it has been claimed that these boundaries are being extended in both directions as transitions into adulthood become more protracted (Rutter and Smith, 1995; Rutter *et al.*, 1998; Ward, 1998). Throughout this report the terms 'young teenagers', 'children', 'boys' and 'girls' have been used to describe young people aged 11–15, and the term 'young adults' has been applied to those aged 16–24.

Within the literature a lack of precision is often evident in relation to the vocabulary that surrounds alcohol use. An array of terms – including 'heavy drinking', 'excessive drinking', and 'binge drinking' – are used, although they are not always clearly defined. The various ways in which these terms have been used will be specified during the course of this report in an attempt to add some precision.

The state of knowledge about young people's drinking

As with any literature review, the studies included in this summary utilised a variety of methods, were conducted in a wide range of locations, made use of different theoretical perspectives and rested on a range of definitions. Although literature relating to the UK provides the key focus for this review, work from other countries has been used to support findings from the UK and to fill some of the gaps.

While research with a qualitative focus has begun to emerge (see Brain *et al.*, 2000; Harnett *et al.*, 2000b; Honess *et al.*, 2000), the quantitative bias of research into young people and alcohol has been well documented and occasionally lamented. Thus, for example, Parker (1996) noted how British criminology has largely retreated from qualitative, ethnographic, community-based studies of subculture and deviant lifestyles and is in danger of losing touch with these issues. Attempts to quantify young people's drinking have been hindered by under-reporting, faulty recall, a lack of standardised questions and difficulties of measurement, although there is evidence to support the reliability of self-report methods (Brain and Parker, 1997; Measham, 1996).

Research into young people's alcohol use in the UK has not only been limited by the methods that it has tended to adopt, but has also been restricted by the questions that it has asked. Prevalence rates and levels of use have dominated research in this field and little attention has been paid to identifying characteristics which may predict different patterns of use. Wright (1999) noted that while there is considerable descriptive data on young people's drinking, much less is known about why British young people drink, the place and meaning of alcohol in young people's lives and the social contexts for drinking.

2 PATTERNS AND INTERPRETATIONS OF YOUNG PEOPLE'S DRINKING

This chapter focuses on what we know about the nature of young people's drinking behaviour and how it has been interpreted. It is divided into the following sections:

- Classifications and styles of drinking.
- Transitions into adulthood and learning to drink.
- Who, what, where?
- Continuity and change.
- Spatial and socio-demographic variation.
- Deviance or normality?

Classifications and styles of drinking

Within academic and social policy discourses around alcohol, key distinctions are made between styles of drinking. Patterns of consumption are often classified according to the frequency with which alcohol is consumed and the amount that is drunk per episode. An early classification was developed in the USA as part of the National Study of Adolescent Drinking Behaviour (Barnes and Welte, 1986; Rachel *et al.*, 1975; see also Craig, undated) which distinguished between:

- *Abstainers*: do not drink alcohol or do so less than once a year.
- *Infrequent drinkers*: drink once a month at most and drink medium amounts (2–4 drinks) per typical drinking session; or drink no more than 3–4 times a month and drink small amounts per typical drinking occasion.
- *Moderate drinkers*: drink at least once a week and drink small amounts per typical drinking occasion; or 3–4 times a month and drink medium amounts; or no more than once a month and large amounts (5–12 drinks) per typical drinking occasion.
- *Moderate–heavy drinkers*: drink at least once a week and drink medium amounts or drink 3–4 times monthly and drink large amounts per typical drinking occasion.
- *Heavy drinkers*: drink at least once a week and drink large amounts per typical drinking occasion.

Although cultural differences limit the relevance of North American classifications to the UK (Wright, 1999), British classifications also rest on distinctions between frequency of drinking and amount consumed. This is evident in the categories of ‘sensible’, ‘heavy’ and ‘binge’ drinking which are quite widely used. It is worth looking at these in a little detail.

Sensible drinking

The Department of Health’s guidance about sensible drinking relates specifically to adults although, in the absence of specific advice for those under 18, researchers have often used it to classify young people’s drinking. The ‘sensible drinking’ message was originally that drinking fewer than 21 units per week for men

and 14 units per week for women was unlikely to damage health. More recent guidance, however, combines a focus on frequency and quantity of consumption. It is now said that for men who drink between 3 and 4 units a day, or less, and for women who drink between 2 and 3 units a day, or less, there are no significant risks to health. However, consistently drinking 4 units a day (men) or 3 units a day (women) is not advised. Put another way, it is said that for men who regularly drink 4 or more units a day and women who regularly drink 3 or more units a day there is an increasing risk to health (Department of Health, 1995; Health Education Authority and Alcohol Concern, undated).

Heavy drinking and binge drinking

Although the notion of 'binge drinking' is, increasingly, providing a focus for concern (Meikle, 2001) there is little consensus as to what this term means. This lack of clarity reflects differences in public and professional perceptions as well as technical debates about the amount of alcohol consumed, and the period of time during which it is consumed. While binge drinking is popularly conceived as drunkenness over a period of days, clinically it is defined as continuous, dependent drinking over a day or more until the drinker is unconscious. It has, however, been used by researchers to describe 'drinking a lot of alcohol in a single session of drinking'; its value to researchers lies in its recognition 'that most of the short-term harm linked with alcohol is from single episodes of drunkenness, rather than drinking more than the safe weekly levels, or individual daily drinking' (Wright, 1999, p. 27).

What levels of consumption are implied by 'heavy' and/or 'binge' drinking? Predictably definitions vary. North American studies tend to use five or more drinks in a row for men and four for women as the cut-off. British definitions tend to be higher although they are not consistent, and the Health Education

Authority (HEA) generally avoids defining binge drinking in terms of units per session:

“If you drink most days of the week and you regularly drink more than the benchmark, then you could be said to be a regular heavy drinker ... [and] If you drink a lot on some occasions, perhaps every weekend or less often, and you usually get drunk then you could be described as a *binge drinker*.”

(Health Education Authority and Alcohol Concern, undated, pp. 12, 14)

However, a recent survey of adults commissioned by the HEA defined a heavy drinking occasion as involving 8 or more units in a single session for men and 6 or more units in a single session for women (Rowlands, 1998; see also Wright, 1999). Plant *et al.* (1990) applied the label of ‘heavy drinkers’ to young men who had consumed 11 units or more on their last drinking occasion and to young women who had consumed 8 units or more.

Qualitative classifications

The classifications described above are essentially quantitative. As such they take no account of variations in individual capacity, or in the context in which drinking occurs, and pay little attention to the length of time over which an ‘episode’ of alcohol consumption lasts. An alternative typology of drinking styles – based on interviews with 40 young (aged 16–24) white men in East London – was recently developed by Harnett *et al.* (2000b). This model was designed to be sensitive to a range of factors, including frequency of drinking episodes, amount consumed, reasons for drinking, and social context. It identified eight distinct styles:

- 1 *Childhood drinking styles* were ways of drinking in which all aspects of the drinking occasion were controlled by adults. They most commonly took the form of 'wine at table' with parents which involved moderate amounts of alcohol at certain prescribed moments, although 'brought up with it' drinking was a regular and normal practice situated in the context of everyday life rather than just being occasional.
- 2 *Adolescent drinking styles* described drinking situations in which an individual's drinking was, for the first time, organised by, and exclusively practised with, members of the peer group rather than in the presence of family or community members. Within this style drinking was essentially a collective experience – choices of what to drink, where to drink and how much to drink were negotiated tacitly with friends. Movement to this style involved a change in environment and choice of drink. It focused particularly on strong types of alcohol such as 'Tennants Super', 'K' cider, alcopops and 'Thunderbird' wine. Although these alcoholic drinks were often mixed with soft drinks to make them palatable, they were considered to be affordable – that is they provided a cheap 'buzz'. The number of drinks consumed tended to be limited to two or three, although fairly large quantities of alcohol were consumed over a short period of time. Adolescent drinking was seen as usually ending in inebriation – 'feeling ill', 'vomiting', 'getting belly ache' and 'getting hung over' were considered to be 'the thing to do'. The location for such drinking styles was described as being 'quasi-public' environments such as the street, parks, raves or at school which provided a location where drinking could be observed by both peers and 'disapproving adults'.

- 3 *Experimental drinking styles* involved young men starting to view alcoholic products, and different drinking situations, as leisure options and engaging in a process of discovery in which their aim was to find out which options suited them best. The shift away from adolescent styles involved testing out a variety of drinks – sometimes in the context of ‘drinking games’ – and movement into new drinking locations. It generally took place between the ages of 16 to 17, when pubs and clubs became more accessible and offered opportunities to try new drinks, although a pint of lager invariably became the preferred public drink during this phase. For a small proportion of young men, alcohol’s association with vomiting etc. were seen to produce a negative image. While they endorsed moderate drinking it was located within a wider interest in illicit drugs¹ and the whole spectrum of designer items such as clothes etc. Where illicit drugs were introduced into the consumption repertoire the period of experimentation with psychoactive experiences became elongated or was revisited following the transition into more ‘mature’ modes of drinking. The two main drink and drug combinations reported were alcohol and amphetamine or alcohol and cannabis.
- 4 *Sociable drinking styles* were applied to a way of drinking in which young men managed and negotiated new social relationships. Reflecting the primacy of sociability within this style it typically consists of one or two drinks and involves ‘pint with me dad’, ‘talk to a girl’, ‘the local’ and ‘meeting people’.
- 5 *Recreational drinking styles* were hedonistic ways of drinking where alcohol and its related activities were seen as means to attaining a high and, as such, young men drank

to excess – recreational styles involved consumption of five drinks or more. Drinking for pleasure occurred after the young men had established that they liked the feelings associated with inebriation and/or had learned to enjoy the taste. Intoxication and losing control were considered to be 'fun' and featured in most of the recreation of most of the young men over 17 or 18 – either by intention or as a by product of 'enjoy[ing] a drink'. An important feature of recreational drinking was identified as 'keeping ace' with other male drinkers, and choice of drink was dictated by group norms although pints of lager were the dominant choice.

- 6 *Safe drinking styles* provided ways of managing drinking behaviour that minimised the risks of harm to an individual's physical and social well-being. This style involved 'healthy drinking', 'knowing the limit', and 'feeling secure' – local pubs and raves were considered to be dangerous. The strategy of feeling secure involved drinking in large groups and using taxis. Night-clubs were often identified as the safest place to get drunk. This emphasis on young drinkers' concerns with their own safety was also reflected by Honess *et al.* (2000).
- 7 *Therapeutic drinking styles* were ways of drinking which relieved symptoms of social and physical disorders and included 'drinking to forget', 'nothing to do', 'insomnia' and 'needing a drink'. Therapeutic drinking by young people was also noted by Honess *et al.* (2000) and is evident in Pavis *et al.*'s (1997) description of alcohol as a 'drug of solace'.
- 8 *Structured drinking styles* applied to drinking styles that were influenced by structural factors such as employment –

two such styles were identified, 'blow it out' and 'getting up'. While 'blow it out' involved periodic consumption of relatively large amounts of alcohol in order to forget about work, in 'getting up' employment played a direct restraining role on levels of consumption as people had to get up in the morning to go to work. The 'blow it out' style equates to the notion of binge drinking although it generally consisted of drinking four or five pints – fewer than the heavy sessions described in recreational drinking styles. Very often those young men who described 'blow it out' styles also described 'getting up' styles, and the day on which drinking occurred was identified as an important influence – drinking on an evening prior to the morning of a work day consisted of one or two drinks, and was very occasional as it was considered to interfere with work.

Transitions into adulthood and learning to drink

Young people's experiences with alcohol vary sharply with age and the notion of transitions into adulthood provides a useful lens through which young people's drinking can be considered. Thus, for example, Pavis *et al.* (1997) argue that as alcohol is widely used and accepted within adult society, it is one of the tasks of adolescence to learn to use it appropriately. An emphasis on transitions is an increasingly important feature of the existing literature. The eight styles of drinking described by Harnett *et al.* (2000b) were, for example, located explicitly within a youth transitions framework. Age and status, it was concluded, play important roles in determining drinking styles. While 'sociable', 'recreational' and 'safe' styles marked the movement out of adolescence into ways of managing alcohol consumption for pleasure, 'structured' drinking styles reflect a 'fundamental

change in biography', primarily defined by the transition into work (Harnett *et al.*, 2000b, p. 76).

During the time that they followed a cohort of 14–18 year olds in the north-west of England, Parker *et al.* (1997, p. 80):

"saw evidence of the transition from home-based, parentally supervised, moderate and 'special occasions' drinking to experimental drinking in public places, parks and streets with friends, to socialising in licensed premises in the mid to late teens."

Similarly, although Honess *et al.* (2000) suggested that drinking is as much 'young people' behaviour as 'adult behaviour', the importance of a transitions framework was evident in the way that they characterised the place of alcohol in the lives of young people:

- *12–13 year olds*: the general picture among young people of this age was of them starting to experiment with alcohol tentatively and usually within the safety of the family environment. This development often reflected a desire to move on from childhood status, and this pressure was seen to be particularly strong for boys.
- *14–15 year olds*: by this age drinking was more commonplace with the emphasis on drinking away from the family environment. Alcohol was an important symbol which distinguished events from 'younger' activities. Among this age group alcohol was often consumed with the intention of getting drunk, and the role of adults had shifted so that drinking outside of the home was something to be kept from parents.

- *16–17 year olds*: at 16 and, even more so, at 17 most young people were drinking regularly and experimentation was seen as a thing of the past. Respondents presented themselves as having a more responsible attitude to drinking – including the belief that they know their own limits. These reflections took place within a life-cycle discourse where early excess was viewed as being an inevitable part of growing up. The role of parents had shifted once again as there was a growing acceptance of drinking as part of normal adolescent activity and towards trust in the young person as a ‘responsible’ drinker.

The importance of transitions in relation to young people’s drinking is evident in much of the quantitative data:

- Young people’s contact with alcohol typically begins well before they reach their teens and has been described as ‘a normal part of socialisation within the home’ (Wright, 1999, p. 15; see also McKeganey and Norrie, 1999).
- The vast majority of teenagers have drunk alcohol. According to Miller and Plant (1996), 94 per cent of young people had some experience of drinking alcohol by the time they were 16. This finding was supported by the 1998 Youth Lifestyles Survey (YLS) which indicated that 84 per cent of 12–17 year olds had drunk alcohol at some point in their lives (Harrington, 2000).
- Young people’s experiences with alcohol vary markedly by age. Levels and frequency of drinking are relatively low among young people during their early teens – of the 11–15 year olds included in the study conducted by Turtle *et al.*

(1997), 23 per cent reported that they did not drink at all and 53 per cent indicated that they 'hardly drink alcohol' or 'drink only a little'. Consumption of alcohol increases markedly during the mid to late teens, as do incidents of intoxication (see below).

Under-age drinking

Research on young people's use of alcohol has paid particular attention to 'under-age' drinking (Harrington, 2000) and this, in part, reflects the importance of notions of transition:

"Between the ages of 11 and 16, young people develop from taking the occasional sip of alcohol to being on the verge of drinking like adults; from drinking (mainly) under adult supervision to drinking independently ... Between the ages of 16 and 18, young people in England rapidly acquire adult drinking habits, in terms of drinking prevalence, consumption levels and settings for drinking."
(Wright, 1999, pp. 17, 29)

The importance of transitions in young people's drinking is evident in the recently published findings from the 1998 YLS of England and Wales (Harrington, 2000). Figures 1 and 2 illustrate the way in which recent and frequent² experiences of drinking increase dramatically during the mid to late teens.

A similar pattern was reported by Goddard and Higgins (2000) in relation to having drunk in the past week: only 6 per cent of their 11 year old respondents had drunk this recently compared with 45 per cent of 15 year olds. The 1998 YLS indicated that the growth of frequent drinking has involved increased levels of bingeing. While most 'frequent' drinking by young adults occurs on one or two days a week, there is evidence of a striking increase

Figure 1 Young people’s drinking in England and Wales – drunk alcohol in the past week (percentages)

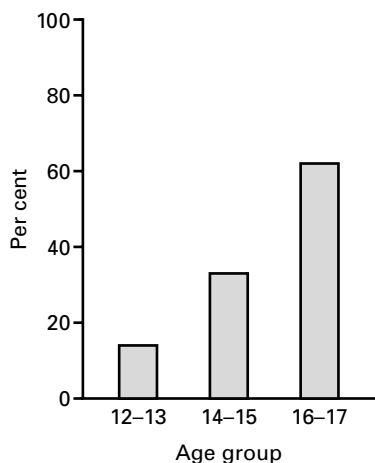
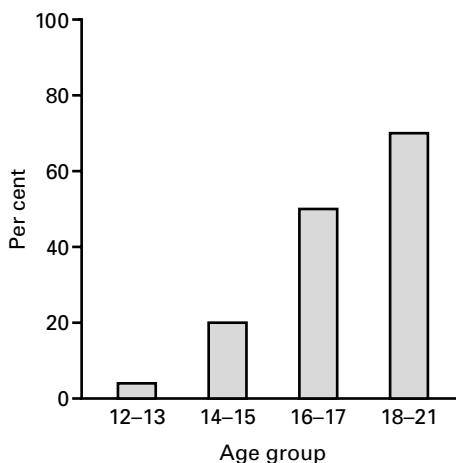


Figure 2 Young people’s drinking in England and Wales – frequent drinkers (percentages)



Source: 1998 YLS (Harrington, 2000) Source: 1998 YLS (Harrington, 2000)

in experiences of intoxication during the mid teens. Approximately a fifth (22 per cent) of 12–15 year olds and nearly two thirds (63 per cent) of 16–17 year olds reported having felt very drunk in the past year, although smaller proportions reported having a ‘hangover’: 11 per cent of 12–15 year olds and 41 per cent of 16–17 year olds (Harrington, 2000). These data support the suggestion that binge drinking is common among young people, not only in the UK but more broadly in the developed world (ICAP, 1997; Wright, 1999).

The importance of bingeing was evident in Measham’s (1996)³ discussion of ‘big bang’ approaches to drinking among young people in the north-west of England. This study also indicated how fairly striking changes can take place in young people’s drinking during a relatively short period of time. Over a period of a year or so – between ‘stage 1’ and ‘stage 2’ – increases in

'heavy sessional drinking' were evident from the frequency with which young people drank (see Table 1) and from the amount that they consumed. While one in four drinkers reported consuming over ten units of alcohol on their last drinking occasion at the age of 14, this figure increased to one in three by the time they were 15.

Young adults' drinking

Although under-age drinking has provided an important focus for research, considerable interest has also been shown in the drinking patterns of young adults who may be loosely defined as those aged 18–24. Young adults are less likely than older adults

Table 1 Changing patterns of drinking among a cohort of young people in the north-west of England

	Stage 1 (14–15)	Stage 2 (15–16)
Estimated usual drinking frequency (% in each category)		
Weekly	30	41
Fortnightly	12	14
Monthly	12	12
Occasional	32	23
Ex-drinker	4	3
Lifelong abstainer	10	7
<i>Number of cases^a</i>	769	747
Specific last drinking occasion (% of all current and ex-drinkers)		
In past week	44	53
In past fortnight	15	18
In past month	17	14
1–12 months ago	20	13
Over 12 months ago	3	2
<i>Number of cases^a</i>	697	690

Source: Measham (1996)

^aNumber of cases included in the analysis.

to drink on a daily basis (Prescott-Clarke and Primatesta, 1997), although they do show the highest rates of heavy drinking including that which takes place in the context of binges. It is, however, important to reinforce the point that it is only a minority of drinkers in this age category that consume alcohol in large quantities. According to the 1996 General Household Survey (GHS), most young adults (18–24 year olds) drank at or below the levels recommended for sensible drinking: the precise figures were 59 per cent of men and 76 per cent of women.

A survey of English, Scottish and Welsh adults in 1996 classified 12 per cent of young men and 6 per cent of young women as heavy drinkers⁴; this compared with 6 per cent of all adult males and 2 per cent of all adult females (Office for National Statistics, 1996). A national survey of English adults in 1997 also highlighted the greater rate at which young adults indulged in episodes of heavy drinking (see Table 2). This was also reflected in levels of drunkenness, with 77 per cent of 16–24 year old

Table 2 Episodes of heavy drinking^a among English adults and young adults in 1997

	Young adults (16–24)	All adults (16–75+)
Episode of heavy drinking in past year? (%)		
Yes	71	47
No	29	53
If Yes, how often do you drink this amount? (%)		
Almost every day	0	1
Several days a week	5	5
Once or twice a week	37	28
Once or twice a month	32	25
Less often	26	41

Source: Goddard (1998) adapted from Wright (1999)

^aA heavy drinking episode was defined as the consumption of 6 units or more for women and 8 units or more for men on a single occasion.

drinkers saying they had felt drunk in the past year compared with 44 per cent of all adult drinkers. Over half (55 per cent) of the 16–24 year old drinkers reported they had had a hangover at least once a month (quoted in Wright, 1999). A recent study of young white males in a relatively deprived part of London, indicated that 65 per cent of the sample were drinking at potentially harmful levels, averaging 45 units a week. Furthermore, 18–21 was identified as the age of highest alcohol consumption and, compared with 16–17 and 22–24 year olds, it recorded the highest proportion of hazardous drinkers and most negative consequences of drinking (Harnett *et al.*, 1999).

Research in Wales confirmed that binge drinking – defined as consuming half of the weekly recommended units of alcohol in a single drinking session – is most prevalent among young adults. Moore *et al.* (1994) reported that while 31 per cent of drinkers aged 18–24 reported binge drinking on a weekly basis, this proportion fell to 26 per cent of 25–34 year olds, and it continued to drop to a low of 15 per cent among 55–64 year olds.

Growing out of it?

Young people adapt their drinking habits in relation to changing circumstances and as they move into different stages of the life-cycle. Thus, for example, while students develop distinctive drinking patterns (see below), after they leave college the frequency and amount of drinking typically falls. Marriage, stable relationships and parenthood have all been shown to moderate young men's drinking habits (Backett and Davison, 1992; Moore *et al.*, 1994; Power, 1992) and, according to Wright (1999, p. 38), 'there is some truth in the statement "they'll grow out of it"'.

Who, what, where?

Important questions, which have been addressed by research to varying degrees, relate to what, where and with whom do young people drink?

What young people drink

What young people drink has emerged as a key focus for research; this reflects important changes in the way that alcoholic drinks are being marketed to young people. The 1990s, it has been suggested, witnessed a diversification of the drinks market as concerted efforts were made by the drinks industry to exploit the youth market. This involved the development of 'designer drinks', followed by the emergence of alcopops – also known as alcoholic soft drinks. These new brands of drinks are characterised by a high alcohol strength and have stimulated particular concern because of the belief that they appeal particularly to young people (Brain and Parker, 1997; Forsyth *et al.*, 1997; Hughes *et al.*, 1997; Measham, 1996; Newcombe *et al.*, 1995). It has been suggested that designer drinks were part of the drinks industries' response to the emerging 'Ecstasy culture' which involved a rejection of alcohol in favour of illicit drugs (Collin with Godfrey, 1997, p. 274; see also Coffield and Goften, 1994):

“In the UK, Ecstasy culture had reshaped the leisure market, and no one in the business of youth entertainment could afford to ignore it. The brewers and distillers ... looked like they had the most to lose. If a generation forsook alcohol for Ecstasy and pubs for raves, what might that mean for the profit margins of tomorrow? ... However, brewers weren't about to sit back and let customers slip away as club culture changed the nature of the youth market. Strategic planners applied their

imagination to a whole range of new initiatives to woo back the crucial 18–24 age group ... Three years after the first fears about a move to abstinence, Bass produced the 'alcoholic lemonade' Hooch, the brand leader in the lucrative new 'alcopops' market – sweet, high-alcohol sodas aimed at those who hadn't gained the taste for beer or spirits."

(Collin with Godfrey, 1997)

While this, arguably, exaggerates the extent to which young people were using Ecstasy and related drugs (Shiner and Newburn, 1997, 1999), there is also little evidence that young people turned away from alcohol during the 1990s (see below – 'Continuity and change'). Nevertheless, it does highlight the concern that some within the drinks industry felt about the challenge posed by illicit drugs, and it helps to explain why 'designer' drinks emerged when they did.

Alcopops and designer drinks have provided an important focus for recent research into young people's drinking. A range of studies indicate that alcopops are at their most popular among drinkers in their mid-teens but that – unlike other drinks – they become less popular as young people get older (Goddard, 1997a). The extent to which alcopops and designer drinks are associated with increased or risky forms of consumption among young drinkers, however, is a more controversial matter:

- Hughes *et al.* (1997), note that the attitudes of 12–17 year olds towards designer drinks varied quite distinctly with age and this reflected attitudes towards, and motivations for, drinking. The brand imagery of designer drinks, unlike that which was used for more mainstream drinks, tended to match 14 and 15 year olds' perceptions and expectations of drinking. The popularity of these drinks peaked between

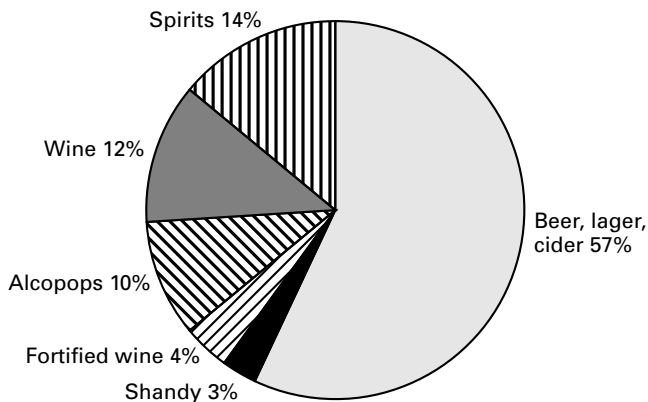
the ages of 13 and 16, while more conventional drinks became consistently more popular with age. Furthermore, designer drinks tended to be consumed in less controlled circumstances and were associated with heavier alcohol intake and greater drunkenness.

- Forsyth *et al.* (1997) concluded their analysis of drinking by young people (11–19 years old) in Scotland by suggesting that the media’s targeting of alcoholic lemonades as being responsible for adolescent drunkenness was largely unjustified. They found that under-age drunkenness was most strongly associated with white ciders, fruit wines and vodka, although it is worth noting that the first two categories included designer drinks such as Electric White, Ice Dragon, White Lightning, and Mad Dog 20/20. Less than half of those who consumed any alcoholic lemonade on the last occasion that they drank alcohol believed they had been drunk and nearly half indicated that their drink had been provided by a family member. In a subsequent study of drinking among 14 and 15 year olds in Scotland, Forsyth and Barnard (2000) noted alcopops – along with ‘ordinary (table) wine’ – was more often consumed at home than in any other location and was strongly associated with remaining sober relative to other drinks.
- Sutherland and Willner’s (1998) study of 11–16 year olds indicated that almost half (47 per cent) of the drinkers preferred alcopops; the proportion that did so fell from 63 per cent at age 11 to 38 per cent at age 16.
- According to Wright (1999) it is unclear whether designer drinks and alcopops encourage more young people to start drinking, or to increase their levels of consumption, or whether they simply shape the choices of existing drinkers.

Although alcopops and designer drinks have emerged as an important part of young people's drinking repertoires, it has been noted that they have not displaced the more traditional drinks: beer, lager and cider remain the primary focus of young people's drinking (see Figure 3) and alcopops are typically consumed within the context of fairly extensive repertoires (Goddard, 1997a). In 1997, a national survey indicated that 14 per cent of 11–15 year olds in England had drunk beer, lager or cider in the past week; 10 per cent had drunk wine and the same proportion had drunk spirits. Only 7 per cent had drunk alcopops – a marked fall from 14 per cent in 1996 (Goddard, 2000b; Goddard and Higgins, 1999).

The market for ordinary strength beer is currently in decline as young people's tastes have come to focus on strong, foreign – often bottled – lagers and, particularly among young women, on new white ciders and strong 'confectionery' products such as Malibu and Tequila Sunrise (Newcombe *et al.*, 1995; Parker *et al.*, 1997; Wright, 1999).

Figure 3 Alcohol consumption of each type of drink as a percentage of the total (11–15 year olds in England in 1998)



Source: Goddard (2000b)

Where and with whom young people drink

Who young people drink with and where they drink are heavily intertwined and have been identified as important influences on the meanings that young people attach to their behaviour (Honest *et al.*, 2000; Pavis *et al.*, 1997). As a consequence these factors have also been important in the way that adult researchers have interpreted young people's drinking. That said, there is currently no clear consensus as to how such behaviour should be understood and characterised. While young people are generally introduced to alcohol by their parents in the home, they tend to go on to drink with friends in other places at around 13–14 and begin drinking in pubs from about the age of 14–15 (Wright, 1999). Drinking with peers in 'uncontrolled' settings is often associated with dangers and risk (Forsyth and Barnard, 2000; Loretto, 1994), although many commentators are clear that the move into 'independent' drinking is a key part of the process by which most young people learn to use alcohol appropriately (Pavis *et al.*, 1997).

Although many young drinkers consume alcohol in a variety of locations (Goddard and Higgins, 2000), a range of studies, conducted over an extended period of time, have highlighted the way in which the home is, by some distance, the most common setting for young teenagers' drinking (Balding, 1997; Goddard, 1997a; Marsh *et al.*, 1986; Turtle *et al.*, 1997). According to the most recent figures, more than two fifths of young drinkers (aged 11–15) said they usually drank in their own home.⁵ Approximately one fifth indicated that they usually drank out of doors – on the street, or in parks – and a similar proportion said they usually drank at parties, or in someone else's home. One in ten reported that they usually drank in pubs, and a similar proportion said they did so in clubs or discos. The proportion who said they drank at home was highest among the youngest drinkers (61 per cent of 11 year olds compared with 31 per cent of 15 year olds) but the proportions drinking at every other

type of location were higher among older than younger drinkers (Goddard, 2000a; Goddard and Higgins, 2000). Important differences in the location of under-age drinking have been noted between England and Scotland: compared with their English counterparts, young Scottish drinkers were less likely to drink in their home or at parties and were more likely to drink somewhere else, probably outdoors (Goddard, 1997a, 1997b; Wright, 1999).

The location of young people's drinking suggests that unsupervised drinking becomes increasingly important among young people as they move through their early and mid-teens. This trend is confirmed when we consider with whom young people drink. The most recent figures for England indicate that seven out of ten 11 year old drinkers reported that they were usually with their parents when they had an alcoholic drink. Although three in ten 15 year olds still drank with their parents, many more said they were usually with friends when they drank. Overall, 30 per cent of 11–15 year old drinkers were considered to be 'supervised' – they usually drank alcohol provided by their parents at home with their parents – although figures varied sharply by age: the proportion of drinkers who were classified as being supervised varied from 45 per cent of 11 year olds to 20 per cent of 15 year olds (Goddard and Higgins, 2000).

The extent to which young people's drinking may be considered 'risky' is seen to vary sharply with the context in which it occurs. Outdoor locations provide the most likely setting for binge drinking and associated deviance (Loretto, 1994; Newcombe *et al.*, 1995). This was reflected in the continuum of drinking styles – ranging from the 'low risk' to 'high risk' styles – recently developed by Forsyth and Barnard (2000). At the 'high risk' end of the scale drinking occurred in a variety of public or 'hidden' outdoor locations where it was more likely to result in intoxication. Those who drank in such locations, however, were not considered to be the only cause for concern as it was noted that:

- While young people who drank on licensed premises were generally older than those who drank outside in hidden locations they were just as likely to get intoxicated.
- The largest group of young drinkers drank in private, at peers' houses, often to the point of intoxication. Thus, 'on the grounds of sheer numbers alone, it would be wrong to overlook this location type' (Forsyth and Barnard, 2000, p. 113).

At the low risk end of the scale, it was noted that a considerable amount of drinking by young people takes place within the family home, usually under parental supervision. The 'controlled' nature of drinking at home was evident in a number of ways. To a great extent it involved the consumption of alcohol supplied by parents or other family members and it resulted in relatively low levels of drunkenness. The role of 'supervision' was also highlighted in a recent analysis of drinking among 11–15 year olds in England. Even allowing for the impact of age, it was noted that supervised drinkers drank less often than unsupervised drinkers, were much less likely to buy alcohol themselves and were less likely to drink on licensed premises. The researchers concluded:

"These data suggest that children whose drinking is supervised – to some extent at least – by their parents are less at risk of drinking too much (which is associated with frequent drinking) and illegal drinking or purchase of alcohol. This is not to imply that it is parental control itself which reduces potentially harmful drinking, but it does lend some support to the suggestion that if children drink at home with their parents from a fairly young age they may be less likely to indulge in more risky behaviour outside the home."

(Goddard and Higgins, 2000, p. 100)

Multivariate analyses confirm that drinking in the home is a significant predictor of controlled drinking even when other possible influences are taken into account. Forsyth and Barnard (2000) explored the way in which drinking location varied with drinking behaviour (e.g. frequency of consumption, types of beverage) while controlling for demographics (age, sex, social class and school attended). The results of this analysis supported the hypothesis that risky drinking was most likely to take place in locations where there was least scope for adult supervision and confirmed that drinking at home was associated with drinking fewer units and with not becoming drunk.

Continuity and change

During the 1970s and 1980s levels and patterns of drinking, including those exhibited by young people, appeared to be very stable and commentators concluded that there had been little change during this period (Goddard, 1991; Lister-Sharp, 1994; Marsh *et al.*, 1986; May, 1992; Sharp and Lowe, 1989). The 1990s, by contrast, have been described as a period of both 'continuity and change' (Parker *et al.*, 1997; Wright, 1999). On the one hand, a high degree of stability has been evident in relation to:

- *Initiation*: there is no clear evidence that young people are starting to drink earlier. National surveys in England and Scotland indicate that age of initiation has remained fairly constant over the past 20 years or so (Goddard, 1997a, 1997b). There has even been some suggestion – from local English studies and a national Welsh study – of delayed onset, particularly among boys (Foxcroft *et al.*, 1995; Roberts *et al.*, 1997).

- *Abstinence*: levels of abstinence have been fairly stable. The proportion of 11–15 year olds in England who do not drink at all has, for example, remained at about 40 per cent since the early 1980s (Balding, 1997; Goddard, 1996, 1997a; Parker *et al.*, 1998; Wright, 1999). The GHS also indicates that, since the mid 1980s, the number of young adults (16–24 years) who claim not to drink has remained fairly constant at about 10 per cent (Wright, 1999).

It has also been noted that most young teenagers continue to drink infrequently and consume modest amounts, and that a minority of young people drink to excess and experience problems (Brain and Parker, 1997; Wright, 1999).

On the other hand, during much of the 1990s underage drinking appeared to occur with greater frequency and involve larger quantities of alcohol than was previously the case (Goddard, 1996; 1997a):

- The proportion of 11–15 year olds who had drunk alcohol during the previous week increased from 20 per cent in 1988 to 27 per cent in 1996.
- The average number of weekly units consumed for this age group increased from 0.8 units in 1988 to 1.8 units in 1996, although among those who had drunk in the past week it increased from 5.4 to 8.4 units during this period.

Since 1996, however, it appears as if there has been a reversal in the trend towards more frequent drinking and a levelling off in the amount of alcohol consumed by underage drinkers. In 1998 and 1999, 21 per cent of 11–15 year olds reported having drunk alcohol in the past week; and in 1998 the average number of weekly units consumed by this age group was 1.6, suggesting

some degree of stabilisation (Goddard, 2000b; Goddard and Higgins, 1999, 2000). These trends were based on aggregate figures which, as we shall see below, hide some important differences between young men and young women.

An increased frequency of under-age drinking, however short lived it may have been, and higher levels of consumption were accompanied by evidence of increased intoxication and binge drinking. Thus, for example, Roberts *et al.* (1997) highlighted rising levels of drunkenness among 11–16 year olds during the period from the mid 1980s to the mid 1990s. This increase was particularly marked among 15–16 year olds, so that by 1996 nearly 50 per cent of the young people in this age group reported having been drunk on at least four occasions.

Spatial and socio-demographic variation

Young people's levels and patterns of drinking vary according to a range of characteristics including their nationality, sex and ethnicity.

Nationality

Although comparisons between countries should be approached with care, differences in young people's drinking behaviour have been identified within the countries of the United Kingdom:

- A recent survey of 15–16 year olds in the UK indicated that prevalence of drinking was highest in Wales and lowest in Northern Ireland (Miller and Plant, 1996).
- Rates of under-age drinking during the past week appear to be lower in Scotland than in England and Wales. However, those young people who did drink in Scotland (and in Wales

to a lesser extent), drank more than their English counterparts (Goddard, 1997a; Wright, 1999).

- In Northern Ireland, young people's relationships with alcohol appear to be particularly polarised and this reflects more general patterns which are evident in this country. Although levels of abstinence are relatively high among young Northern Irish people, so too are levels of heavy drinking. This pattern was evident more than 20 years ago (McGuffin, 1979) and while it has been confirmed more recently, the proportion of young drinkers in Northern Ireland does appear to be increasing (Craig *et al.*, 1991; Department of Health and Social Services for Northern Ireland, 1989; Loretto, 1994).

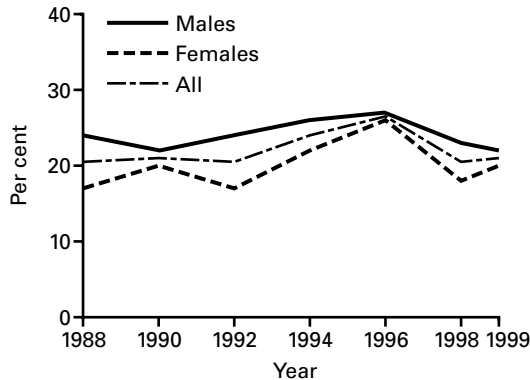
Sex

Differences between males and females have provided an important focus for the literature; Honess *et al.* (2000, p. 62) recently highlighted the way in which young people's relationships with alcohol are 'clearly gendered'. A range of surveys highlight important differences in young men's and young women's consumption of alcohol, although it has been suggested that girls' and young women's drinking habits are becoming increasingly similar to those of boys and young men (Wright, 1999). While some commentators have talked of a 'narrowing' gender gap (Royal College of Physicians and the British Paediatric Association, 1995, p. 34), this trend has, arguably, been overstated.

- It has been suggested that the increased frequency of under-age drinking which characterised much of the 1990s was particularly evident among girls. According to Wright (1999, p. 25), for example, 'in both Scotland and England,

the frequency of girls' drinking is increasing at a faster rate than that of boys, so that gender differences are diminishing'. A closer inspection of the data on which this claim was made, however, casts some doubt on such an interpretation. In England, the trends that were apparent in relation to under-age drinking during the past week in the period from 1988 to 1999 were strikingly similar for boys and girls (see Figure 4). Although the gender gap appeared to narrow at several points during this period it did not do so consistently and on several occasions it opened up again. Throughout this period, however, differences in rates of under-age drinking by boys and girls in England tended to be fairly small. Gender differences were also fairly small in Scotland and Wales, although considerable differences

Figure 4 Percentage of 11–15 year olds in England who drank alcohol during the past week



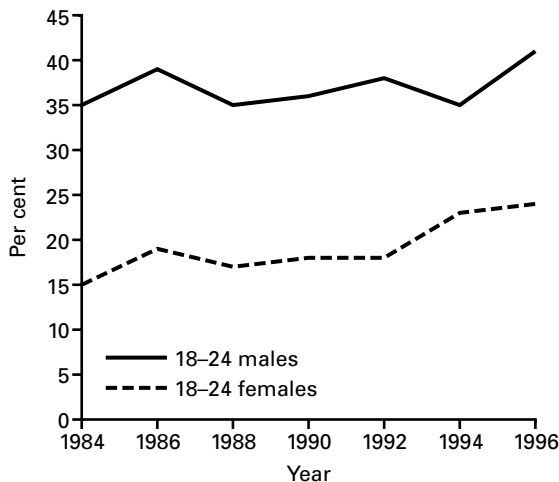
Source: Goddard and Higgins (2000)

Note: While figures for 1999 were based on 9,374 cases, this compared with 4,617 for 1998 and 2,823 for 1996. The sample size for surveys prior to 1996 was similar to those achieved in 1996 (Goddard, 1997a; Goddard and Higgins, 1999, 2000). Wright's (1999) interpretation was based on data from 1988 to 1996.

continued to be evident in Northern Ireland where boys were more likely than girls to have tasted alcohol, to be current drinkers and to have been drunk (Wright, 1999).

- A narrowing of the gender gap has also been noted in relation to the amount that young adults drink. While the proportion of adult males in Great Britain who drink over recommended limits has remained fairly stable since 1986, the trend for young men has been described as more 'more erratic'. It has also been noted that 'the proportion of all adult women drinking more than sensible weekly limits has slowly risen since 1984, across all age groups, and this upward trend, although again erratic, is particularly apparent among young women' (Wright, 1999, pp. 32–3). Figure 5 presents the data on which this interpretation was based

Figure 5 Rates at which 18–24 year olds in Great Britain drink more than sensible weekly limits – 14 units for women and 21 units for men (percentages)



Source: GHS, adapted from Wright (1999)

and shows a good deal of consistency in the general trends for young men and young women. With the exception of 1994, the rate at which young men and young women drank in excess of recommended levels tended to rise and fall together. Nevertheless the rate at which young adults drank at such levels increased more sharply among women than men. While the rate at which young women drank above the recommended limit in 1996 was 1.6 times the rate for 1984, for young men it was 1.2 times the earlier rate. On this dimension, therefore, it may reasonably be argued that young women's and young men's drinking patterns are becoming increasingly similar.

Although young women's drinking is becoming increasingly similar to that of young males on some measures, important sex differences remain. Thus, for example, heavy drinking continues to be particularly – although by no means exclusively – associated with young men:

- In England in 1996, 11–15 year old boys were twice as likely as 11–15 year old girls to have drunk 15 units or more in the past week although the proportions who had done so were small (4 per cent of boys and 2 per cent of girls). In Scotland, by contrast, levels of consumption among girl drinkers were not much lower than among boys (Goddard, 1997a, 1997b; Wright, 1999).
- Measham (1996) reported that, when her respondents were 15 years old, heavy sessional drinking and heavier weekly drinking were positively associated with being male.

- The rate at which young adults report drinking more than recommended limits remains higher for men than women (see Figure 5).
- Young men are more likely to report heavy drinking⁶ on a single occasion than are young women: in 1997, 81 per cent of young men aged 16–24 reported an episode of heavy drinking in the past year, compared with 60 per cent of young women. Furthermore, of those who reported such an episode, young men reported a greater frequency than did young women. Nearly half (47 per cent) of the young men reported heavy drinking once or twice a week compared with less than a quarter (21 per cent) of women (Goddard, 1998).
- A survey of English, Scottish and Welsh adults in 1996 classified 12 per cent of young men and 6 per cent of young women as heavy drinkers⁷; this compared with 6 per cent of all adult males and 2 per cent of all adult females (Office for National Statistics, 1996).
- Moore *et al.* (1994) found that binge drinking was most prevalent among young adult males. Approximately one third (31 per cent) of male drinkers and one tenth (11 per cent) of female drinkers reported binge drinking at least on a weekly basis, although it should be noted that these figures are based on all drinkers aged 18–64.

Ethnicity

Research into young people's drinking has paid little attention to the role of ethnicity (Denscombe, 1995; Wright, 1999). Even where studies have included a focus on ethnicity, fairly crude classifications have been used which do not reflect the importance

of ethnic and cultural diversity (Modood *et al.*, 1997). In part, this reflects the small number of ethnic minority respondents that are included in most studies. Nevertheless some important ethnic differences in drinking have been reported:

- Harrington (2000) reports that ethnic minority teenagers were less likely than whites to say they drink alcohol, or drink frequently. The majority of 'non-whites' aged 12–17 had either never drunk alcohol or had not done so in the past year compared with 20 per cent of whites. In addition, only one in 20 'non-whites' aged 12–17 were frequent drinkers in comparison with one in four whites.
- Measham (1996) reported that while white and 'black' respondents appeared to have similar drinking patterns they drank more heavily than 'Asians'.
- A school-based survey of 15–16 year olds in Leicestershire highlighted a 'stark contrast' between ethnic groups. It indicated that South Asians tended to hold less favourable attitudes to drinking alcohol than their white counterparts and reported far lower frequency of consumption. While 94 per cent of South Asians described themselves as non-drinkers this compared with 38 per cent of whites. Similarly, 2 per cent of South Asians and 25 per cent of whites reported drinking alcohol twice a week or more. Within South Asian groups different attitudes were evident between religious groups although reported frequency of drinking was similar for Hindus, Sikhs and Muslims (Denscombe, 1995).
- A recent study of 12–13 year olds in two inner London boroughs reported that Bangladeshi youth showed lower

levels of peer involvement and influence, higher levels of religious and familial involvement and the lowest levels of substance use, including drinking. While these patterns were reversed for whites (i.e. they showed higher levels of peer involvement, lower levels of religious and familial involvement and high levels of substance use) black African and black Caribbean youth were located between these two extremes (Karlsen *et al.*, 1998).

The role of religion in defining young South Asian people's relationships with alcohol was also highlighted in a recent Norwegian study of abstinence among 16–17 year olds. Non-drinkers were, it was noted, often from 'non-western immigrant' backgrounds; Muslims were often non-drinkers, and religion played an important role in the lives of non-drinkers. The authors concluded that while traditions of non-drinking have historically been associated with a 'morally religious lifestyle', there is much to indicate that such patterns are now evident in 'totally new groups', namely the new 'non-western immigrants' (Pedersen and Kolstad, 2000).

Although religion may encourage alcohol abstinence among young South Asian people its influence is not as straightforward as is sometimes supposed. Thus, for example, Ghosh (1984) notes that alcohol has been used in the Indian subcontinent for many years by various religious, cultural and socio-economic groups and he concludes that no cultural tradition is completely opposed to the use of alcohol in all circumstances. Furthermore, Cochrane (1989) described alcohol use in South Asian religious groups in the UK and described a continuum of acceptance of alcohol from Sikhs (more socially acceptable) through Hindus to Muslims (less socially acceptable). Young male Hindu drinkers have reported that their culture allows them to drink and there is

some suggestion that Muslim young people 'officially' describe themselves as non-drinkers even though they may drink, thus raising questions about the accuracy of survey data (Mathrani, 1998). There is, furthermore, some suggestion that young Asians are drinking more than previous generations and there is evidence to suggest that drinking patterns among young 'non-white' teenagers may be changing alongside those of their white peers (Health Education Authority/MORI, 1992; Royal College of Physicians and the British Paediatric Association, 1995, p. 34; Turtle *et al.*, 1997; Wright, 1999). Thus while Honess *et al.* (2000) noted that religion may provide a rationale for abstinence, they also noted that the relative odourlessness of vodka meant that young people for whom alcohol was proscribed on religious grounds showed a particular preference for this drink.

Social class

Social class has not provided a major focus for research into alcohol use within the UK. Nevertheless there is some suggestion that levels and patterns of drinking vary according to social class. Adults in non-manual households, particularly women, show higher levels of alcohol consumption than do those in manual households. Furthermore, the rate at which men in households headed by an employer/manager exceed the sensible weekly levels is relatively high (Wright, 1999). Conversely there is evidence that binge drinking is most prevalent among young men in manual occupations who had not pursued their education beyond secondary school (Moore *et al.*, 1994). Similarly, when her respondents were aged 15, Measham (1996) reported that heavy sessional drinking and heavier weekly drinking were positively associated with living in a working-class school catchment area.

Nevertheless, Wright (1999) concluded that many of the socio-economic factors found to be associated with adults' drinking habits are not relevant to children and that results of research into social class and drinking among children and teenagers are unclear and inconsistent. Similarly, the Royal College of Physicians and the British Paediatric Association (1995, p. 34) concluded that 'drinking in older adolescents varies little by social class or employment status'.

Deviance or normality?

Young people's drinking as delinquent or deviant behaviour

Drinking by young people is often considered to be a form of delinquency or deviant behaviour. This conceptualisation is particularly strong in the United States of America where the literature tends to be dominated by a paradigm in which alcohol use by young people is seen to be necessarily problematic and dysfunctional (Wright, 1999). It would be wrong to suggest, however, that such a view is limited to North America. In the UK traces of this view are evident in concern about the drinking habits of those who are variously described as 'excluded' or 'alienated' and in the way that alcohol use by young people has been located within broader peer and parental influences. An emphasis on exclusion was evident in the report from the Royal College of Physicians and the British Paediatric Association (1995, pp. 34–5):

“Young people who feel excluded from society because they are out of work or in boring, humdrum jobs are more likely to drink heavily than those studying or in interesting occupations.”

'Excessive' drinking has been seen to be prevalent among 'delinquent youth' and 'damaged minorities' (Brain *et al.*, 2000, p. 5) and there is some evidence of heightened levels of alcohol consumption among young people who may be considered to be 'alienated'. According to Craig (undated), measures of alienation have been found to be significantly correlated with a range of health risk behaviours including lack of exercise, smoking, drinking and drug use. Based on her own study, she also reported that, for sixth-formers, 'alienation' – measured on the basis of feelings about school and future plans – was strongly correlated with 'frequent' and 'excessive' drinking. No such link, however, was evident among young people in further education or on Youth Training Programmes.

The influence of parents and peers on young people's drinking has provided an important focus for research and it is often suggested that, as young people go through their early and mid-teens, the family influences become less important and peer influences become more important (Wright, 1999). Notions of peer groups and peer pressure are closely tied to understandings of deviant behaviour as they offer a way of dividing young people into 'good' and 'bad' and provide a way in which 'bad' behaviour by 'good kids' can be explained (Davies, 1992, pp. 29–32). While it has been shown repeatedly by cross-sectional studies that young people's drinking – or non-drinking – habits reflect those of their friends (Iannotti *et al.*, 1996; Royal College of Physicians and the British Paediatric Association, 1995; Wright, 1999) this does not necessarily indicate causation. Such patterns may be explained by peer selection rather than peer pressure: that is, rather than pressuring those around them to behave in certain ways, young people seek out others who think and behave like them (Coggans and McKellar, 1994; Davies, 1992).

Much of the research on alcohol and family life has been conducted on the basis of parents who are problem drinkers and

who may, as a result, be in contact with services (Royal College of Physicians and the British Paediatric Association, 1995; Wright, 1999). Research in the USA provides the extraordinary estimate that about one in eight children have at least one parent that is a problem drinker (MacDonald and Blume, 1986). Comparable information is not available in the UK (Royal College of Physicians and the British Paediatric Association, 1995). Furthermore, it is far from straightforward to assess the impact of parental alcohol misuse on children as such parents frequently have other 'problems'. The problem of co-morbidity, as we shall see, runs throughout consideration of most aspects of the impact of alcohol (mis)use on young people. In summary, however, research has found:

- Insecure patterns of attachment at one year among infants born to women with high alcohol use before and during pregnancy (O'Connor *et al.*, 1987).
- Cognitive deficits and poor school performance among children of problem drinkers when compared with other children (Nordberg *et al.*, 1993; von Knorring, 1991).
- Raised prevalence of behavioural and emotional disorders (West and Prinz, 1987).
- Some evidence of association between heavy alcohol use by parents and physical abuse of children (Oliver, 1985).

In addition, it has been estimated that young people with alcoholic parents are approximately five times more likely to develop alcohol-related problems than are those with non-alcoholic parents (Pickens *et al.*, 1991). This link appears to reflect

a range of biological and environmental factors. The role of genetic influences has been discussed in relation to a variety of 'antisocial behaviours' including heavy drinking (Rutter *et al.*, 1998), and it has been estimated from studies of identical and non-identical twins that 30 per cent of the familial transmission of alcoholism in males can be attributed to genetic factors (Merikanges, 1990; Pickens *et al.*, 1991; see also Lloyd, 1998). The link between parents' and children's drinking cannot, however, be reduced to biology. Thus, for example, although the children of heavy drinkers have an increased likelihood of becoming heavy drinkers themselves, it appears to be the case that the children of non-drinkers are also at an increased risk of becoming heavy drinkers. This has led some commentators to emphasise the importance of 'sensible' drinking by parents as a model of appropriate behaviour for young people (McKechnie *et al.*, 1977; Orford, 1990; Wright, 1999).

Family support, family control and family drinking styles have all been identified as having an important influence on young people's drinking. Low parental support, low parental control, heavy parental drinking and attitudes that condone such behaviour are associated with heavy drinking by young people. Moderate levels of support and control, attitudes which support sensible drinking by young people and a model of sensible parental drinking provide an environment which is most conducive to the development of 'socially competent drinking behaviour' by young people (Foxcroft and Lowe, 1991, 1997; Lowe *et al.*, 1993).

Young people's drinking as normal behaviour

Although traces of the drinking as deviance equation are evident in the UK, such approaches have largely been rejected:

“Recently, British researchers have challenged this perspective, arguing that adolescent drinking in Britain is essentially normal behaviour, which is part of the process of socialisation and reflects adult norms and drinking practices within a wider cultural setting.”

(Wright, 1999, p. 1)

The notion of ‘normal behaviour’ is key here for it highlights a wider set of concerns about the way in which young people’s drinking has often been constructed as deviant behaviour. This was neatly summed up by Sharp and Lowe (1989, p. 305) who argued that to see youthful drinking as necessarily problematic ‘runs the risk of turning what is essentially normal behaviour into something deviant’. In an apparent attempt to rehabilitate the image of young drinkers, recent researchers in the UK have concentrated on the inappropriateness of public policy responses in this area and on the rationality behind young people’s drinking. Within this literature it is argued that while alcohol use is problematic for a small minority of young people, for the majority it is functional and purposeful:

- May (1992) argued that there had been a succession of ‘moral panics’ about young people’s use of alcohol during the 1970s, 80s and 90s and that they made little sense in view of research which emphasised the stability of young people’s use of alcohol during this period. He went on to suggest that research highlighted the ‘normality’ of alcohol consumption among young people, most of who drank in moderation.

- Brain *et al.* (2000, p. 5) offer an 'appreciative' analysis whereby young people's use of alcohol was framed 'as they perceive it – as consumption rather than "abuse"'. They argue that young people consume licit and illicit drugs in order to seek a 'buzz' (intoxication) and that this profile of 'hedonistic/functional consumption' extends far beyond a small delinquent or damaged core of adolescents and is apparent among 'otherwise conventional, conforming youth' including higher education students and professional groups. They conclude that policy initiatives and theoretical explanations should adjust to 'post-modernity' so that such consumption can be better socially managed.

Although young people's drinking has, within the UK, increasingly come to be seen as a form of 'consumption', the limits of this perspective have been noted. Thus, for example, according to Honess *et al.* (2000, p. 62): 'taking account of its multiple social functions, alcohol is not simply part of a "consumption repertoire"'. Furthermore, while Dorn (1983) and Gofton (1990) also discuss the positive reasons that young people give for drinking alcohol, it is not only British-based researchers who have rejected the idea that young people's drinking is necessarily problematic. Thus, for example, Pape and Hammer (1996) concluded that, among young males in Norway, getting drunk for the first time in mid-adolescence seemed to be an ingredient in the normal developmental process.

3 DRINKING AND HARM

Even though alcohol may be an unremarkable feature of everyday life, concern about excessive drinking has a long history within the UK. Many of the ills associated with the late Stuart and early Georgian period – including lawlessness and poverty – were, for example, attributed to the remarkable increases that took place in gin consumption during this period. While half a million gallons of gin were consumed in England in 1685, this figure had risen to 11 million by 1750. Such was the level of concern about this increase that legislation was introduced in 1729, 1736 and 1750 in an attempt to control it. In contrast to previous statutes, those introduced in 1750 proved to be effective so that consumption fell to below two million gallons within a decade and to approximately one million by 1790 (Orford, 1985). Although the threat posed by gin may have receded, alcohol continues to be considered harmful and is associated with a range of specific harms.

In this chapter the notion of harm will be broken down and consideration will be given to the relative harmfulness of alcohol, tobacco and illicit drugs. The specific harms associated with alcohol will be examined in some detail and discussion will focus on addiction and dependency; mortality and health; criminality and offending; and risky behaviours. A recurrent theme in this part of the review will be the notion of co-morbidity which refers to the 'co-occurrence of two supposedly separate disorders' (Rutter *et al.*, 1998, p. 5). Thus, for example, suppose that

(i) young adults who drink heavily show higher than average levels of criminal activity and (ii) heavy drinking and criminal activity share common 'risk' factors such as having experienced behavioural difficulties in childhood. Unpacking the relationship between heavy drinking and criminal activity in such circumstances is clearly complex. Heavy drinking may cause offending, offending may cause heavy drinking, or both may be caused by common risk factors. While research has shown that patterns of drinking are associated with a variety of harms, the precise nature of these links often remain unclear.

In the previous chapter it was noted how much of the drinking that is evident among young people involves moderate levels of consumption. This has important implications for the harmfulness of alcohol and it should be remembered that the proportion of young people who experience problems with their drinking is small (Brain and Parker, 1997; Wright, 1999).

Overview

Within the UK, the importance of the notion of harmfulness is reflected in legislation which seeks to control the distribution of illicit drugs. Existing drugs law rests on a three-tiered classification within which substances are allocated according to their (perceived) relative harmfulness. The most severe legal sanctions are placed on those substances that are seen to be the most harmful. Thus while the maximum penalty for possession of a class C drug is two years imprisonment and an unlimited fine, for a class A drug it rises to seven years imprisonment and an unlimited fine (The Police Foundation, 2000). The basis of current drugs law was recently reviewed by the Independent Inquiry into the Misuse of Drugs Act 1977 (The Police Foundation, 2000). The Inquiry upheld the existing role of harmfulness which it defined in terms of:

- acute (i.e. immediate) physical harm, including risk of overdose
- physical harm from chronic (i.e. longer-term) use
- the ease with which drug may be injected
- the likelihood of the drug leading to dependence and addiction
- physical withdrawal symptoms
- psychological withdrawal symptoms
- the risk of social harm through intoxication
- the risk of causing other social problems
- the risk of medical costs arising.

This framework was applied to illicit drugs and to alcohol and tobacco which were included in order to 'put things in perspective' (The Police Foundation, 2000, p. 46). As part of the assessment, members of the Royal College of Psychiatrists' Faculty of Substance Misuse were consulted. The Inquiry concluded that alcohol is more harmful than tobacco and cannabis and classified it alongside heroin and cocaine, which were considered to be the most harmful of the illicit drugs (see Table 3).

The approach used by the Independent Inquiry was essentially based on the notion of risk – hence acute toxicity was defined as 'the risk of death or severe and immediate symptoms following an overdose' (The Police Foundation, 2000, p. 43). It did not take account of the extent to which particular substances were used. While this is clearly an important determinant of the total amount

Table 3 Harmfulness of illicit drugs, alcohol and tobacco

Class A	Class B	Class C
Cocaine	Amphetamines (non-	Cannabinol and
Heroin	injectable)	cannabinol derivatives
Methadone	Barbiturates	Benzodiazepines
Other opiates in pure form	Buprenorphine	Cannabis
Amphetamines (injectable)	Codeine	
Alcohol	Ecstasy and ecstasy-type drugs	
	LSD	
	Tobacco	

Source: The Police Foundation (2000)

of harm caused by a given substance, inclusion of this dimension would increase the rating given to the relative harmfulness of alcohol. This was recognised by Rutter *et al.* (1998, p. 154), for example, when they noted that, 'considered in population terms, alcohol is a more important risk factor for antisocial behaviour than are other drugs because it is more frequently taken in excess'.

Although the Independent Inquiry highlighted the relative harmfulness of alcohol and tobacco, it resisted arguments that these substances should be treated in the same way as illicit drugs. It felt that use of alcohol and tobacco was so widespread and familiar that prohibition would lead to widespread resentment and law breaking. By contrast, it noted that the present laws against illicit drugs enjoy widespread public acceptance, with the exception of certain aspects of its operation against cannabis. Furthermore, although alcohol was considered to be a dangerous drug which caused 'enormous social costs and harm' it was also recognised that many people used it 'moderately and non-destructively'. Thus the Inquiry concluded that 'it is the misuse of alcohol that needs to be prevented, and while the ways in

which this can best be done may be debated, control under the MDA (Misuse of Drugs Act) is not one of them' (The Police Foundation, 2000, p. 50).

Addiction/dependency

In his analysis of 'excessive appetites', Orford (1985) noted that:

"Excessive drinking of alcohol provides the best known example of the type of behaviour which constitutes the theme of this book – namely apparent loss of control over a form of activity which, for most people, serves as a pleasurable and moderate indulgence."

(Orford, 1985, p. 9)

Although the precise definition of the terms 'alcoholism', 'alcohol addiction' and 'alcohol dependence' is a matter of some controversy, alcoholism has come to be viewed widely as a disease by both professionals and the lay public. Furthermore, while there may be 'disagreement about how best to construe excessive drinking, and about its causes and solutions, ... of its existence there can be no doubt' (Orford, 1985, p. 28). Thus, for example, using government figures, Alcohol Concern recently claimed that one in 25 adults are dependent on alcohol compared with one in 50 who are 'hooked' on all other drugs including those which have been prescribed. Despite the way in which alcoholism tends to be associated with middle age, young adults have high rates of problem drinking and alcohol dependence compared with other age groups, although it has been noted that problems relating to drunkenness resulting from binge drinking are much more common:

- In 1994–95, 129 young people aged 15 to 19, and 50 children aged 10–14 were treated in hospital for ‘alcohol dependence syndrome’, although it is unclear whether these figures are genuine cases of dependence or whether they include emergency admissions for alcohol-related accidents (Alcohol Concern, 2001a).
- The OPCS Health Survey for England (Office of Population and Census Surveys, 1995) indicated that among current drinkers, 9 per cent of males and 5 per cent of females were problem drinkers – that is, they responded ‘yes’ to at least two of a series of questions designed to assess psychological and physical dependence. For men, the proportion of problem drinkers was found to be highest in the 16–24 and 25–34 age groups and for women it was found to be highest in the 25–34 age group. Within the 16–24 age group, 12 per cent of male drinkers and 6 per cent of female drinkers were classified as problem drinkers.
- The 1993 Psychiatric Morbidity Survey sought to assess the prevalence of alcohol dependence alongside a range of mental health problems. Respondents were classified as being alcohol dependent if they answered ‘yes’ to at least three of 12 questions about loss of control, symptomatic behaviour and binge drinking. For men the highest rate of dependency was evident among 20–24 year olds while for women it was evident among 16–19 year olds. Among 16–19 year olds, nearly 12 per cent of men and 7 per cent of women were considered to be dependent; this compared with approximately 17 per cent and 4 per cent respectively among 20–24 year olds (Meltzer *et al.*, 1995; Alcohol Concern, 2001a).

It is worth noting that these surveys probably underestimate the prevalence of problem drinking as they focus on people living in private households and exclude those who live in institutions and those who are homeless (Wright, 1999).

Mortality and health

In order to understand the health implications of alcohol use it is important to distinguish between long term, short term, direct and indirect effects. The regular consumption of alcohol in high volumes over a long period of time can have a detrimental effect on nearly every organ in the body and may cause a range of illnesses including cirrhosis of the liver, pancreatitis, gastritis and peptic ulcer, tuberculosis, cardiomyopathy and peripheral neuritis (Alcohol Concern, 2001c; Orford, 1985). The seriousness of these conditions is evident from alcohol's position as the seventh main cause of death throughout the world. In the USA, for example, in 1992 100,000 people died of alcohol-related causes compared with 30,000 from 'abuse' of illegal drugs (Hawkins *et al.*, 1995). In England and Wales in 1998, over 6,000 deaths were directly attributable to alcohol; this compared with 1,620 drug-related deaths throughout the UK in 1994. Furthermore, death rates from alcohol-related diseases appear to be rising: it has been suggested that from 1984 to 1994 they increased by a third overall and that, for those aged 25–44, they doubled (Alcohol Concern, 2001d).

The impact of the long term direct effects of alcohol are not widely apparent among young people. Cancers, heart disease, liver cirrhosis and other health consequences of chronic heavy drinking take time to develop and are rarely seen in young drinkers. Very few young people die from the direct effects of alcohol. In 1993, 17 people under the age of 25 died from the direct effects of alcohol; in 1994 the figure was 12 and in 1995 it was 11. This does not mean, however, that young people should be considered

to be immune from the health-related dangers associated with alcohol.

There is some suggestion that heavy drinking at a relatively young age is predictive of heavy drinking later on in life, although it is important to note that the evidence for this is not strong. Information in this area has been described as 'particularly sketchy' (Royal College of Physicians and the British Paediatric Association, 1995, p. 31) and it has been argued that youthful drinking behaviour is not a good predictor of alcohol-related illness or physical dependence in later life (Wright, 1999). The National Child Development Study and the Cambridge Study of Delinquency Development both point to a reasonable level of consistency in relation to heavy drinking (Farrington, 1995; Ghodisian and Power, 1987). In the Cambridge study, for example, nearly half (46 per cent) of the heavy drinkers at age 18 were still heavy drinkers at age 32. Thus, while the evidence is not unequivocal, there is reason to think that those consuming heavily at a young age run increased risks in relation to negative alcohol-related consequences later in life.

Although the long-term harms associated with excessive drinking should not be ignored, it is the short-term, often indirect, dangers associated with alcohol which have been highlighted in relation to young people. This reflects a combination of biological and cultural factors which have been seen to make young drinkers particularly vulnerable to such risks:

- Young people in childhood and adolescence are not fully developed; they weigh less than adults and will achieve higher blood alcohol levels; physical differences mean that they are different from adults both in the way that they metabolise alcohol and in the way that they respond physiologically to intoxication. Novice drinkers will have

developed little physical tolerance to alcohol and will consequently experience greater intoxication (Wright, 1999). Similarly, their learned skills will be much less well developed than those with greater experience of alcohol use.

- The styles and location of drinking particularly associated with young people adds to the potential for short term harm. Thus, for example, while Forsyth and Barnard (2000, pp. 108, 113) noted that 'drinking location is a good indicator of potential for alcohol-related harm even before the environmental risks inherent to that setting are taken into account', they went on to suggest that:
"The harms directly attributable to under-age intoxication seem certain to be exacerbated by other dangers inherent to drinking location (e.g. traffic, deep water or being a victim of crime). The most dangerous settings (e.g. indoor/licensed or outdoor/hidden locations) tend to be frequented by younger or more regular drinkers, often consuming strong, cheap alcohol products (e.g. white cider or fruit wine). To this combination of risky circumstances, less tangible psychological hazards can be added which may be caused by novice, uncontrolled intoxication taking place in unfamiliar or threatening surroundings."

Variations in drinking style and location mean that while no alcohol problem is exclusive to young people, there is a discernible pattern of alcohol-related problems experienced by younger drinkers. For this group, it is simple intoxication, episodic drunkenness or binge drinking that are most likely to lead to problems such as violence, crime and accidents. This is reflected in patterns of mortality: while very few young people die from the direct effects of alcohol, many more die from the indirect effects, particularly accidents, suicide and violence (Wright, 1999, p. 118). Similarly Alcohol Concern (2001d)

have noted that accidents, suicide and violence are all significant causes of death in the 16–35 age group and that ‘alcohol can be implicated in all three’.

According to Alcohol Concern (2001d), there is a ‘broad consensus’ that around 28,000 to 33,000 deaths are indirectly related to alcohol. While Sabey and Coding (1975) calculated that about 500 young people may die each year while drunk, representing 10 per cent of all deaths under 25, this work was carried out more than 20 years ago. More recent figures are not available and further research is needed to establish the extent to which the indirect effects of alcohol are implicated in the deaths of young people (Alcohol Concern, 2001d; Wright, 1999).

In assessing the effects of alcohol on physical well-being, it is important to take account of other risk factors which are associated with *both* increased morbidity and alcohol consumption. Andreasson *et al.*'s (1990) survey of a large cohort of Swedish conscripts, with a 15-year follow-up, found that the number of hospital admissions per capita increased from 1.8 among ‘abstainers’ to 2.4 among ‘high consumers’. Controlling for shared risk factors reduced the differential, but relative risk remained raised though ‘modest’ according to the authors. This may be considered unsurprising given that, despite the relatively long follow-up, those in the cohort were only in their early to mid-30s by the time the follow-up was undertaken. By comparison, the relative risk of death among high consumers within the cohort was described as ‘high’. This finding was reinforced during a 20-year follow-up of the same cohort (Andreasson *et al.*, 1991) which found that the risk of death among high consumers was 2.8 times that for moderate consumers. The majority (71 per cent) of the deaths occurring in the cohort were classified as ‘violent deaths’ and were strongly associated with alcohol consumption. Half of these violent deaths were suicides or possible suicides and one third were traffic accidents.

This leads neatly into a more detailed consideration of the links between alcohol, accidents and injury, mental health and suicide.

Accidents and injury

Wright (1999) suggests that the most important physical health risks associated with young people's drinking relate to accidents. Although the analysis presented by Hingson and Howland (1993) was not specific to young people, it clearly highlighted the link between alcohol and accidents. They reported that up to half of head injuries, up to one third of non-fatal falls and a significant proportion of drownings and burn deaths are alcohol-related. Indeed, considering these and accidents at work, road accident deaths and accidents involving pedestrians, they suggest that alcohol is a factor in 20–30 per cent of all accidents.

Hutchison *et al.*'s (1998) survey of facial injuries reported by 163 accident and emergency departments during one week found that alcohol was a factor in 22 per cent of all facial injuries, 43 per cent of serious facial injuries and 45 per cent of facial fractures. Almost all assaults with bottles or glasses (98 per cent) were alcohol-related and half of these incidents took place in bars. In line with other studies of public violence, the study found that it was the 15–25 age group that suffered the greatest number of assaults generally, and alcohol-related assaults in particular. It was therefore, not surprisingly, the 15–25 age group that experienced the greatest number and proportion of alcohol-related facial injuries (in this age group 46 per cent of facial injuries were caused by assault). Extrapolating from their data, the authors estimated that there are a minimum of 30,000 assaults producing facial injuries every year (and they suggest this is a significant underestimate). The social consequences of this are very significant for 'it is possible that (as a result) there is a large cohort of young people who, because of their psychological distress, under achieve for the whole of their adult lives' (Hutchison *et al.*,

1998, pp. 12–13). It should also be noted that this research relates only to people attending accident and emergency departments. There are likely to be some young people who have suffered an injury as a result of assault but do not seek help, either because they are embarrassed, upset or concerned about the possible consequences.

Of all 'accidents' associated with alcohol consumption, it is those which occur on the roads that are most serious. This is evident from a range of statistics:

- A total of 540 people were killed in drink-drive accidents in 1996 and this accounted for one in six of all those killed on the roads (Alcohol Concern, 2001c).
- Approximately one tenth of car driver fatalities who had been over the legal blood alcohol limit are aged 16–19 (Hayden, 1995).
- Drinking and driving is the leading cause of death among 15–24 year olds (Snow and Cunningham, 1985).
- Male drivers in their 20s are the most likely to fail a breath test after being involved in a traffic accident and are three times more likely to do so than women. Furthermore, 20–29 year olds are four times more likely than those in other age groups to be involved in accidents and to fail a subsequent breath test (Alcohol Concern, 2001c).
- American research (Little and Clontz, 1994) has estimated that 57 per cent of 18–20 year old drinkers have driven whilst drunk.¹ Almost 60 per cent of drivers aged 15–19 had been drinking prior to being involved in an accident (43 per cent being 'drunk' as defined by their state laws).

Studies attempting to identify the 'characteristics' of youthful drunk drivers suggest that, psychologically, they have an orientation towards impulsivity, sensation seeking and risk taking and that it is the most frequent users of alcohol, rather than the heaviest users that most often commit drink-driving offences (Johnson and White, 1989).

Mental health and suicide

Research evidence supports the idea that there is a positive association between alcohol use and depression among young people (Deykin *et al.*, 1992). Young people diagnosed as suffering from severe psychiatric disorders (anxiety disorders, affective disorders and antisocial personality) are also often diagnosed as having substance misuse problems, including alcohol misuse problems (NHS Health Advisory Service, 1996). Based on a large cohort study, Andreasson *et al.* (1991) reported that levels of alcohol consumption significantly increased the rate of admission to hospital for mental disorder. There is, however, very little research in the UK into the extent to which dual diagnosis is a problem (Alcohol Concern, 2001e).

Alcohol may be implicated in suicide in two ways. On the one hand it may produce a prolonged build-up of depression and self-incriminatory ideas, and on the other intoxication may encourage rash acts because of its disinhibitory effect (Alcohol Concern, 2001e). Hawton *et al.* (1993) identified a link between alcohol use and teenage suicide, and Alcohol Concern (2001e) quoted one study which found that 20 per cent of those diagnosed as having serious alcohol problems had attempted suicide and 8 per cent went on to kill themselves.

Although research does suggest a link between alcohol, mental health problems and suicide, the precise nature of these relationships is unclear. It is, for example, difficult to assess from

the evidence whether drinking causes mental health problems or vice versa (Wright, 1999).

Crime and criminal justice

Clearly, there are a number of offences that are linked directly to alcohol consumption: drunkenness; being drunk and disorderly and so on. As Wright (1999, p. 124) notes, offences of drunkenness in England and Wales rose steadily throughout the 1970s and 1980s, peaking in 1989. The number of offences decreased from the peak of 93,000 in 1989 to 42,500 in 1995, though it is likely that this reflects changes in the nature of policing rather than alcohol consumption. The rate of convictions for drunkenness peaks at 18 for both men and women. Greater public concern is generally reserved for the role of alcohol in other, often more serious, forms of offending.

There is now considerable research which shows that younger people are more likely to be both perpetrators and victims of violence – at least violence in public places – and that violence is implicated in much of this offending (see, for example, Hindelang *et al.*, 1978; Shepherd and Brickley, 1996). According to the 1988 British Crime Survey (BCS) (Mayhew *et al.*, 1989), 50 per cent of victims of wounding said the offender ‘had been drinking’, as did 44 per cent of victims of assault and 30 per cent of victims of sexual offences. The 1996 BCS (Mirlees-Black *et al.*, 1996) suggests that two fifths of violent crimes involve alcohol (over half of violence by strangers, 45 per cent of violence by acquaintances, 32 per cent of domestic violence and 17 per cent of muggings). Shepherd and Brickley’s (1996) study of an accident and emergency department found that 85 per cent of 18–35 year old males injured in urban city centre violence were involved in assaults that either took place in a bar or shortly after leaving one. Not only is drinking associated with offending, it is also linked

to victimisation. People injured in cases of assault are more likely to have been drinking at the time than those injured in other ways (Hayden, 1995), and those assaulted are likely themselves to be occasionally 'heavy' or 'binge' drinkers (Shepherd and Brickley, 1996; Yates, 1987).

As with illicit drugs the precise nature of the relationship between alcohol and crime is difficult to determine. At worst, we may state with some certainty that alcohol is *associated with* a considerable amount of crime (Marsh and Fox Kibby, 1992; Parker, 1996; Tuck, 1989). Thus, for example, Newcombe *et al.*'s (1995) study of adolescents in the north-west of England found a strong relationship between offending and the frequency and amount of alcohol consumed. Cookson (1992), in a self-report survey of over 600 convicted male offenders, found that one quarter reported being drunk at the time of the offence, and a further 16 per cent said they had been drinking but were not drunk. She found 'habitual drunkenness' to be associated with self-reports of all major types of offending. The young offenders in McMurrin and Hollin's (1989) sample reported drinking an average of 58 units a week, and they found alcohol to play a similar role in both property and violent offending. Similarly, Ferguson *et al.*'s (1996) longitudinal study found that both male and female 15–16 year olds that drank heavily, frequently or problematically were at increased risk of committing both violent and property crimes (see Table 4).

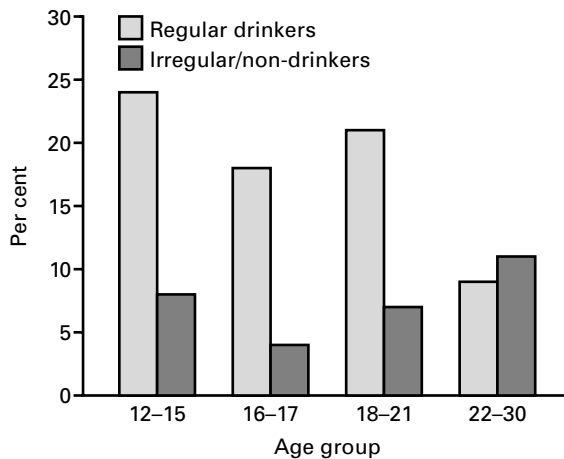
Not only would there appear to be a general association between offending and alcohol consumption, some studies have also detected a more specific link between drinking and persistent offending. Data from the YLS (Flood-Page *et al.*, 2000) show a clear relationship between level of alcohol consumption and serious or persistent offending (see Figures 6 and 7). A higher proportion of offenders aged 12–17 were frequent drinkers (36 per cent) than non-offenders (20 per cent) (see also Audit Commission, 1996; Hagell and Newburn,

Table 4 Variations in rates of violent and property offending according to reported alcohol misuse^a and remaining sample members (rate per 100)

	Males – alcohol misuse?		Females – alcohol misuse?	
	Yes	No	Yes	No
Violence	32.1	7.6	15.4	3.1
Property	45.3	12.4	50	7.3

^aAlcohol misuse was defined using a modified version of the Rutgers Alcohol Problem Index (White and Labouvie, 1989). The differences shown here were statistically significant ($p < 0.001$).

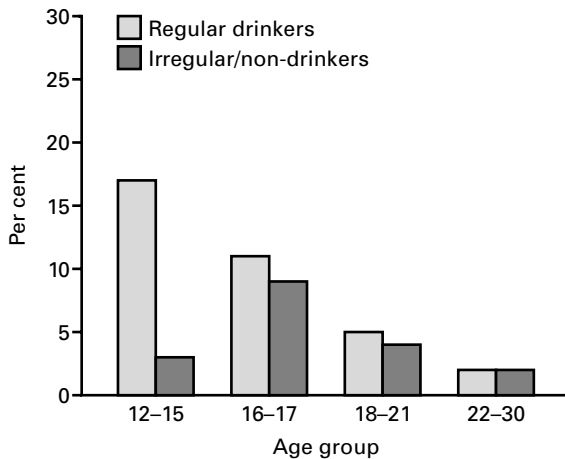
Figure 6 Drinking behaviour and serious or persistent offending in young men in the past 12 months (percentage of serious or persistent offenders)



1994; Parker, 1996). This pattern held across the age range. Relatedly, Parker's (1996) study of 'persistent young adult offenders' found that their drinking and offending careers overlapped and interacted in complex ways.

As we have implied, however, explaining the link between alcohol use and crime is not straightforward. Longitudinal

Figure 7 Drinking behaviour and serious or persistent offending in young women in the past 12 months (percentage of serious or persistent offenders)



research, for example, tends to suggest that offending and drunkenness share common 'risk factors' (parental substance use, conduct problems in middle childhood and affiliations with 'delinquent peers'). Thus, Ferguson *et al.* (1996) found statistically significant relationships between both alcohol misuse and juvenile offending and:

- social disadvantage
- family adversity throughout childhood (a range of items including poor parenting, family instability and conflict)
- a family history of drug and/or alcohol abuse
- individual factors, such as early tendencies towards conduct problems
- affiliations with 'delinquent peers' at age 15.

Much of the literature on alcohol and crime is couched in the language of 'shared risk factors'. Thus, North American longitudinal research provides some support for the idea that aggressive behaviour may be a precursor to later heavy drinking and alcohol-related aggression (White and Hansell, 1998; White *et al.*, 1993a, 1993b), though some have found evidence for the reverse relationship (alcohol use leading to aggression) and for a 'shared risk factors' explanation (see also Coggans and McKellar, 1995). In a similar vein, McMurrin and Hollin (1989), from a survey of 100 incarcerated young offenders, suggest that there is a 'functional relationship' between drinking and delinquency. That is, they say, alcohol use may be both an antecedent to offending and a consequence of it. Farrington (1996), acknowledging this, points out that a factor such as alcohol misuse can be both a symptom and a cause simultaneously.

Whilst a number of studies have drawn broad links between alcohol use and offending in general, evidence of causality is stronger in relation to aggression and violence. There is now considerable evidence that aggression and violent offending are linked with heavy drinking and drunkenness (Graham and Bowling 1998). There is, in addition, evidence from time-series data showing that increases in the total consumption of alcohol are associated with changes in the levels of recorded violent crime (Smith, 1990; Wiklund and Lidberg, 1990). Studies of police records show that a significant proportion of violent offenders are either persistent heavy drinkers or were drunk when the violent offence occurred (Coid, 1982; Wiley and Weisner, 1995), and a small number of longitudinal studies indicate that alcohol use is an independent risk factor for violent behaviour by young people.

One of the larger and methodologically more sophisticated studies, conducted by Rossow *et al.* (1999) found a positive association between frequency of alcohol intoxication and violent

behaviour. Having controlled for a wide range of potential 'confounders', they found that a small but significant association remained. The implication is that a small yet direct causal relationship between alcohol consumption and violence can be established. The question then is: what is the nature of the 'causal' relationship. Rossow *et al.* (1999) speculate that alcohol intake increases the risk of aggression in situations of frustration or in response to provocation. Age, however, is crucial:

"In early adolescence drinking and intoxication is still rather infrequent and deviant and ... early onset of drinking tends to be a predictor or symptom of other problem behaviours. Among older adolescents, however, there was still a small but statistically significant net effect of intoxication on violent behaviour when all potential confounders were taken into account."

(Rossow *et al.*, 1999, p. 1029)

In an attempt to throw further light on the nature of the relationship between alcohol consumption and violent offending, Komro *et al.* (1999) attempted to examine the key determinants cross-sectionally and longitudinally by considering the association between personality and behavioural risk factors. They found 'the more extreme behaviours of binge drinking and acknowledgement of alcohol/drug problems were significantly associated with physical violence (1999, p. 25). Though they were unable to be specific about the nature of the causal relationship, they nonetheless concluded that alcohol use was an independent risk factor in violent behaviours among young people.

Similarly, Ferguson *et al.* (1996), though noting that young people who misused alcohol were at significantly increased risk of both property and violent crime, found that this relationship did not hold for acquisitive crime and alcohol misuse once shared

risk factors had been controlled for. By contrast, they concluded that 'there is a direct cause and effect association between alcohol misuse and risk of violent offending independently of common risk factors' (p. 492).² Shepherd (1996, p. 501), commenting on this connection, suggests that it is consistent with evidence of a link between injury and high binge consumption in young men (see also Shepherd *et al.*, 1990). Finally in this regard, Cookson (1992) argues that focusing on the role of alcohol in particular violent events rather than on its role in individual offending behaviour highlights its role as a contributory factor. Thus, she says:

"When criminals are the focus of the study it seems from all data sources that drinking and delinquency go together, and that this is true for all types of crime. When criminal incidents are examined, alcohol is clearly involved more frequently in crimes of violence than in crimes of acquisition."

(Cookson, 1992, p. 359)

Risky behaviours

Alcohol and tobacco

As we have already suggested, there is considerable evidence of clustering of what might be termed 'risky activities' among the young. Quite strong correlations, for example, have been found between smoking and drug use and, though to a lesser extent, between alcohol consumption and smoking (Brannen *et al.*, 1994). Smoking tobacco is responsible for more adverse health effects than any other psychoactive drug – it is implicated in up to one third of deaths from cancer and 90 per cent of deaths

from lung cancer (Plant and Plant, 1992). Such consequences are generally long term, affecting the middle-aged and elderly rather than the young. Nonetheless, teenage smokers have reduced lung function and related respiratory abnormalities, and report more frequent coughs and colds.

Young people who drink frequently are significantly more likely to be regular smokers (Goddard, 1997a, 1997b; Lader and Matheson, 1991). Goddard (1997a, 1997b) found that less than one in ten 'regular smokers' aged 11–16 (8 per cent) said they never drank, whereas over two thirds of non-smokers (61 per cent) also reported that they didn't drink. Plant *et al.* (1985) found levels of alcohol consumption among 16–17 year olds to be significantly correlated with the number of cigarettes smoked daily (smoking was also linked to negative alcohol-related experiences). Similarly, young people who are smokers are more likely to use illicit drugs.

Alcohol and illicit drugs

Research into alcohol and research into illicit drugs have tended to develop separately. This was reflected in the rather cursory consideration that was given to 'alcohol and other drug use' in a recent review of the literature about young people and alcohol (Wright, 1999). Although it has been suggested that increased illicit drug use by young people involved a conscious rejection of alcohol (Coffield and Gofton, 1994; Collin with Godfrey, 1997; and see above 'What young people drink'), there is a growing awareness of the way in which young people's drinking is often tied up with use of illicit drugs. The work of Parker, Aldridge and Measham has been particularly important in this context as they have located alcohol within a broader range of 'psychoactive' substances and have identified the importance of smoking and drinking as a pathway into illicit drug use (Parker *et al.*, 1998; see

also Measham, 1996; Parker 1996). Over half of the 'weekly drinkers' in that study reported having used an illicit drug in the past year compared with one in 15 non-drinkers; two fifths had used a drug in the past month compared with one in 25 non-drinkers (see also Bean *et al.*, 1988; Diamond *et al.*, 1988).

The links between alcohol and illicit drugs are also evident in other work which has shown how early onset of drinking is associated with subsequent illicit drug use and how illicit drug use tends to take place in the context of lifestyles which include frequent and heavy drinking (Brain *et al.*, 2000; Goddard and Higgins, 2000; McKeganey and Norrie, 1999; Sutherland and Willner, 1998; Yamaguchi and Kandel, 1984). The relationship is probably best summarised by the Advisory Council on the Misuse of Drugs (1998, p. 69), who suggested, 'for many young people alcohol, tobacco and illicit drugs inhabit one and the same world rather than constituting separate domains'.

Alcohol, sexual behaviour and sexually-transmitted diseases

There is relatively little research evidence on the role that alcohol plays in youthful sexual relationships. Nonetheless, there is, as Donovan and McEwan (1995, p. 320) put it, 'a received wisdom ... that women (especially) and men will have sex more readily when under the influence of alcohol than when sober'. Clearly both the use of alcohol and having sex are relatively common activities for young people. Alcohol is a powerful disinhibitor – that is, it is believed to reduce social inhibition (Plant and Plant, 1992; Rhodes and Stimpson, 1994). Research evidence suggests that young people often combine drinking and sex, sometimes in a consciously functional way, especially in connection with early sexual activity (Klein and Pitman, 1993; Plant *et al.*, 1990). Work by Robertson and Plant (1988) found that males who had drunk

before intercourse were more than three times less likely than those that had not done so to have used some form of contraception.. There is now reasonably strong evidence, including from North America, of a positive relationship between prior alcohol use, sexual activity and absence of contraception among white heterosexual populations (Hingson *et al.*, 1990; McEwan *et al.*, 1991; Robertson and Plant, 1988). By contrast, studies exploring the possibility of an association between alcohol and 'risky sex' in homosexual male populations have been more equivocal. Some North American research has suggested a link between the use of alcohol (and other psychoactive drugs) and 'high risk' sexual activity among gay men (Stall 1988), whereas other work has cast some doubt on the role of alcohol as a possible 'cause' of risky sex (Scott, 1992).

As with much else in this review, this is another area in which 'independent effects' are hard to identify. The closest is perhaps Ferguson and Lynskey's (1995) longitudinal study in New Zealand that found that adolescents that reported misusing alcohol had odds of early onset sexual activity (defined as below age 16), multiple partners and unprotected intercourse between six and 23 times higher than those of young people that did not report misusing alcohol. Taking common risk factors into account, the odds ratios were lowered, but the difference remained statistically significant. Nonetheless, Graves (1995, p. 27), summarising evidence from a North American survey, suggested that 'in young adults, alcohol use with sex does not necessarily lead directly to lapses in judgement about safe sexual practices'. Alcohol is but one of a number of factors that play an important role in determining the riskiness of a particular sexual encounter. In a similar vein Plant and Plant, concluding their review of available literature, noted that:

“on balance, available evidence supports the view that there is an association between alcohol, certain other drugs and risky sex. Even so, a clear causal connection has not yet been demonstrated and further research is required to provide additional clarification.”

(Plant and Plant, 1992, p. 112)

4 CONCLUSIONS

A central theme, running through this review, has been the ambiguous position of alcohol in contemporary Britain. On the one hand, alcohol is consumed by a very large number of people for pleasure without any major problems occurring in the short or longer term. However, on the other hand, when used to excess, alcohol is associated with a range of harms that place it ahead of illicit drugs as a source of individual and social harms. These harms include long term, and very serious, physical health problems that may lead to premature death, property crime, violent crime and mental health problems. In view of this ambiguity, it is not easy to form simple conclusions about the role or impact of alcohol consumption by young people. However, the following key points are evident from the existing literature in this area:

- Young people's experiences with alcohol vary markedly by age, and the notion of 'transitions' is crucial to understanding this relationship. Although the vast majority of teenagers have drunk alcohol, for most young people contact with alcohol typically begins much earlier as a normal part of family life.
- Young people who drink alcohol should not be considered deviant. The transition into independent drinking is a normal part of adolescent development and most drinking at this stage is relatively moderate and does not involve chronic,

heavy or dependent use. However, levels of consumption and intoxication increase markedly during the mid to late teens.

- There is a range of harms that may result from excessive drinking. In relation to young people, binge drinking has been identified as a particular cause for concern. There is quite strong evidence linking binge drinking to violence.
- Risk factors associated with binge drinking and other problem drinking behaviours are often interconnected and longitudinal research supports the idea that there are 'bi-directional' influences: that is, antisocial behaviour can lead to an increase in the chance of alcohol (and drug) problems and vice versa. Consequently, it is difficult to separate the 'problems' associated with alcohol from other risks, although it is clear that the individual and social harms associated with alcohol are at least as great as those associated with illicit drugs.
- The context in which drinking takes place is a key determinant of the potential for harm. While supervised drinking in the parental home is associated with low levels of intoxication, the move into independent drinking is a source of risk. Particular concern exists about drinking in hidden/outdoor locations.

The key question for social policy, therefore, is how to reduce the harms associated with alcohol consumption by young people. As noted by the Independent Inquiry into the Misuse of Drugs Act, legislative approaches do not offer the best way of controlling the consumption of alcohol. While criminology has been poor at considering the prevention of alcohol related misconduct, the

models that it has developed elsewhere – for example, public health approaches to the management of violence – highlight important lessons (Moore, 1995). We suggest that a combination of what might be characterised as ‘situational’ and ‘social’ prevention initiatives offer a constructive way forward. Put another way, what is required is a range of initiatives that encourage more sensible drinking – and this might include both public health approaches aimed at enhancing self control strategies – and structural modifications which seek to create safer drinking environments through design, technology and possible changes to licensing laws.

Structural features

Young people are increasingly coming to be seen as consumers, and alcohol as a product to be marketed. The manufacture and sale of alcoholic drinks is a huge and enormously profitable business and in order to remain so it is dependent on young people, both as a particular market segment, and as future consumers. From this starting point it may be argued that the sale of alcohol is organised in such a way as to promote youthful drunkenness and excess. There are currently a number of design features that, arguably, encourage heavy and/or binge drinking. Considerable time, effort and resources are put into marketing drinks to young people, and to making places of consumption (bars, pubs and clubs) attractive to them. Much of this is relatively unproblematic and it is, perhaps, unrealistic to think that it is going to change. However, attention should be paid to the role of the drinks industry in encouraging alcohol misuse rather than ‘sensible drinking’. It is clear that various design features of modern bars are specifically geared towards maximising alcohol consumption. As one example, in many of the newer bars being opened in our major city centres, the amount of seating available is very limited

and music is played at a level that makes conversation difficult. Both of these features can be seen as an attempt to take advantage of the way that customers who are forced to stand and have limited opportunities to talk will drink significantly more than those who sit and are able to hold lengthy conversations. In this, and numerous other ways such as 'happy hours' and the promotion of drinks with particularly high alcohol content, excessive rather than moderate drinking is encouraged. There are a number of 'structural' changes that might therefore be encouraged:

- reduction in the availability of 'happy hours' and cheap promotional events
- provision of low and non-alcoholic drinks at competitive prices
- provision of food and snacks
- plentiful seating
- moderate noise levels
- clear 'door policies' where those who are already intoxicated are refused entry, and clear strategies for dealing with difficult customers.

In so far as binge drinking is particularly associated with young adults, the social mix of bars and pubs provides opportunities to encourage informal social control. Where there is a mixed clientele in terms of age, for example, it may be that more excessive forms of drinking, and associated forms of antisocial behaviour, are discouraged.

The Crime and Disorder Act 1998 now provides a clear structure in which local 'community safety' initiatives are to be planned and managed by the police and local authorities. The introduction of the structural modifications described above could be usefully incorporated into major inner-city crime and disorder strategies. Additionally, it may be necessary to consider how licensees might be encouraged to operate in a different manner, and there are a number of possibilities that are worth considering:

- Introducing controls, via by-laws in major urban areas, over the design of bars, pubs and clubs (covering such things as provision of seating, acceptable noise levels).
- Levying charges on the owners of licensed premises to cover the costs of the policing of young people who are drunk.
- Placing much more stringent controls on the issuing of licenses, covering the behaviour of those drinking in, or in the vicinity of, particular premises.

Social/cultural changes

How can the culture of youthful alcohol consumption be changed? We highlight three general approaches here: education; the management and supervision of the 'transition' to drinking outside the home; and changes in the licensing laws. Considerable time, money and public attention is currently devoted to 'drugs education' and public health campaigns aimed at reducing cigarette smoking. In our experience alcohol use is rarely central to such initiatives and given what has already been said about the relative harms associated with illicit drugs and alcohol, such a position is hard to justify. Much greater attention should be

paid to alcohol education within more general substance misuse education. In particular, education should focus on the differences between the sensible 'use' of alcohol, and its *misuse*.

As this review has illustrated, the risks associated with binge drinking by young people vary according to the context in which it occurs. That is, supervised drinking, particularly drinking within the home, is relatively unlikely to lead to drunkenness. By contrast, drinking outside the home, especially in unsupervised locations, is much more 'risky'. While the movement from largely supervised to largely unsupervised drinking is a key transition, it typically occurs before the age at which young people can legally purchase alcohol. Consequently, current laws do not provide an effective basis for managing this transition. By making the purchase of alcohol illegal before the age of 18, the state effectively forfeits the ability to supervise and regulate 'under-age' drinking. In other words, the rigidity of the law currently prevents the creation of relatively safe environments where young people may consume alcohol outside the home in circumstances where there is some supervision. Thought needs to be given to the design of such environments and possibly, by implication, to a more flexible minimum legal age at which alcohol can be bought. Finally in this regard, another change to current practice which should be considered as a way of reducing binge drinking concerns the time at which pubs and bars are generally forced to close. A more extended period in which alcohol can be consumed, it is argued, might lead to the promotion of more sensible forms of consumption.

Further research

A number of well established surveys provide snapshots of young people's use of alcohol, and there is, within the UK at least, a growing body of work which combines qualitative and quantitative

methods to explore the meanings that young people attach to drinking. While some of this research is based on a longitudinal design, we believe that there continues to be much mileage in such approaches. In terms of subjects which require further research we believe that the following areas should be prioritised:

- the ways in which styles of drinking vary with transitions into adulthood and the reasons for such changes
- the relationship between the use of alcohol and different illicit drugs by young people at different ages
- young people's motivations for apparently 'risky' drinking
- patterns of consumption, and attitudes to drinking, among young people from black and minority ethnic communities
- the extent to, and ways in, which alcohol is an indirect cause of death
- evaluations of situational and social prevention initiatives.

NOTES

Chapter 1

- 1 A variety of bibliographic databases were consulted including:
 - International Bibliography of the Social Sciences
 - Sociological Abstracts
 - Social Science Citation Index
 - ASSIA – Applied Social Science Index and Abstracts
 - PsycLIT – covers the international literature of psychology and the behavioural sciences
 - Medicus – a medical index
 - Geography, the database for geographical literature.

Chapter 2

- 1 The term illicit drugs should be read to include all drugs designated illegal for purposes of possession, use or trade according to various domestic laws and international agreements (South, 1997). It also includes substances such as amyl/butyl nitrate (poppers) and solvents which, although not illegal to use, are socially disapproved of. It does not, however, include alcohol or cigarettes.
- 2 Harrington (2000) defined frequent drinkers as those who had consumed alcohol at least once a week during the previous 12 months.

- 3 Measham (1996) reported on the first two stages of a longitudinal school survey. Stage one was administered in 1991 when respondents were aged 14–15 and stage two was administered in 1992 when they were 15–16.
- 4 Heavy drinkers were considered to be men who drink over 50 units a week and women who drink more than 35 units a week.
- 5 It is important to note that that many young drinkers gave more than one answer to the question of where they usually drank.
- 6 Defined as the consumption of 6 units or more for women and 8 units or more for men on a single occasion.
- 7 Heavy drinkers were considered to be men who drink over 50 units a week and women who drink more than 35 units a week.

Chapter 3

- 1 It is important to note that in most states in the USA the minimum legal age for possession and purchase of alcohol is 21. Consequently, such a finding may not be easily translatable to the UK situation.
- 2 The authors go on to make the very important point that by analysing such relationships within a population they may be missing important links at an individual level. Thus, 'while the results suggest that, on average, alcohol misuse makes relatively little or no contribution to rates of property offences and only moderate contributions to risks of violent

offences in 16 year olds, this finding does not preclude the possibility that in specific individuals the misuse of alcohol may make a major contribution to their offending behaviours' (1996, p. 493).

BIBLIOGRAPHY

- Abel, E.L. and Zeidenberg, P. (1985) 'Age, alcohol and violent death: a postmortem study', *Journal of Studies on Alcohol*, Vol. 46, pp. 228–31
- Advisory Council on the Misuse of Drugs (1998) *Drug Misuse and the Environment*. London: Home Office
- Alcohol Concern (2001a) 'More people "hooked" on alcohol than all other drugs', www.alcoholconcern.org.uk/Newsdesk/Newsroom_Intro.htm
- Alcohol Concern (2001b) *Factsheet 7: Young People and Alcohol*. www.alcoholconcern.org.uk/Information/Factsheets/Factsheet7.htm
- Alcohol Concern (2001c) *Factsheet 9: UK Drinking and Driving*. www.alcoholconcern.org.uk/Information/Factsheets/Factsheet9.htm
- Alcohol Concern (2001d) *Factsheet 18: Alcohol and Mortality*. www.alcoholconcern.org.uk/Information/Factsheets/Factsheet18.htm
- Alcohol Concern (2001e) *Factsheet 34: Alcohol and Mental Health*. www.alcoholconcern.org.uk/Information/Factsheets/Factsheet34.htm
- Alcohol Concern (2001f) *Factsheet 38: Damage to Health, Long Term Effects of Alcohol*. www.alcoholconcern.org.uk/Information/Factsheets/Factsheet38.htm
- Anderson, P., Cremona, A., Paton, A., Turner, C. and Wallace, P. (1993) 'The risk of alcohol', *Addiction*, Vol. 88, pp. 1493–508
- Andreasson, S., Allebeck, P. and Romelsjo, A. (1990) 'Hospital admissions for somatic care among young men: the role of alcohol', *British Journal of Addiction*, Vol. 85, pp. 935–41
- Andreasson, S., Romelsjo, A. and Allebeck, P. (1991) 'Alcohol, social factors and mortality among young men', *British Journal of Addiction*, Vol. 86, pp. 877–87
- Audit Commission (1996) *Misspent Youth: Young People and Crime*. London: Audit Commission
- Backett, K. and Davison, C. (1992) 'Rational or reasonable? Perceptions of health at different stages of life', *Health Education Journal*, Vol. 51, No. 2, pp. 55–9

- Balding, J. (1997) *Young People in 1996*. Exeter: Schools Health Education Unit, University of Exeter
- Barnes, G.M. and Welte, J.W. (1986) cited in Craig, J. (undated) *Almost Adult: Some Correlates of Alcohol, Tobacco and Illicit Drug Use among a Sample of 16 and 17 Year Olds in Northern Ireland*. Occasional Paper No. 3. Belfast: Northern Ireland Statistics and Research Agency
- Bean, P., Wilkinson, C., Whynes, D. and Giggs, J. (1988) 'Knowledge of drugs and consumption of alcohol among Nottingham 15 year olds', *Health Education Journal*, Vol. 47, pp. 79–82
- Brain, K. and Parker, H. (1997) *Drinking with Design: Alcopops, Designer Drinks and Youth Culture*. London: Portman Group
- Brain, K., Parker, H. and Carnwath, T. (2000) 'Drinking with design: young drinkers as psychoactive consumers', *Drugs: Education, Prevention and Policy*, Vol. 7, No. 1, pp. 5–20
- Brannen, J., Dodd, K., Oakley, A. and Storey, P. (1994) *Young People, Health and Family Life*. Buckingham: Open University Press
- Cochrane, R. (1989) *Drinking Problems in Minority Ethnic Groups*. Birmingham: University of Birmingham School of Psychology
- Coffield, F. and Goften, L. (1994) *Drugs and Young People*. London: Institute for Public Policy Research
- Coggans, N. and McKellar, S. (1994) 'Drug use among peers: peer pressure or peer preference', *Drugs, Education, Policy and Practice*, Vol. 1, No. 1, pp. 15–25
- Coggans, N. and McKellar, S. (1995) *The Facts about Alcohol, Aggression and Adolescence*. London: Cassell
- Coid, J. (1982) 'Alcoholism and violence', *Drug and Alcohol Dependence*, Vol. 9, No. 1, pp. 1–13
- Collin, M. with Godfrey, J. (1997) *Altered State: The Story of Ecstasy Culture and Acid House*. London: Serpent's Tail
- Cookson, H.M. (1992) 'Alcohol use and offence type in young offenders', *British Journal of Criminology*, Vol. 32, No. 3, pp. 352–60
- Craig, J. (undated) *Almost Adult: Some Correlates of Alcohol, Tobacco and Illicit Drug Use among a Sample of 16 and 17 Year Olds in Northern Ireland*. NISRA Occasional Paper, No. 3. Belfast: Northern Ireland Statistics and Research Agency
- Craig, J., Francis, D. and McWhirter, L. (1991) *Smoking and Drinking Amongst 11–15 Year Olds in Northern Ireland in 1990*. Belfast: HMSO

- Davies, J.B. (1992) 'Peer group influence and youthful alcohol consumption: an opinion', in *Alcohol and Young People: Learning to Cope*, Proceedings of Addictions Forum, Alcohol Research Group Conference, October 1992. London: The Portman Group
- Denscombe, M. (1995) 'Ethnic group and alcohol consumption: the case of 15–16 year olds in Leicestershire', *Public Health*, Vol. 109, pp. 133–42
- Department of Health (1995) *Sensible Drinking: The Report of an Inter-Departmental Working Group*. London: Department of Health
- Department of Health and Social Services for Northern Ireland (1989) *Drinking among School Children in Northern Ireland*. Belfast: DHSS
- Deykin, D., Buka, S. and Zeena, T. (1992) 'Depressive illness among chemically dependent adolescents', *American Journal of Psychiatry*, Vol. 149, pp. 1341–7
- Diamond, I., Pritchard, C., Choudry, N., Fielding, M., Cox, M. and Bushnell, D. (1988) 'The incidence of drug and solvent misuse among southern English normal comprehensive schoolchildren', *Public Health*, Vol. 102, pp. 107–14
- Donovan, C. and McEwan, R. (1995) 'A review of the literature examining the relationship between alcohol use and HIV-related sexual risk-taking in young people', *Addiction*, Vol. 90, pp. 319–28
- Dorn, N. (1983) *Alcohol, Youth and the State*. Oxford: Croom Helm
- Farrington, D.F. (1995) 'The development of offending and antisocial behaviour from childhood: key findings from the Cambridge Study in Delinquent Development', *Journal of Child Psychology and Psychiatry*, Vol. 30, pp. 369–74
- Farrington, D.F. (1996) 'Explaining the link between problem drinking and delinquency', *Addiction*, Vol. 91, No. 4, pp. 498–501
- Ferguson, D.M. and Lynskey, M.T. (1995) 'Alcohol misuse and adolescent sexual behaviours and risk taking', *Pediatrics*, Vol. 98, No. 1, pp. 91–6
- Ferguson, D.M., Lynskey, M.T. and Horwood, J. (1996) 'Alcohol misuse and juvenile offending in adolescence', *Addiction*, Vol. 91, No. 4, pp. 483–94
- Flood-Page, C., Campbell, S., Harrington, V. and Miller, J. (2000) *Youth Crime: Findings from the 1998/99 Youth Lifestyle Survey*. London: Home Office
- Forsyth, A. and Barnard, M. (2000) 'Preferred drinking locations of Scottish adolescents', *Health and Place*, Vol. 6, No. 2, pp. 105–15
- Forsyth, A., Barnard, M. and McKeganey, N.P. (1997) 'Alcopop Supernova: are alcoholic lemonades (alcopops) responsible for under-age drunkenness?', *International Journal of Health Education*, Vol. 35, No. 2, pp. 53–8

- Foxcroft, D. and Lowe, G. (1991) 'Adolescent drinking behaviour and family socialisation factors: a meta analysis', *Journal of Adolescence*, Vol. 14, pp. 255–73
- Foxcroft, D.R. and Lowe, G. (1997) 'Adolescents' alcohol use and misuse: the socializing influence of perceived family life', *Drugs: Education, Prevention and Policy*, Vol. 4, No. 3, pp. 215–29
- Foxcroft, D., Lowe, G. and Lister-Sharp, D.J. (1995) 'Teenage drinking: a four year comparative study', *Alcohol and Alcoholism*, Vol. 30, No. 6, pp. 713–19
- Ghodsian, M. and Power, C. (1987) 'Alcohol consumption between the ages of 16 and 23 in Britain: a longitudinal study', *British Journal of Addiction*, Vol. 82, pp. 175–80
- Ghosh, S.K. (1984) 'Prevalence of drinking alcohol and alcohol dependence in the Asian population in the UK', in Krasner, S.J., Maddon, J.S. and Walker, R.J. (eds) *Alcohol Related Problems: Room for Manoeuvre*. Chichester: Wiley
- Goddard, E. (1991) *Drinking in England and Wales in the late 1980s*. London: HMSO
- Goddard, E. (1996) *Teenage Drinking in 1994*. London: HMSO
- Goddard, E. (1997a) *Young Teenagers and Alcohol in 1996, Volume 1*. England, Office for National Statistics. London: The Stationery Office
- Goddard, E. (1997b) *Young Teenagers and Alcohol in 1996, Volume 2*. Scotland, Office for National Statistics. London: The Stationery Office
- Goddard, E. (1998) *Young Teenagers and Alcohol in 1997*. London: The Stationery Office
- Goddard, E. (2000a) *Drinking in England and Wales in the Late 1980s*. London: HMSO
- Goddard, E. (2000b) 'Drinking among young teenagers', *Acquire: Alcohol Concern's Quarterly Information Research Bulletin*, Winter/Spring, No. 25, pp. 1–2
- Goddard, E. and Higgins, V. (1999) *Smoking, Drinking and Drug Use among Young Teenagers in 1998, Volume 1*, England 1999. London: The Stationery Office
- Goddard, E. and Higgins, V. (2000) *Smoking, Drinking and Drug Use among Young Teenagers in 1999, Volume 1*, England 1999. London: The Stationery Office
- Gofton, L. (1990) 'On the town: drink and the new lawlessness', *Youth and Policy*, Vol. 29, pp. 33–9
- Graham, J. and Bowling, B. (1998) *Young People and Crime*. London: Home Office

- Graves, K.L. (1995) 'Risky sexual behaviour and alcohol use among young adults: results from a national survey', *American Journal of Health Promotion*, Vol. 10, No. 1, pp. 27–36
- Griffin, C. (1993) *Representations of Youth: The Study of Youth and Adolescence in Britain and America*. Cambridge: Polity Press
- Hagell, A. and Newburn, T. (1994) *Persistent Young Offenders*. London: Policy Studies Institute
- Harnett, R., Thom, B., Herring, R. and Kelly, M. (1999) 'Alcohol in transition: towards a model of young men's drinking styles', *Journal of Youth Studies*, Vol. 3, No. 1, pp. 61–77
- Harnett, R., Herring, R., Thom, B. and Kelly, M. (2000) 'Rapid communication: exploring young men's drinking using the AUDIT questionnaire', *Alcohol and Alcoholism*, Vol. 34, No. 5, pp. 672–7
- Harrington, V. (2000) *Underage Drinking: Findings from the 1998–99 Youth Lifestyles Survey*. Research Findings, No. 125. London: Home Office
- Hawkins, D., Arthur, M. and Catalano, R. (1995) 'Preventing substance abuse', in Tonry, M. and Farrington, D. (eds) *Building a Safer Society: Strategic Approaches to Crime Prevention*. Chicago: University of Chicago Press
- Hawton, K., Fagg, J., Platt, S. and Hawkins, M. (1993) 'Factors associated with suicide after parasuicide in young people', *British Medical Journal*, Vol. 306, pp. 1641–4
- Hayden, D. (1995) *Young People and Alcohol-related Incidents*. Executive summary, No.45. London: Centre for Research on Drugs and Health Behaviour
- Health Education Authority/MORI (1992) *Tomorrow's Young Adults*. London: HEA
- Health Education Authority and Alcohol Concern (undated) *Say When...How Much is Too Much?* London: HEA and Alcohol Concern
- Hindelang, M., Gottfredson, M. and Garaflo, J. (1978) *Victims of Personal Crime: An Empirical Foundation for a Theory of Personal Victimization*. Cambridge, MA: Ballinger Publishing Company
- Hingson, R. and Howland, J. (1993) 'Alcohol and non-traffic unintended injuries', *Addiction*, Vol. 88, pp. 877–83
- Hingson, R., Strunin, L., Berlin, B. and Heeren, T. (1990) 'Beliefs about AIDS, use of alcohol, drugs and unprotected sex among Massachusetts adolescents', *American Journal of Public Health*, Vol. 80, pp. 295–9
- Honess, T., Seymour, L. and Webster, R. (2000) *The Social Contexts of Underage Drinking*. London: Home Office

- Hughes, K., MacKintosh, A.M., Hastings, G. and Wheeler, C. (1997) 'Young people, alcohol and designer drinks: quantitative and qualitative study', *British Medical Journal*, Vol. 314, pp. 414–18
- Hutchison, I.L., Magennis, P., Shepherd, J.P. and Brown, A.E. (1998) 'The BAOMS United Kingdom Survey of Facial Injuries. Part 1: Aetiology and the association with alcohol consumption', *British Journal of Oral and Maxillofacial Surgery*, Vol. 36, pp. 3–13
- Ianotti, R.J., Bush, P.J. and Weinfurt, K.P. (1996) 'Perception of friends' use of alcohol, cigarettes and marijuana among urban schoolchildren: a longitudinal analysis', *Addictive Behaviours*, Vol. 21, No. 5, pp. 615–32
- ICAP (1997) 'The limits of binge drinking: ICAP Reports 2', *Alcohol Update*, Vol. 32, pp. 8–10. Glasgow: Scottish Council on Alcohol
- Johnson, V. and White, H.R. (1989) 'An investigation of factors related to intoxicated driving behaviours among youth', *Journal of Studies on Alcohol*, Vol. 50, No. 4, pp. 320–30
- Karlsen, S., Rogers, A. and McCarthy, M. (1998) 'Social environment and substance misuse: a study of ethnic variations among inner London adolescents', *Ethnicity and Health*, Vol. 3, No. 4, pp. 265–73
- Klein, H. and Pittman, J. (1993) 'The relationship between emotional state and alcohol consumption', *International Journal of Addictions*, Vol. 28, pp. 47–61
- Komro, K.A., Williams, C.L., Forster, J.L., Perry, C.L., Farbaksh, K. and Stigler, M.H. (1999) 'The relationship between adolescent alcohol use and delinquent and violent behaviours', *Journal of Child and Adolescent Substance Abuse*, Vol. 9, No. 2, pp. 13–28
- Lader, D. and Matheson, J. (1991) *Smoking among Secondary School Children in 1990*. London: HMSO
- Lister-Sharp, D. (1994) 'Underage drinking in the United Kingdom since 1970: public policy, the law and adolescent drinking behaviour', *Alcohol and Alcoholism*, Vol. 29, No. 5, pp. 555–63
- Little, R. and Clontz, K. (1994) 'Young, drunk, dangerous and driving: underage drinking and driving research findings', *Journal of Alcohol and Drug Education*, Vol. 39, No. 2, pp. 37–49
- Lloyd, C. (1998) 'risk factors for problem drug use', *Drugs, Prevention and Policy*, Vol. 5, No. 3, pp. 217–32
- Loretto, W.A. (1994) 'Youthful drinking in Northern Ireland and Scotland: preliminary results from a comparative study', *Drugs: Education, Prevention and Policy*, Vol. 1, No. 2, pp. 143–52
- Lowe, G., Foxcroft, D.R. and Sibley, D. (1993) *Adolescent Drinking and Family Life*. Reading: Harwood Academic Press

- MacDonald, D. and Blume, S. (1986) 'Children of alcoholics', *American Journal of Diseases of Children*, Vol. 140, pp. 750–4
- Marsh, A., Dobbs, J. and White, A. (1986) *Adolescent Drinking*. London: HMSO
- Marsh, P. and Fox Kibby, K. (1992) *Drinking and Public Disorder*. Oxford: MCM Research
- Mathrani, S. (1998) *Young Drinkers: a Qualitative Study*. Report to the HEA, based on research by Research Works Ltd. London: HEA
- May, C. (1992) 'A burning issue? adolescent alcohol use in Britain 1970–1991', *Alcohol and Alcoholism*, Vol. 27, No. 2, pp. 109–15
- Mayhew, P., Elliott, D. and Dowds, L. (1989) *The 1988 British Crime Survey*. London: HMSO
- McEwan, R., McCallum, T., Bhopal, R. and Madhok, R. (1991) 'Sex and the risk of HIV infection: the role of alcohol', *British Journal of Addiction*, Vol. 87, 577–84
- McGuffin, S. (1979) 'Drinking patterns of young people in Northern Ireland', *Ulster Medical Journal*, Vol. 48, No. 2, pp. 26–30
- McKechnie, R., Cameron, D., Cameron, I. and Drewery, J. (1977) 'Teenage drinking in South West Scotland', *British Journal of Addiction*, Vol. 72, pp. 287–295
- McKeganey, N. and Norrie, J. (1999) 'Pre-teen drug users in Scotland', *Addiction Research*, Vol. 7, No. 6, pp. 493–507
- McMurrin, M. and Hollin, C. (1989) 'Drinking and delinquency: another look at young offenders and alcohol', *British Journal of Criminology*, Vol. 29, No. 4, pp. 386–94
- Measham, F. (1996) 'The "Big Bang" approach to sessional drinking: changing patterns of alcohol consumption among young people in North West England', *Addiction Research*, Vol. 4, No. 3, pp. 283–99
- Measham, F., Newcombe, R. and Parker, H. (1994) 'The normalisation of recreational drug use amongst young people in the north west of England', *British Journal of Sociology*, Vol. 45, No. 2, pp. 287–312
- Meikle, J. (2001) 'Binge drinking: Britain's new epidemic?', *Guardian*, 19 February, p. 3
- Meltzer, H., Gill, B. and Pettigrew, M. (1995) *The Prevalence of Psychiatric Morbidity among Adults Aged 16–64 Living in Private Households in Great Britain*. London: Office of Population and Census Surveys
- Merikanges, K.R. (1990) 'The genetic epidemiology of alcoholism', *Psychological Medicine*, Vol. 20, pp. 11–22

- Miller, P.M. and Plant, M. (1996) 'Drinking, smoking and illicit drug use among 15–16 year olds in the United Kingdom', *British Medical Journal*, Vol. 31, pp. 394–7
- Mirlees-Black, C., Mayhew, P. and Percy, A. (1996) *The 1996 British Crime Survey*. London: Home Office
- Modood, T., Berthoud, R., Lakey, J., Nazroo, J., Patten Smith., Virdee, S. and Beishon, S. (1997) *Ethnic Minorities in Britain: Diversity and Disadvantage*. London: Policy Studies Institute
- Moore, L., Smith, C. and Catford, J. (1994) 'Binge drinking: prevalence patterns and policy', *Health Education Research*, Vol. 9, No. 4, pp. 447–505
- Moore, M.H. (1995) 'Public health and criminal justice approaches to prevention', in Tonry, M. and Farrington, D. (eds) *Building a Safer Society: Strategic Approaches to Crime Prevention*. Chicago: University of Chicago Press
- Muncie, J. (2000) *Youth and Crime*. London: Sage
- NHS Health Advisory Service (1996) *The Substance of Young Needs: Children and Young People*. London: HMSO
- Newcombe, R., Measham, F. and Parker, H. (1995) 'A survey of drinking and deviant behaviour among 14/15 year olds in North West England', *Addiction Research*, Vol. 2, No. 4, pp. 319–41
- Nordberg, L., Rydelius, P. and Zetterstrom, R. (1993) 'Children of alcoholic parents: health, growth, mental development and psychopathology until school age', *Acta Paediatrica Supplement*, Vol. 387, pp. 1–24
- O'Connor, M., Sigman, M. and Brill, N. (1987) 'Disorganisation of attachment in relation to maternal alcohol consumption', *Journal of Consulting and Clinical Psychology*, Vol. 55, pp. 831–6
- Office for National Statistics (1996) *The 1996 General Household Survey*. London: HMSO
- Office of Population and Census Surveys (1995) *Health Survey for England 1993*. London: HMSO
- Oliver, J. (1985) 'Successive generations of child maltreatment: social and medical disorders in the parents', *British Journal of Psychiatry*, Vol. 147, pp. 484–90
- Orford, J. (1985) *Excessive Appetites: A Psychological View of Addictions*. Chichester: John Wiley & Sons
- Orford, J. (1990) 'Alcohol and the family', in Koslowski, L.T. et al. (eds) *Research Advances in Alcohol and Drug Problems*. New York: Plenum, pp. 81–155

- Pape, H. and Hammer, T. (1996) 'Sober adolescence: predictor of psychosocial maladjustment in young adulthood?', *Scandinavian Journal of Psychology*, Vol. 37, No. 4, pp. 362–77
- Parker, H. (1996) 'Young adult offenders, alcohol and criminological cul-de-sacs', *British Journal of Criminology*, Vol. 36, No. 2, pp. 282–98
- Parker, H., Aldridge, J. and Measham, F. (1997) *Illegal Leisure: The Normalization of Adolescent Recreational Drug Use*. London: Routledge
- Parker, H., Aldridge, J. and Measham, F. (1998) *Illegal Leisure: The Normalization of Adolescent Recreational Drug Use*. London: Routledge
- Pavis, S., Cunningham-Burley, S. and Amos, A. (1997) 'Alcohol consumption and young people: exploring meaning and social context', *Health Education Research*, Vol. 12, No. 3, pp. 311–22
- Pedersen, W. and Kolstad, A. (2000) 'Adolescent alcohol abstainers: traditional patterns in new groups', *Acta Sociologica*, Vol. 43, No. 3, pp. 219–34
- Persson, J. and Magnusson, P-H. (1987) 'Prevalence of excessive or problem drinkers among patients attending somatic outpatient clinics: a study of alcohol-related medical care', *British Medical Journal*, Vol. 295, pp. 467–72
- Pickens, R.W., Svikis, D.S., Cgue, M. and Lykken, D.T (1991) 'Heterogeneity in the inheritance of alcoholism: a study of male and female twins', *Archives of General Psychiatry*, Vol. 48, pp. 19–28
- Plant, M., Bagnall, G. and Foster, D. (1990) 'Teenage heavy drinkers: alcohol related knowledge, beliefs, experiences, motivation and the social context of drinking', *Alcohol and Alcoholism*, Vol. 25, No. 6, pp. 691–8
- Plant, M., Peck, D. and Samuel, E. (1985) *Alcohol, Drugs and School-Leavers*. London: Tavistock
- Plant, M. and Plant, M. (1992) *Risk Takers: Alcohol, Drugs, Sex and Youth*. London: Routledge
- Power, C. (1992) 'Drinking careers: lifestyles and life circumstances', in *Alcohol and Young People: Learning to Cope*, Proceedings of Addictions Forum, Alcohol Research Group Conference, October 1992. London: The Portman Group
- Prescott-Clarke, P. and Primatesta, P. (1997) *Health Survey for England 1995*. London: The Stationery Office
- Rachel, J.V., Williams, J.R., Brehm, M.L. and Cavanaugh, B. (1975) *A National Study of Adolescent Drinking Behaviour, Attitudes and Correlates: Final Report*. Springfield, Virginia: NTIS
- Ramsay, M. and Spiller, J. (1997) *Drug Misuse Declared: Results of the 1996 British Crime Survey*. London: Home Office

- Rhodes, T. and Stimpson, G. (1994) 'What is the relationship between drug taking and sexual risk?', *Sociology of Health and Illness*, Vol. 6, No. 2, pp. 209–28
- Roberts, C., Blakey, V. and Tudor-Smith, C. (1997) *The Impact of Alcopops on the Drinking Patterns of Young People in Wales*. Findings from the 1996 Welsh Youth Health Survey, Briefing Report Number 12. Cardiff: Health Promotion Wales
- Robertson, J. and Plant, M. (1988) 'Alcohol, sex and risk of HIV infection', *Drug and Alcohol Dependence*, Vol. 22, pp. 75–8
- Rossow, I., Pape, H. and Wichstrom, L. (1999) 'Young, wet and wild? Associations between alcohol intoxication and violent behaviour in adolescence', *Addiction*, Vol. 94, No. 7, pp. 1017–31
- Rowlands, O. (1998) 'Experiences of and Attitudes Towards Intoxication among People Aged 16 and Over in England'. Unpublished report. London: HEA
- Royal College of Physicians and the British Paediatric Association (1995) *Alcohol and the Young: Report of a Joint Working Party of the Royal College of Physicians and the British Paediatric Association*. London: Royal College of Physicians
- Royal College of Psychiatrists/Royal College of Physicians (2000) *Drugs: Dilemmas and Choices*. London: Gaskell
- Rutter, M. and Smith, D.J. (1995) *Psychosocial Disorders in Young People: Time Trends and their Causes*. Chichester: Wiley
- Rutter, M., Giller, H. and Hagell, A. (1998) *Antisocial Behaviour by Young People*. Cambridge: Cambridge University Press
- Sabey, B. and Coding, P. (1975) 'Alcohol and road accidents in Great Britain', in Israelstam, S. and Lamber, S. (eds) *Alcohol, Drugs and Road Safety*. Toronto: Addiction Research Foundation
- Scott, J. (1992) cited in Wright, L. (1999) *Young People and Alcohol: What 11 to 24 Year Olds Know, Think and Do*. London: Health Education Authority
- Sharp, D. and Lowe, G. (1989) 'Adolescents and alcohol – a review of the recent British research', *Journal of Adolescence*, Vol. 12, pp. 295–307
- Shepherd, J. (1996) 'Significant connections', *Addictions*, Vol. 91, No. 4, pp. 501–2
- Shepherd, J. and Brickley, M. (1996) 'The relationship between alcohol intoxication, stressors and injury in urban violence', *British Journal of Criminology*, Vol. 36, No. 4, pp. 546–66
- Shepherd, J., Robinson, L. and Levers, B. (1990) 'The roots of urban violence', *Injury*, Vol. 21, pp. 139–42

- Shiner, M. and Newburn, T. (1997) 'Definitely, maybe not: the normalisation of recreational drug use amongst young people', *Sociology*, Vol. 31, No. 3, pp. 511–29
- Shiner, M. and Newburn, T. (1999) 'Taking tea with Noel: the place and meaning of drug use in everyday life', in South, N. (ed.) *Drugs: Cultures, Controls and Everyday Life*. London: Sage, pp. 140–59
- Smith, I. (1990) 'Alcohol and crime: the problem in Australia', in Bluglass, R. and Bowden, P. (eds) *Principles and Practice of Forensic Psychiatry*. Edinburgh: Churchill Livingstone
- Snow, R.W. and Cunningham, O. (1985) 'Age, machismo, and the drinking locations of drunken drivers: a research note', *Deviant Behaviour*, Vol. 6, pp. 57–66
- South, N. (1997) 'Drugs: use, in crime and control', in Maguire, M., Morgan, R. and Reiner, R. (eds) *The Oxford Handbook of Criminology*, 2nd edition. Oxford: Clarendon, pp. 925–60.
- Stall, R. (1988) 'The prevention of HIV infection associated with drug and alcohol use during sexual activity', *Advances in Alcohol and Substance Abuse*, Vol. 7, pp. 73–88
- Sutherland, I. and Willner, P. (1998) 'Patterns of alcohol, cigarette and illicit drug use in English adolescents', *Addiction*, Vol. 98, No. 8, pp. 1199–208
- The Police Foundation (2000) *Report of the Independent Inquiry into the Misuse of Drugs Act 1971*. London: The Police Foundation
- Tubman, J. and Langer, L. (1995) "'About last night": the social ecology of sexual behaviour relative to alcohol use among adolescents and young adults in substance abuse treatment', *Journal of Substance Abuse*, Vol. 7, No. 4, pp. 449–61
- Tuck, M. (1989) *Drinking and Disorder*. Home Office Research Study 108. London: Home Office
- Turtle, J., Jones, A. and Hickman, M. (1997) *Young People and Health: the Health Behaviour of School Age Children*. London: HEA/BMRB
- von Knorring, A-L. (1991) 'Children of alcoholics', *Journal of Child Psychology and Psychiatry*, Vol. 154, pp. 677–82
- Ward, J. (1998) 'Opportunities for research: changing youth transitions – new risks and vulnerabilities', *Drugs: Education, Prevention and Policy*, Vol. 5, No. 1, pp. 105–8
- West, M. and Prinz, R. (1987) 'Parental alcoholism and childhood psychopathology', *Psychological Bulletin*, Vol. 102, pp. 214–18
- White, H.R. and Hansell, S. (1998) 'Acute and long-term effects of drug use on aggression from adolescence into adulthood', *Journal of Drug Issues*, Vol. 28, No. 4, pp. 837–58

- White, H. and Labouvie, E. (1989) 'Towards the assessment of adolescent problem drinking', *Journal of Studies on Alcohol*, Vol. 50, pp. 30–7
- White, H., Brick, J. and Hansell, S. (1993a) 'A longitudinal investigation of alcohol use and aggression in adolescence', *Journal of Studies on Alcohol*, Vol. 11, pp. 62–77
- White, H., Hansell, S. and Brick, J. (1993b) 'Alcohol use and aggression among youth', *Alcohol, Health and Research World*, Vol. 17, No. 2, pp. 144–50
- Wiklund, N. and Lidberg, L. (1990) 'Alcohol as a causal criminogenic factor: the Scandinavian experience', in Bluglass, R. and Bowden, P. (eds) *Principles and Practice of Forensic Psychiatry*. Edinburgh: Churchill Livingstone
- Wiley, J.A. and Weisner, C. (1995) 'Drinking in violent and nonviolent events leading to arrest: evidence from a survey of arrestees', *Journal of Criminal Justice*, Vol. 23, No. 5, pp. 461–76
- Wright, L. (1999) *Young People and Alcohol: What 11 to 24 Year Olds Know, Think and Do*. London: Health Education Authority
- Yamaguchi, K. and Kandel, D. (1984) 'Patterns of drug use from adolescence to young adulthood: sequences of progression', *American Journal of Public Health*, Vol. 74, pp. 668–72
- Yates, D.W. (1987) 'The detection of problem drinkers in the accident and emergency department', *British Journal of Addiction*, Vol. 82, pp. 163–7

