



# Unlawful driving behaviour: A criminological perspective

by Claire Corbett and Frances Simon  
(Brunel University)

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TRANSPORT RESEARCH LABORATORY  
Department of Transport



**Contractor Report 301**

**UNLAWFUL DRIVING BEHAVIOUR: A CRIMINOLOGICAL PERSPECTIVE**

by Claire Corbett and Frances Simon  
(Centre for Criminal Justice Research, Department of Law, Brunel University)

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Transport Research Laboratory  
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Crowthorne, Berkshire RG11 6AU

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## CHAPTER 1: INTRODUCTION

### 1. OBJECTIVES OF THE STUDY

This report presents and discusses the findings of a two-year study carried out by the authors at Brunel University in 1989-90. Its overall objective was to point to ideas which, indirectly at least, might pave the way towards enhancing road safety and reducing accidents. More specifically, our main aims as criminologists were to broaden knowledge about the extent of unlawful driving behaviour and the nature of its links with accidents, and to explore the reasons and motivations drivers express for engaging in various forms of lawbreaking on some occasions and for adhering to the law at other times.

A special focus has been the role of cognition and of social influences in decisions whether to break the traffic laws. We wished to gain an understanding of the offender's viewpoint and of his or her perceptions of the opportunities, costs and benefits of lawbreaking on the roads, and an appreciation of the social influences and pressures that may affect a motorist's habitual driving style. Such knowledge might contribute significantly to road safety and to the prevention of crime. Linking in with this theme, another of our aims was to discover whether any distinction could be drawn, in terms of cognitive and social factors, between traffic offenders who have accidents and those who do not.

### 2. PROBLEMS OF MEASUREMENT

#### (a) Accidents

Road traffic accidents are a major cause of death in western countries, and as human error contributes to the vast majority of them (see, for example, Storie 1977), research has proliferated over the last three decades in the hunt for their causes and correlates. But despite the high proportion of deaths which are linked to them, road accidents are a rare phenomenon. It has been estimated that an individual driver's chance of involvement in an injury accident is once in 57 years, and that lifetime risk of involvement in a fatal accident is about one in 80 (Forsyth and Silcock 1987). A study by Quimby et al (1986) showed that an individual driver's annual risk of a damage or injury accident is 0.3. Further, Peck, McBride and Coppin (1971) concluded that 'the accident population is largely composed of different drivers from year to year'.

In addition to being rare events accidents have multiple causes, occurring as the result of complex interactions. This means that any relationship between an individual driver's accident liability and other variables of interest will be largely hidden by what appears to be random error, making it difficult to uncover such links. These problems have been discussed in detail by Peck et al (1971) and Maycock (1985) and we look at them again in Chapter 6.

Investigators, however, have not been deterred by such difficulties from seeking the correlates and causes of accidents. A variety of methodologies have been adopted, including aggregate statistical studies from records (e.g. Peck et al 1971; Jones and Everest 1987; Forsyth and Silcock 1987; Broughton 1988); observational studies (Quenault and Harvey 1971); and self-report techniques involving the administration of driving-related attitude and personality questionnaires (McGuire 1976; Mayer and Treat 1977; Miller and Schuster 1983; Los Angeles Alcohol Research Centre 1987; West, French and Elander 1991; Donovan, Marlatt and Salzburg 1983 for a review). Combinations of these methods are sometimes used to offset the limitations of each (Agent 1978; Clayton, McCarthy and Breen 1980; Wilson and Greensmith 1983; Risser 1985). Information on accidents has usually been taken from official records, despite the fact that many non-injury accidents are not recorded, but some researchers have used self-

report data on accidents, either alone (e.g Parry 1968) or to supplement records (Schuster 1968).

Results in general have been mixed, and it is not our purpose to review them here. However, one finding relevant to our discussion is that measures of traffic violations have been consistently shown to have associations, though low, with accident rate (Peck et al 1971; Goldstein 1972).

#### **(b) Offending**

Most studies have measured lawbreaking on the road by traffic convictions (violations), either taking them direct from official records or asking drivers to disclose their own. But this has several disadvantages. First, the extent of the association typically found between accidents and traffic convictions may be questionable since the latter often arise from the former. Few studies have taken account of this, but Peck et al (1971) found a reduced (though still significant) correlation when this spurious association was controlled. Second, enforcement policies may vary considerably between and within countries (see, for example, US Department of Transportation Annual Highways Statistics), adding unreliability to the criterion when measured by the number of traffic convictions. Third, official records of convictions may contain inaccuracies (as we found in the present study).

The alternative is to ask drivers to estimate how often and how seriously they typically break various traffic laws. The self-report method, of course, has its own drawbacks which we address more fully in Chapter 2, but it may provide a more satisfactory and stable base than official convictions on which to measure unlawful driving behaviour. Research has shown that an individual's driving style is relatively stable over time (Wasielewski 1984) and place (Utzelmann 1976), and if drivers are willing to describe their behaviour this can be good information for analysis in relation to their accidents.

The use of self-report to study habitual law-breaking has focused most on drink-driving (e.g. Clayton et al 1980, 1984; Snortum, Hauge and Berger 1986; Everest and Jones 1988; Sabey, Everest and Forsyth 1988), and a little on speeding (e.g. Utzelmann 1976). Some studies, like our own, have surveyed a wider range of unlawful actions. Biecheler-Fretel and her colleagues in France (Biecheler-Fretel 1989) have used self-report data on a variety of offences to describe 'basic driving behaviour', relate it to accidents and convictions, and to infer drivers' social norms and attitudes to traffic laws. Reason and colleagues at Manchester University (e.g. Baxter 1989, Reason et al 1990) have also used self-report data to search for the correlates of errors and violations on the road and to assess the relationship between these and accident risk.

However, while the work of Biecheler-Fretel and of Reason in particular shares some features with our study, we had other purposes too. From our perspective as criminologists a study of unlawful driving behaviour was of interest in its own right, and presented a challenge. As unlawful driving appears to be a widespread activity (see, for example, Lex 1989, 1991), and much of it carries less stigma than non-traffic crime, we had the opportunity to question people in relative freedom about their participation in it. We could enquire not only about past and present behaviour but also about future offending, which is a much under-researched area. And because rates of detection and enforcement are low, we could study offenders before they were apprehended and processed by the criminal justice system, instead of concentrating on events after apprehension which is the usual diet of criminologists.

### **3. THE IMPORTANCE OF COGNITIVE AND SOCIAL FACTORS**

In carrying out this study we have focused on some of the cognitive and social factors involved. In so doing, we hope to have scratched beneath the surface of unlawful driving



behaviour to discover what kinds of meaning offending has for drivers, what are the effects of social and legal constraints on offending, and what motivations drivers have for offending on some occasions and refraining at other times.

We feel that reasons for desisting from lawbreaking are important. The effectiveness of external controls on traffic offending in the shape of police enforcement is limited by constraints on manpower. From what we know of deterrence in practice, the effects tend to be short-lived unless several costly conditions are maintained, such as a high, visible and continued police presence (Homel 1988; Cairney and Carseldine 1989). Reinforcement of internal controls against offending may therefore be worth pursuing in the endeavour to improve road safety (see Layzell 1984 for further discussion). Internal controls may be represented in the beliefs, attitudes, values and perceptions that drivers bring to the driving situation, and information about these could make a useful contribution to driver education. A general means of exploring these beliefs and attitudes is to ask drivers their reasons and motivations for keeping and/or breaking the laws, and this is one of the matters addressed in our study.

In addition to cognitive factors that may play a role in drivers' decisions about traffic laws, recent attention has turned to social factors that influence driver behaviour (see Knapper and Cropley 1981 for a review). As driving is an activity taking place in a social environment (which some drivers see as an extension of every day social life: Knapper and Cropley 1978) we felt it was important to discover what kinds of external social influences affect drivers' decisions to offend or not to offend. The wider cultural context in which driving is located undoubtedly plays a part in shaping motorists' habits (see, for example, Gusfield, Kotarba and Rasumssen 1981; Gusfield 1985), but in this study we have focused on more personal social influences on traffic offending.

#### 4. OVERVIEW OF THE RESEARCH

Our research included three main stages, of which the first comprised the completion of a self-administered questionnaire by 535 drivers. Their chief task was to decide how well each of a number of cognitive and social reasons explained their behaviour in regard to three actions: speeding, driving with excess alcohol, and running red lights. Drivers who had previously been disqualified were also asked, in similar fashion, to explain their decisions about driving during their ban. All drivers were asked to estimate the frequency with which they engaged in various other traffic offences.

The second stage involved 98 depth interviews with sub-samples of respondents to the questionnaire. While there may be a statistical correlation between traffic offending and accident liability, it is common experience that many high offenders deny, and many low offenders admit to, having had accidents. The bulk of our interview sample comprised four groups of drivers who were either 'high' or 'low' offenders and who had either 'high' or 'low' accident rates. The remainder were drivers who had previously been disqualified. *Inter alia* we explored whether there were any features which distinguished these groups and their styles of driving in terms of cognitive and social factors.

The third stage consisted of two studies designed to examine drivers' motivations shortly before, or shortly after, they had engaged in an offending activity. The first involved brief interviews with over 300 drivers who were drinking in pubs, some of whom expected to be over the legal alcohol limit on departure. The second comprised short roadside interviews with 110 drivers who had just been stopped by police for exceeding speed limits.

Other samples of drivers took part in the study for other purposes and these will be described in Chapter 2.

We have composed the report around a framework of several themes, and for each one we pool findings from various parts of the study.

Tables summarising our main quantitative findings are included in Chapters 3-6. Additional tables giving the results in more detail are available on personal request to TRL.

## CHAPTER 2: METHODOLOGY AND SAMPLES USED

In total, more than 1100 drivers participated in the research by providing information through questionnaires and interviews. There were several samples and stages, and we shall now describe these (not in chronological order) and other aspects of the methods used.

### 1. POSTAL SURVEYS

#### (a) Main sample

Much of our statistical data comes from a postal questionnaire survey of 457 drivers drawn from the TRL database of motorists willing to help with research. Six hundred and fifty were targeted, comprising 250 who had told TRL in 1987/88 that they had had at least two accidents in the preceding three years, and 400 who said they had had none. These two groups were also selected to ensure substantial representation of both males and females and of both young (under 25 years)<sup>1</sup> and older drivers; within these strata the groups were chosen at random. The 457 respondents were 75% of those apparently still available (i.e. excluding people who had moved away, died, or were no longer driving); the response rate varied little with gender or accident history, but was lower for younger drivers (68%) than older ones (83%).

The questionnaire covered several areas of interest, as follows:

(i) Self-reported offending: Drivers were asked how often (on a five-point scale) they engaged in each of 26 items of behaviour. Twenty-five of these had been chosen to represent, as far as possible, various categories of unlawful driving (speeding, disregarding traffic signs, drink-driving, driving with a defective vehicle or inadequate documentation, illegal parking, and driving with active disregard of others' safety), and a range within each category. (The 26th was driving while disqualified, which was relevant to only a few of the sample and which was used separately later.) For most items the question referred to the respondent's current driving habits; for a few the respondent was asked 'on how many days during the past three years have you.....'.<sup>2</sup>

(ii) Reasons for offending and for not offending: Three actions were selected from the 26: driving over 40 mph in a 30 mph area, driving when over the blood alcohol limit, and driving (at a junction) through traffic lights that had just turned red. For each of these actions the questionnaire offered a list of reasons why drivers might engage in it on some occasions and another list why they might refrain from it at other times, and the respondent was asked to say how well (on a four-point scale)<sup>3</sup> each reason explained his/her own behaviour. The lists, each comprising between 18 and 27 items, represented a 'broad brush' approach to enquire into drivers' motives and intentions, concentrating

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1. When originally surveyed by TRL this group had included some drivers aged 17, but none were younger than 18 at the time of our study. For convenience, we refer throughout to the youngest age groups in our samples as the 18-20 or 18-24 year olds.

2. Table 3.1 lists the 25 items, though not in the same order as they appeared on the questionnaire. The five possible responses to 'how often do you.....' were : never; only rarely; sometimes; usually; nearly always. The five possible responses to 'on how many days in the last three years have you... ' were : none; 1-5; 6-10; 11-30; 31 days or more.

3. The four possible responses were: very well; fairly well; a little bit; not at all/it does not apply/I disagree with the statement.

mainly on cognitive and social factors, and including a few personality factors.

(iii) Self-reported accidents, mainly during the three-year period from autumn 1986 to autumn 1989.

(iv) Motoring and non-motoring convictions during the same period.

(v) Driving experience: number of years on the road, annual mileage, type of vehicle driven, etc. and also how the respondent had learned to drive.

(vi) Socio-demographic and other data - age, gender, occupation etc.

Some basic characteristics describing the sample (as revealed by their questionnaire responses) are set out in Table 2.1. Briefly, 47% were female; 48% were under 25 and 15% were 55 or over; 30% were in professional or managerial occupations and 14% were unskilled or students; 28% had less than four years of driving experience and 20% had 20 years or more; 29% had driven less than 5000 miles in the past year and 13% had driven 20,000 or more. Fifty-four per cent said they had had no accidents in the three years immediately before our survey, 26% had had one, and 20% two or more.

**Table 2.1: Basic characteristics of the main survey sample**

<b>Gender</b> (N = 457)	<b>Male</b> %	<b>Female</b> %					
	53	47					
<b>Age</b> (N = 457)	<b>17-20</b> %	<b>21-24</b> %	<b>25-34</b> %	<b>35-44</b> %	<b>45-54</b> %	<b>55-64</b> %	<b>65 + yrs</b> %
	25	23	18	12	8	7	8
<b>Socio-economic status</b> (N = 448)	<b>I, II</b> <b>professional/ managerial</b> %	<b>III n</b> <b>skilled non-manual</b> %	<b>III m</b> <b>skilled manual</b> %	<b>IV</b> <b>semi- skilled</b> %	<b>V</b> <b>unskilled/ students</b> %		
	30	27	23	5	14		
<b>Years of driving experience</b> (N = 453)	<b>1-3</b> %	<b>4-9</b> %	<b>10-19</b> %	<b>20+ yrs</b> %			
	28	34	18	20			
<b>Mileage last year</b> (N = 446)	<b>1,000- 4,999</b> %	<b>5,000- 9,999</b> %	<b>10,000- 14,999</b> %	<b>15,000- 19,999</b> %	<b>20,000 + miles</b> %		
	29	23	25	11	13		
<b>No. of accidents in 3 years since autumn 1986</b> (N = 445)	<b>None</b> %	<b>One</b> %	<b>Two</b> %	<b>Three + accidents</b> %			
	54	26	13	7			

## **(b) Disqualified drivers sample**

To study drivers who might be considered as being at the 'heavy end' of traffic offending, postal questionnaires were sent to 300 motorists who had experienced a period of disqualification but had since had their licences restored. These people came from a random list of formerly disqualified drivers provided by DVLC through TRL. We chose the 300 to include males and females, under 25 and over, whose disqualifications had been for up to 24 months and had ended between July 1988 and February 1989. Seventy-eight (31% of those apparently still available) responded. For brevity we refer to them as the 'disqualified drivers' sample, although all were legally back on the road at the time of the study.<sup>1</sup>

The questionnaire for these drivers was the same as for the main survey, with an additional section on the respondent's experience of disqualification. This mainly asked how often (if at all) he/she had driven during the ban, and what were the reasons for driving and for not driving. Two lists of reasons were offered, on similar lines to those already described.

Fifty-one of the 78 had been banned for driving with excess alcohol (for periods of 12 to 24 months); 14 for speeding (up to two months); and the others for various offences (e.g. careless driving) or as a result of 'totting-up' (one to 24 months). Compared with the main sample the disqualified differed in several ways. Only nine were female and only one was aged over 55; fewer of the disqualified were at the extremes of the range of driving experience, and on average they drove slightly higher mileages. Half of them had had an accident in the last three years.

Most analyses of the survey data kept the main and disqualified samples separate. In reporting the findings in the following chapters we normally refer to the main sample, and then bring in the disqualified to compare or add to it. Chapter 5, on deterrence, makes extensive use of the disqualified sample.

## **(c) Pre-pilot sample**

In order to help develop our postal questionnaire and construct measures of unlawful driving behaviour, 150 licence-holders, randomly sampled by the DVLC, were approached. Eighty-two (62% of those apparently available) responded to our request for assistance. The respondents slightly under represented females and the middle of the age range, but in analysis the data were weighted so that in respect to gender and age the sample can be regarded as representative of the driving public.

Their chief task was to rate the seriousness, on an 11-point scale, of the 26 offences to be used in the main and disqualified drivers' surveys, and from their answers we constructed a scale of seriousness and an offending score (see below). They also suggested some of the reasons for offending. Ratings of offence seriousness made by the pre-pilot sample were also compared with those made by two other groups: traffic police and respondents to our in-depth interviews.

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1. The rather disappointing response rate may have had several causes. Perhaps formerly disqualified drivers are less willing than others to participate in road safety research which asks about their own driving. The length of the questionnaire may also have contributed to their reluctance; that sent to the disqualified sample had four extra pages, and several of those who did respond commented on its length, whereas only one main sample driver did so in regard to the shorter version.

#### **(d) Pilot sample**

The questionnaire for the main sample was tested by being sent to 60 drivers from the TRL database who had reported having had one accident (in the three years preceding the TRL survey). Seventy-two per cent responded, resulting in minor amendments to the questionnaire.

#### **(e) Sample of traffic police officers**

As a separate exercise 112 officers from two police forces rated the 26 offences for seriousness in the same way as the pre-pilot sample. This enabled us to compare police and public perceptions of the seriousness of breaches of traffic law. The results have been reported in detail elsewhere (Corbett and Simon 1991).

## **2. MEASURING OFFENDING AND ACCIDENTS**

### **(a) Offending**

An offending score was devised which rested on two bases: the seriousness scale of 25 offences (excluding driving while disqualified) gained from the pre-pilot, and the frequencies with which respondents in the main sample said they committed them. The 25 items were boiled down to 12 from an examination of their mean ratings, loadings in a factor analysis, opportunities for committing each, and frequencies in the main sample. Each driver's score was a weighted sum combining seriousness points with his/her frequencies for the offences admitted.

The offending score featured in many statistical analyses, and was often used by dividing it into three ranges: low, medium and high, each containing one third of the respondents in the main sample. The high and low offenders are often contrasted in our findings, as described in the following chapters. Other analyses used all 25 offences or various subsets of them, and chief among these was a speeding score which combined the frequencies of the six speeding items. This also was divided into three ranges of low, medium and high, and many of our results contrast the high and low speeders thus defined.

### **(b) Accidents**

The number of accidents a driver had had in the three years before our survey was found, perhaps not surprisingly, to be correlated with mileage driven (in the last year). In calculating each respondent's accident rate we took this into account, and also the degree of responsibility admitted (for up to three accidents). The resulting rate, expressing the number of accidents per 100,000 miles, averaged over three years and weighted by responsibility, was the chief measure used in statistical analyses, and for many purposes it was divided into three ranges: low (zero), medium and high. The low and high groups were used with the low and high offending scores to define the four extreme types of drivers selected for interview (see below).

## **3. IN-DEPTH INTERVIEWS**

In order to explore drivers' behaviour and opinions more deeply than the postal questionnaire allowed we held long semi-structured interviews with selected respondents from the main and disqualified driver samples. Among the chief topics were:

- (i) His/her attitude to traffic rules; differences between offending on and off the road; self-comparison with other drivers;

- (ii) Speeding;
- (iii) Drink-driving;
- (iv) (for the disqualified sample only) The experience of disqualification;
- (v) Details of accidents (up to three).

At the end of the interview the respondent was asked to complete the following:

- (a) Seriousness ratings of the 12 actions contributing to the offending score, in the same way as in the pre-pilot and police samples;
- (b) A short questionnaire based on the concept of locus of control (the extent to which a person feels in control of events) and referring specifically to road accidents (Montag and Comrey 1987).<sup>1</sup>

Ninety-eight interviews were carried out. Interviewees were chosen from the main and disqualified driver samples rather differently, as follows:

**(a) Main sample**

One question originally prompting the research was: although some link is expected between traffic offences and accidents, why do some offending drivers avoid accidents, and why do some law-abiding drivers have them? With this in mind we used the offending score and accident rate to select four extreme groups for interview. Type 1 comprised those with high offending scores and low accident rates; Type 2 had high offending and high accidents; Type 3 low offending and low accidents; Type 4 low offending and high accidents. Approaches to 95 such drivers in the main sample yielded 66 interviewees. Excluding some who had apparently gone away, this gave a response rate of 75%. Seventeen were of Type 1, 15 of Type 2, 21 of Type 3, and 13 of Type 4.

Later chapters will describe differences between the four types. Here we will say that the interviewees were equally divided by gender (33 males and 33 females). Forty-four per cent were aged under 25 while 20% were over 54. Twenty-six per cent had less than three years' driving experience since passing their test, and a similar proportion had been driving for 20 years or more. Thirty-nine per cent had driven less than 5000 miles in the last year but only three per cent had driven more than 20,000 miles. Not surprisingly, these characteristics resembled fairly well those of the larger survey sample from which they were taken.

**(b) Disqualified drivers sample**

Thirty-two of the formerly disqualified drivers were interviewed, 57 having been approached. (This represented a response rate of 63%, excluding six who had gone away.) They were chosen more or less randomly, though it turned out that three were of Type 1, seven of Type 2, one of Type 3, one of Type 4, with the others not in these extremes. Compared with the main sample of interviewees, a similar proportion (44%) were aged under 25, although none was older than 54. Considerably fewer (nine per cent) were female. On average they had driven much further in the past year (only 16% had

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1. Respondents were also asked about their experiences of stress on and off the road, and were invited to complete Broadbent's 'Cognitive Failures Questionnaire' (Broadbent et al 1982) as a possible indicator of vulnerability to stress. Our findings on stress and its links with accidents will be reported elsewhere.

driven less than 5000 miles), and fewer (nine per cent) had less than three years' driving experience. Twenty had been banned for drink-driving, six for speeding, and six for other reasons including 'totting up'. Like the main sample of interviewees, these characteristics of formerly disqualified interviewees reflected quite closely those of the larger survey sample.

For many analyses of the interview data the five groups (main sample Types 1 to 4, and the disqualified sample) were at first examined separately. In drawing on the findings in the following chapters we contrast high and low offenders, those with high and low accident rates, and the main and disqualified samples, when this is appropriate. When the results showed no difference between the interview groups we discuss them together. Throughout this report, unless the context implies otherwise we use 'high' and 'low' (in connection with offending or accident rates) to refer to the extreme ranges of our measures.

#### 4. TWO OBSERVATIONAL STUDIES

What drivers told us in the postal questionnaires and in-depth interviews was mainly an account of their general motoring habits and experience, given to us retrospectively away from the actual situation. To learn more about decisions in their immediate context we mounted two small on-the-spot studies, of drivers stopped by the police for speeding, and of drivers drinking in public houses. These were not pure observational studies because the data still largely comprised what informants said to us in short interviews, but it was gathered immediately before or after their decision whether or not to break the law, and we observed the natural surroundings in which the decision was made.

##### (a) Speeding study

With the co-operation of traffic officers in one police force, we held short interviews with drivers who had just been stopped for speeding. These were carried out on several weekdays at various times between 0730 and 1800 hrs. Six sites were used: a dual carriageway resembling a motorway, four miles from a large town, with a speed limit of 70 mph, and five sites all of which had a 30 mph limit but which varied in road width and proximity to the town centre. The procedure was that the officers stopped and dealt with speeders according to their normal practice, the researchers observing the stop but keeping out of earshot. The police then asked the drivers if they would be willing to speak with a researcher for a few moments, it being emphasised that there was no obligation to do so and that it would make no difference to the case. Eighty-five per cent agreed, yielding a sample of 110 (47 in the 70 mph area and 63 where the limit was 30 mph).

Our questions were on the following topics:

- (i) The respondent's reasons for exceeding the speed limit on this occasion, and whether the journey was in connection with his/her work;
- (ii) Reactions to being stopped by the police, and whether the experience would affect his/her choice of speed in future;
- (iii) How often he/she exceeded the speed limit by more than 10mph;
- (iv) Whether he/she believed there was any link between speeding and the risk of accidents.

We also noted the driver's sex and approximate age, the presence or absence of passengers, the make and age of the vehicle, speed when stopped, and the action taken by the police (informal warning, fixed penalty notice, or report for prosecution). These



particulars were also noted for 19 drivers who refused to be interviewed.

The 110 respondents comprised 82 men and 27 women, ranging in age from late teens to over 60. The majority were in ordinary saloon cars, and most had been driving at between 10 and 20 mph above the limit when stopped. In many respects, including their main reasons for speeding, they resembled those drivers in the main postal sample who had high speeding scores, except that a much smaller proportion (about 20%) were aged under 25. (This was natural, since the postal sample had deliberately over-represented young drivers). The 19 refusers, all but one of whom said they were in too much of a hurry to grant an interview, were similar to the respondents in sex and age. Their speeds when stopped were slightly higher, and far more of them were driving high performance or powerful cars.

#### **(b) Pub study**

This was a prospective study of pub patrons' decisions about drinking and driving. With the co-operation of four major breweries and of landlords, we visited public houses in five Home Counties, preferring ones with well-occupied car parks but otherwise making no special selection. Visits took place either at lunchtime or in the evening, though few were at weekends. We asked patrons who appeared to be drinking alcohol whether they had driven to the pub, and if so whether they would spare a few minutes to help with research on driving. Of more than 300 drivers approached, fewer than 10 refused.

Initial screening questions resulted in a sample of 252 drivers in three groups: 26 who were not drinking any alcohol, 153 who were and who intended or hoped to be under the legal blood alcohol limit when driving away afterwards, and 73 who thought they would or might be over the limit but said they would nevertheless drive. Groups 2 and 3 were asked, not how much alcohol they would drink (which we thought might be considered offensive or produce unreliable answers), but how much they thought they could drink and still be (a) fit to drive and (b) below the limit. Both were asked the reasons for their decision (staying under or driving when over), and further questions to Group 3 explored their perceptions of the risk of having an accident or being caught driving with excess alcohol, and what measures would deter them.

The total sample of 252 comprised 223 men and 29 women, ranging in apparent age from late teens to pensioners, though most were in the middle ranges of adulthood. When (on reasons for their decisions) Group 2 patrons were compared with survey respondents who said they drank alcohol but never drove when over the limit, and Group 3 were compared with survey respondents who admitted sometimes drink-driving, the pub patrons on average appeared to be rather more hardened drinkers. The principal findings of this study have been reported elsewhere (Corbett, Simon and Hyde 1991) and are drawn on at various points in this report.

## **5. SOME COMMENTS ON THE METHODS**

### **(a) The use of self-reported information**

The whole study depends heavily on what drivers themselves told us about their offending behaviour on the road and their experience of accidents. We have already mentioned in Chapter 1 some reasons for measuring offending by self-report data rather than traffic convictions: the spurious link between convictions and accidents, variation in enforcement producing unreliability in the criterion, and inaccuracies in records. We wished to obtain as full a picture as possible of our respondents' unlawful driving behaviour, and if we had relied on convictions to measure it the data would have been so skimpy as to be practically useless. The great majority of respondents told us that they broke traffic laws in one way or another. But only 57 out of the 457 in the main sample said they had been convicted of a motoring offence in the last three years, and only 17 of those 57 appeared in DVLC

records of convictions.<sup>1</sup> In Chapter 3 we present comparisons between the convicted and the unconvicted which bear out the inadequacy of using convictions, or the sentence of disqualification, as indicators of unlawful driving behaviour.

The use of self-report data is well established in criminological research. Hirschi, Hindelang and Weis (1980), reviewing the use of self-report to measure the extent of delinquency, conclude that it has a respectable place among other measures and that the reliability of self-report instruments is generally acceptable. Self-reporting is of course essential if one wishes to ask people about their motives and reasons for offending, as, for example, Bennett and Wright (1984) did with burglars. This was a prime objective in our study. We also thought that because breaking traffic laws carries less social stigma than many other kinds of offending, drivers would be encouraged to be frank (and we were very careful to assure them of confidentiality).

Nevertheless it is probable that our respondents under-reported their more serious offences. Locander, Seymour and Bradburn (1976) found that the more socially undesirable an action, the more it was subject to response distortion in self-report measures. Sabey, Everest and Forsyth (1988) in their roadside surveys of drinking and driving, found that motorists with higher blood-alcohol levels were very likely to understate the amount they had drunk. In our postal questionnaires only 23% of the sample of disqualified drivers admitted having driven during their ban, but admissions elicited in interviews raised this figure to 34% among interviewees, which is consistent with studies in USA and Canada suggesting that there the proportion may be about one in three (Robinson and Smiley 1987, Duncan et al 1990).

We did not test reliability directly. But it was encouraging to find that the sample of drivers apprehended in the speeding study were quite like those drivers in the main sample who told us that they exceeded the speed limits often or by large amounts, and that impressions from the pub study reinforced, roughly speaking, those from the main sample about drink-driving.

In regard to accidents, again self-report provided fuller data than would have been obtainable from records. Accidents not causing injury (i.e. the majority) are not usually recorded by the police, and it was not possible to use insurance records. If respondents were willing to be fairly frank about their offending there was no reason to think they would be less so about their accidents (and, as we report in Chapter 6 when discussing responsibility for accidents, we found some evidence to justify this faith). We did find, from comparing TRL data with our own and from comparing questionnaire responses with interviews, discrepancies which suggested that some accidents had been forgotten or dates misremembered, and where possible we used cross-checks to fill in gaps. The fact that our accident data showed the same kinds of relationship with other variables (e.g. age and gender) as have been found in other studies gives some ground for confidence.

The study could not have been undertaken without self-report data. It does not tell the whole story, but we believe it goes a useful part of the way towards describing drivers' patterns of behaviour and their reasons for it, which was one of our chief aims.

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1. The convictions of some of the 57 would not have been on DVLC records because their licences had not been endorsed. But others - e.g. for careless driving - should have been. The discrepancy in the other direction was much smaller; four people appeared in the records as convicted who told us they had not been. One of these said he was employed in public relations!

**(b) A note of caution**

Despite the foregoing, it would be unwise to conclude that our findings can be unreservedly generalised to the whole motoring population. In various ways the samples were unrepresentative of drivers in general. The main sample for the postal survey, though originating in a random selection of drivers from DVLC records, had (by the time we obtained it) been 'filtered' through several stages of 'willingness to participate in research'; moreover, it was deliberately stratified in such a way as to over-represent young drivers and those who had had accidents. The main in-depth interview sample was further selected from it to include only drivers at the extremes of offending and accident rates. The disqualified drivers sample included only people who had been recently disqualified - for short or moderate periods - and were now back on the road, and their response rate for the postal survey was only 31%. The pre-pilot sample probably was fairly representative of the motoring public. The speeding sample was collected around just one town and excluded late night drivers. The pub sample was confined to the Home Counties, and very few patrons were interviewed at weekends when the number of (detected) drink-driving offences is highest (Broughton 1986). And all the samples excluded motor cyclists.

In stratified samples multivariate statistical relationships become distorted, especially if the dependent variable (e.g. accident rate) has been used for stratification. Such problems are examined in Chapter 6, but we must say here that tests of statistical significance cannot be used to make inferences from our samples to the general population of drivers, and in most tables we have omitted them. Nevertheless the various samples between them offer much information about driving behaviour, and this is an exploratory study whose purpose is to suggest lines for further research.

## CHAPTER 3: THE NATURE, EXTENT, AND PERCEIVED SERIOUSNESS OF UNLAWFUL DRIVING BEHAVIOUR

### 1. HOW MUCH UNLAWFUL DRIVING BEHAVIOUR IS THERE, AND OF WHAT DOES IT CONSIST?

The impression formed by many drivers that some breaches of traffic rules are widespread has recently been confirmed by research. For instance, a survey by Lex/MORI (1989) found that 65% of drivers admitted having broken a speed limit within the previous six months. But some breaches are much less frequent: only six per cent of the Lex/MORI respondents had driven an unsafe vehicle, and five per cent had driven when over the legal blood-alcohol limit during the same period. Viewing the matter from another angle, Sabey, Everest & Forsyth (1988) found that less than two per cent of drivers tested in roadside surveys were over the legal blood-alcohol limit.

These and other studies have tended to focus exclusively on one or just a few unlawful actions. Our intention, in contrast, was to produce a more rounded picture of the incidence of a variety of types of traffic offence among different groups of drivers. We achieved this through having our main postal sample describe their driving habits by saying how often they did any of 25<sup>1</sup> actions listed in the questionnaire. Interestingly, only one per cent denied ever doing any of them. Table 3.1 shows the proportions who admitted doing each 'sometimes' or more often. Not unexpectedly, speeding offences were the commonest: at the top of the table is driving between 31 and 40 mph within a 30 mph area, admitted by 88%. Near the middle are (e.g.) overtaking on the left (12%) and running red lights (seven per cent), while the least frequent is 'driving when you think you are over the legal blood-alcohol limit and feel your ability is affected for the worse' (0.1%).

Importantly, the fact that the main sample over-represented drivers who had had accidents does not explain the frequencies of offending shown in Table 3.1. Among those who had had no accidents in three years, 82%, for example, admitted driving between 31 and 40 mph in a 30 mph area at least sometimes, 34% admitted driving between 81 and 90 mph on a motorway, and at the other end of the scale three per cent admitted not giving way to traffic on a major road. So although the sample is not fully typical of the population of drivers it is enough to indicate that some offences are common, and to provide plenty of material for an exploratory study.

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1. Driving while disqualified has been omitted from consideration here, and is discussed in Chapter 5.

**Table 3.1 : Incidence of traffic offending among survey respondents**

N = 457 main survey respondents

Offence	Label	% admitting at least "sometimes"
Driving between 31 & 40 mph in a 30 mph area	TO40	88.0
Driving between 71 & 80 mph on a motorway	TO80	71.5
Driving between 41 & 50 mph in a 30 mph area	TO50	49.2
Driving between 81 & 90 mph on a motorway	TO90	43.8
At a junction, driving through amber lights when there is time to stop	AMBER	37.3
Parking on single yellow lines during a prohibited period	SINGLE	30.2
Overtaking, crossing into a hatched white line area to do so	HATCH	22.7
Driving over 90 mph on a motorway	OVER90	18.8
Driving over 50 mph in a 30 mph area	OVER50	16.8
Failing to use a direction "indicator" signal when you should	SIGNALS	16.6
Parking on double yellow lines	DOUBLE	13.8
Driving a vehicle knowing the tyres are defective	TYRES <sup>1</sup>	13.1
Overtaking on the left hand side of moving traffic on a dual carriageway or motorway (in this country)	LEFTHAND	12.3
Driving a vehicle knowing it is not road taxed	ROADTAX <sup>1</sup>	10.9
Driving a vehicle knowing the lights are defective	LIGHTS <sup>1</sup>	9.2
Driving a vehicle knowing it does not have an MOT	MOT <sup>1</sup>	8.8
At a junction, driving through traffic lights that have just turned red	RED	7.4

(continued)

**Table 3.1 (continued)**

<b>Offence</b>	<b>Label</b>	<b>% admitting at least "sometimes"</b>
Driving a vehicle knowing the brakes are defective	BRAKES <sup>1</sup>	5.5
Overtaking, crossing continuous double white lines to do so	OVERLINE	4.0
Driving over a zebra crossing when a pedestrian is just starting to cross	ZEBRA	3.9
Driving a vehicle knowing you are not insured to drive it	INSURED <sup>1</sup>	3.3
Driving when you think you are over the legal blood-alcohol limit but feel your ability is not affected	ALCOK	2.8
Pulling out from a side road without giving way to traffic on the major road	GIVEWAY	2.6
Turning right when a sign indicates "no right turn"	NORIGHT	2.2
Driving when you think you are over the legal blood-alcohol limit and feel your ability is affected for the worse	ALCWORSE	0.1

**Note**

1. For these six offences the percentage is of respondents who said they had done it on six or more days in the last three years.

A factor analysis of the frequencies, to see which offences might cluster together, produced the results shown in Table 3.2. Seven factors emerged which accounted for 57% of the variance: between them they described (roughly speaking) speeding on motorways, speeding/failing to stop in built-up areas, vehicle maintenance and documentation offences, drink-driving, parking and signal offences, failing to observe road signs, and illegal overtaking. Motorway speeding was much the largest (explaining 23% of the variance). Since the 25 offences were originally chosen to represent different kinds of unlawful driving behaviour the clusters are not surprising, but the prominence of motorway speeding is noteworthy.

Speeding behaviour receives particular attention at various points in this report. So does drink-driving, which 22% of the main sample admitted doing although most of them said they did it 'only rarely'. Another piece of evidence on the frequency of this offence comes from the pub study: from interviews with patrons, among whom we would expect drinking drivers to be more concentrated, we made a rough estimate that between a quarter and a half of alcohol-drinkers who drive away from pubs are likely to be over the legal limit, which is a rather worrying finding (see Corbett, Simon and Hyde 1991).

**Table 3.2 : Factor analysis of offence frequencies**

N = 457 main survey respondents

Factor	Offences	Possible name	% of variance explained
1	TO80 TO90 OVER90	Speeding on motorways	23.3
2	TO40 TO50 OVER50 AMBER RED ZEBRA LEFTHAND	Speeding/failing to stop in built-up areas	7.8
3	TYRES LIGHTS BRAKES MOT INSURED ROADTAX	Vehicle maintenance and documentation offences	6.4
4	ALCWORSE ALCOK	Drink-driving	6.1
5	DOUBLE SINGLE SIGNALS	Parking and signal offences	5.2
6	GIVEWAY NORIGHT	Failing to observe road signs	4.5
7	OVERLINE HATCH	Illegal overtaking	4.2
			57.4%

## 2. WHO DOES IT?

### (a) The general picture

Other studies have consistently found that traffic offending generally is more frequent among men than women, and declines with increasing age (e.g. Lex/MORI 1989 (self-reported offences); Broughton 1986 (recorded offences); Harrington and McBride 1970 (recorded offences in USA)). Our main sample produced similar results, while also showing that offending is not confined to any particular group of drivers. Breaking the 30 mph limit, for example, was admitted 'sometimes' or more often by 93% of respondents under 25 years old but also by 65% of those aged 55 and over; overtaking on the left was admitted by 15% of men but also by nine per cent of women.

With most of the 25 offences there was an overall decline in frequency as drivers' ages increased (the exceptions being giving way to traffic on a major road, overtaking on the left, neglecting MOT, and drink-driving, which all showed little relationship with age in the sample as a whole). For several offences there was a relationship with gender: men were more likely than women to speed on motorways, overtake illegally, park illegally, drive when over the alcohol limit, drive with defective lights or tyres, and neglect MOT and road tax. Among men by themselves there was a strong tendency for the younger ones more often to commit all the speeding offences, run amber lights, cross double white lines when overtaking, and park illegally; young women gave a partly similar picture, though they were less likely to drive at the highest levels of excessive speed. We found that drink-driving was commoner among men aged 25-54 than among their younger or older counterparts, while Sabey et al (1988), whose roadside surveys were carried out at night, found it most frequent among men aged 25-29.

Summarising the behaviour of our main sample respondents by means of their offending scores, and comparing groups defined by age, gender and other background variables, we found the following:

Offending score decreased with age, and within each age-group (17-24, 25-54, 55+) males had higher scores than females.

There was no relationship between offending score and socio-economic status.

There was a positive correlation between offending score and mileage driven in the last year.

Respondents with less than 10 years' driving experience had higher offending scores than those with 10 or more (this would be largely correlated with the age relationship).

Drivers living in large cities had higher scores than those living in small towns or villages, but offending score was unrelated to the types of roads (motorway, built-up areas, rural) on which the respondent had done most driving in the last year.

Offending score was slightly related to the type of vehicle normally driven. Groups of drivers in order of offending score from highest to lowest were those driving: (1) 'souped-up' and ordinary sports cars (highest); (2) 'upmarket' sports, saloons and estate cars; (3) ordinary saloons; (4) small saloons (less than 1050 cc) (lowest). Offending was slightly related to engine size, drivers of bigger engines having higher scores, but it was unrelated to the age of the vehicle.

A multiple regression analysis of 341 cases from the main sample, attempting to 'predict' offending score by using the relationships summarised above, produced an equation incorporating age, gender, and the size of the driver's home community. It accounted for 23% of the variance, but was probably overfitted to its particular sample. Nevertheless, the importance of age and gender as predictor variables of traffic offending is highlighted.

#### **(b) Characteristics of high speeders**

In the main sample we noticed a general trend for high speeding scorers to be most likely, medium scorers to be next likely, and low speeding scorers to be least likely to commit any of the other kinds of offence: for example, 27% of high speeders, but only three per cent of low speeders, admitted driving with defective tyres. This suggests that speed choice may be linked with the propensity to commit other kinds of offence, a point taken up in the next section of this chapter.



There was also a trend across the three groups on some background variables describing themselves and their driving. High speeders were the most likely to be young, male, and in full-time work. They had less experience than other drivers (38% of high speeders, 30% of medium, and 18% of low speeders had been driving for less than four years) and they were more likely than the others to drive sports or 'souped-up' cars (though a majority of each speed group drove ordinary saloons). More high speeders drove cars with engines of at least 1600 cc and fewer of them drove vehicles over eight years old. High speeders drove higher mileages and included more people who did much of their driving on motorways. These characteristics of the three speeding groups were echoed in our disqualified driver sample, although there was a much lower link between speeding and age. The disqualified sample also included more high speeders who were experienced drivers and in professional or managerial jobs.

Our findings on the characteristics associated with speeding are consistent with those of other studies. For example, the Lex survey (1991) found that drivers who believed it acceptable to break the speed limit on motorways were more likely than others to be young, male, and driving vehicles with larger engines. Almost three-quarters of young single males in the Lex sample believed that motorway speeding was acceptable, and so did 68% of company car drivers.

In our roadside speeding study, drivers of 'souped-up', sports or upmarket cars were on average going faster than others who were stopped, and included many of those who said they were in too much of a hurry to talk to us. Among drivers interviewed, the most frequent speeders were more likely than others to say that this experience of being stopped would not affect their choice of speed in future, and they were also more likely to deny any general link between speeding and accident risk, a topic which is taken up in Chapter 4. While the speeding study sample was too small for complex analysis, it did give a clear impression that high speeders include a 'hard core' of deliberate and persistent offenders.

#### **(c) Characteristics of drink-drivers**

Drivers in the main and disqualified samples who admitted ever driving while over the alcohol limit were more apt than those who denied this activity to offend in other ways, especially in speeding, running red lights, making prohibited right turns, parking illegally, and neglecting MOT and insurance. However, on background variables which described themselves and their driving there were few features that distinguished between them and other respondents. More of the drink-drivers were men, though not necessarily young ones; and on average they drove higher mileages and had more powerful cars, which may reflect the gender difference. Thus while drink-drivers were more likely to engage in other unlawful actions than those who refrained, they were otherwise unremarkable.

This profile of drink-drivers is largely confirmed by Sabey et al's (1988) survey of drivers on the road at night, which found that those over the legal blood-alcohol limit were more likely to be male, aged 20-29, skilled manual workers, and people who had been drinking in pubs. Nevertheless, possibly unlike other drivers, 44% of them thought they could drink more than five units and still drive safely; this result is broadly comparable with the proportions of drink-drivers in our study who were confident of their fitness to drive.

#### **(d) Characteristics of red-runners**

Consistent with our picture of high speeders and drink-drivers, we found that drivers who admitted driving through red lights were also more likely than other respondents to commit other offences. Like the high speeders more of them were male, young, and in full-time work, and they drove somewhat higher mileages, more on motorways and had less driving experience. But, unlike high speeding, there was little or no correlation between red-running and the type, age, or engine size of vehicle driven.

### 3. ARE PREVIOUSLY DISQUALIFIED DRIVERS MORE LIKELY TO OFFEND THAN OTHER GROUPS?

Drivers who had been disqualified were included in our study as possibly representing the 'heavy end' of traffic offenders. But it must be remembered that our sample was not typical: it excluded those with very long disqualifications, and comprised only people who had been back on the road for about 18-22 months and who were willing to answer our questions.

When the 78 drivers in the disqualified sample were compared with the main respondents, the disqualified appeared to offend more frequently in certain ways: motorway speeding, illegal parking, defective tyres, and the failure to obtain an MOT, road tax and insurance. Because the disqualified were nearly all men under 55 we compared such people with their counterparts in the main sample, in two age groups (18-24 and 25-54), on the eight offences which most distinguished between the whole samples. Despite small numbers, the results suggest clear differences. With motorway speeding, the disqualified showed in both age groups the high frequencies which characterised the younger drivers in the main sample. With illegal parking, lack of road tax, MOT, and (especially) insurance the younger disqualified drivers offended more than any other group. With defective tyres there was a difference across both dimensions: the disqualified offended more than the main sample and (independently) younger drivers offended more than older ones. Thus younger disqualified drivers tended in general ways to offend more than any other group, while older disqualified drivers differed from the non-disqualified chiefly in speeding more on motorways.

When the disqualified were sorted according to the reason for their disqualification - drink-driving, speeding, or other matters (including 'totting-up') - it was found that though these three groups differed little in many offences, the 'speeders' had the highest speeding scores, and the 'other' group were highest on offences involving parking, tyres, MOT, road tax and insurance. The 'drink-drivers' were unremarkable, nor did their rate of alcohol offences exceed that of the main sample. Chapter 5 will examine the topic of disqualification more closely, but here we may say that the comparison just described suggests the following. Drivers disqualified for speeding continued to speed, even at more mature ages when other drivers were slowing down. Drivers disqualified for other non-alcohol offences were still inclined to offend in relation to parking and the condition and documentation of their vehicles, though (like other drivers) less so as they grew older. Drivers disqualified for drink-driving were, once they got their licences back, no more likely to drink-drive, speed or offend in other ways than the main sample generally.

A further comparison was made by re-sorting the main and disqualified samples together, taking account of offending scores, convictions since September 1986, and five people in the main sample who had also been disqualified. The total were divided into five categories: (1) unconvicted, low offending score (129 drivers); (2) unconvicted, medium offending score (125); (3) unconvicted, high offending score (114); (4) convicted but not disqualified (53); and (5) disqualified (83). Table 3.3 compares these groups on offending score, and shows that groups (4) and (5) differ little from each other and that the average offending scores of both lie between those of groups (2) and (3).

Clearly, in the samples used in this study, formerly disqualified drivers were not wholly at the 'heavy end' of unlawful driving behaviour. This is interesting since symbolically, convicted and/or disqualified drivers might be considered to be the 'worst' offenders. One interpretation of this finding is that official convictions and the sentence of disqualification are not necessarily the best measures of unlawful driving behaviour. Habitual breaches that escape detection are an alternative and probably more stable index of unlawful driving.

**Table 3.3 : Five categories of driver  
(main and disqualified samples together)  
compared on offending score**

	Category	N	Offending Score	
			mean	median
(1)	Unconvicted, low offending score	129	29.9	31.2
(2)	Unconvicted, medium offending score	125	62.1	61.8
(3)	Unconvicted, high offending score	114	104.1	97.7
(4)	Convicted but not disqualified	53	80.9	78.1
(5)	Disqualified	83	74.1	71.8

**Notes**

1. Convictions and disqualifications refer to the period since September 1986.
2. The definitions of low, medium and high offending scores are the same as for the main sample.
3. Because a few values of offending score are extremely high it is preferable to compare medians rather than means. Mann-Whitney tests show that, as would appear from the Table, groups (4) and (5) differ little from each other, and that they lie between (2) and (3) and differ significantly from both.

**4. PERCEPTIONS OF THE SERIOUSNESS OF TRAFFIC OFFENCES AMONG VARIOUS SAMPLES OF DRIVERS**

Having surveyed the extent of unlawful driving behaviour and what kinds of drivers are responsible for it, we now examine how seriously different samples of our drivers rated these offences.

Data on seriousness can be used for a number of purposes, most notably to assess public consensus, to assist indirectly in making policy changes, and sometimes, as Levi and Jones (1985) suggest, to justify them. (However, to use seriousness data in this latter way is perhaps a little suspect, requiring an inferential leap: mere measures of public perceptions of seriousness do not necessarily mean that the public desires some change to be made.) Our initial purpose was, as explained in Chapter 2, to assist in constructing an 'offending score' for each respondent to our questionnaire. The results were interesting in their own right, but they also presented us with the opportunity to make comparisons with seriousness ratings obtained from other groups of drivers. Altogether we obtained ratings from four samples: the public, in the shape of the pre-pilot sample; traffic police; and interviewees in the main and disqualified samples, for whom we also had information on their levels of offending.

**(a) Comparisons between different offending groups, and with the public<sup>1</sup>**

Our interviewees were requested to rate only 12 of the 26 offences - those used to construct the offending score. Four groups of drivers were studied: the public, the main sample interviewees divided into those with high and low offending scores, and the disqualified interviewees. Apart from the public sample whose responses were weighted to reflect the age and gender proportions of the national population of licence-holders, we can say nothing about the representativeness of the groups; they are merely samples of other types of driver (see Chapter 2 for further discussion of this point).

The main finding was that despite differences between the four groups in their absolute ratings of the 12 offences, the overall correlation in terms of ranking was surprisingly high. For instance, 'driving with excess alcohol when feeling your ability is not affected' was ranked as most serious by all but the low offenders who placed this in second position, while all groups ranked 'driving between 30 and 40 mph in a 30 mph area' and 'parking on single yellow lines during prohibited periods' in penultimate or bottom position.

Absolute ratings of seriousness produced several notable differences between the groups. Among the interviewees, not only did high offenders rate all offences as less serious than low offenders, but when we re-classified the main sample according to their speeding scores high speeders similarly perceived all offences as less serious than low speeders. An identical pattern was found when we compared high and low speeders within the disqualified group. These findings suggest, first, that the more one engages in unlawful driving behaviour the less seriously one is likely to perceive it, and second, that choice of speed may affect judgement of the seriousness of other offences as well. In other words, the more a driver speeds, the more he/she is likely to consider speeding *and other* offences as less serious. There are possible links here with findings noted earlier: that motorway speeding explained far more variance than any other offence group in our factor analysis of 25 offences, and (almost another way of stating the same thing) that high speeders were more likely than other drivers to commit any of the other offences too. Perhaps habitual choice of speed is the most important driving behaviour determining decisions to commit other traffic offences.

On nine of the 12 offences the mean ratings of the disqualified interviewees lay between those of the high and low offending interviewees in the main sample (of whom very few, if any, would have experienced disqualification). We have already seen that in the total survey sample the disqualified drivers tended, in regard to offending, to be placed somewhat below the unconvicted high offenders, and now their perceptions of seriousness placed the disqualified interviewees similarly. It would be tempting to speculate that the disqualified interviewees rated most offences more seriously than the main sample of high offenders because their experience of disqualification had raised their perceptions of seriousness. But when we compared the mean ratings of the main sample of high offenders with those of the disqualified who had high offending scores (N = 24), they were lower for five offences and higher for seven, which gives little support to the idea. By implication it seems that seriousness ratings may have more to do with present offending levels than with the effect of a previous disqualification, which is consistent with the finding that the more drivers engage in traffic offending the less seriously they are likely to perceive it.

As might be expected, the ratings of the public sample (who would be expected to contain some high and some low offenders) tended to fall between those of the low and high offenders, being greater than the high offenders (and the disqualified) for all 12 items, and

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1. Comparisons of perceptions of seriousness between the public and traffic police are discussed in Corbett and Simon (1991).

less than the low offenders for nine.

The ratings of younger (aged under 25) and older (25+) drivers in three groups were also compared. Younger members of the public sample rated nine out of 12 offences less seriously than older members of the public (some t-tests statistically significant); younger members of the amalgamated high and low offending groups in the main sample rated all offences as less serious than the older members. Among the disqualified there was not such a clear difference (only seven out of 12 items rated as less serious), but the numbers available for comparison were very small. The first two of these three results are consistent with those of Brown and Copeman (1975), who found that younger drivers, especially young males, rated traffic offences less seriously than others; and they tend to support the finding that in general the more drivers engage in traffic offences the less seriously they rate them, since (as seen earlier in this chapter) young drivers are responsible for a disproportionate amount of offending on the roads.

Summing up, we found high correlations in rankings of offence seriousness between the public, the high offender, the low offender and the disqualified groups. However, high offenders and the disqualified rated all offences as less serious than the public. High offenders rated all offences less seriously than low offenders, and high speeders rated all offences as less serious than low speeders. This latter finding suggests that choice of speed may be a critical behavioural determinant of perceptions of the seriousness of other types of offending, and perhaps of decisions to engage in other types of offending.

Younger drivers, by and large, rated the offences as less serious than older drivers (and offend more than older drivers). Little difference in seriousness ratings was noted between high offenders who had (probably) not been previously disqualified and those who had, suggesting that present levels of offending may have a greater impact than the experience of disqualification on perceptions of seriousness.

Overall, it would appear that seriousness ratings are strongly linked with personal levels of offending, although we cannot tell from this data if perceptions of seriousness precede or follow commission of the offences. In other words, we do not know whether, for example, high offenders engage in these offences because they are not perceived as serious: 'it's not serious therefore I do it', or whether they deduce their perceptions from the fact that they engage in it: 'I do it therefore it cannot be serious'.

## CHAPTER 4: COGNITIVE AND SOCIAL FACTORS IN UNLAWFUL DRIVING BEHAVIOUR

### 1. INTRODUCTION

Understanding the reasons why individuals break rules made by society has long exercised the minds of philosophers and theorists. More recently, criminologists and social researchers have warned against the adoption of any one explanatory theory, pointing instead to the multi-factorial nature of motivations to break laws. Walker (1987), for instance, lists nine distinct 'states of mind' which could help to explain why an individual breaks a rule. These include, among others, ignorance, forgetfulness, private justification (the 'neutralisation' concept of Sykes and Matza, 1957), the overriding claim of some other rule (eg. loyalty to friends), and enjoyment of rule-breaking.

With respect to driving, Rothengatter (1988) also concluded from empirical evidence that 'motivations for speed choice and other types of road-user behaviour are clearly multi-factorial'. Exemplifying this, Donovan, Marlatt and Salzberg (1983) reviewed literature on the relationships of a large number of psychosocial variables linked with high-risk driving (and attempted to integrate them into a theoretical cognitive-behavioural model). Among them were: personality traits such as aggression and feelings of frustration; emotional states; attitudes to driving, including the enjoyment of speed and risk-taking, and the view of driving as a means of showing confidence in one's ability.

In this chapter we report on our own examination of explanations for and against traffic offending, bearing in mind the considerations above. First, using data from the postal survey, the speeding study and the pub study, we summarise respondents' reasons for engaging and not engaging in three kinds of behaviour: speeding, drink-driving and running red lights. We look at perceptions of accident risk, although reasons relating to the topic of deterrence will be mainly reserved for Chapter 5. Next, using data from our in-depth interviews, we identify the main types of reasons that appear to explain why drivers engage in and refrain from traffic offending in general. Then we examine drivers' attitudes to law, rules, and morality, and how they view the difference between offending on and off the road. Finally, we see how drivers compare themselves with other drivers in terms of skill and safety.

### 2. SPEEDING

#### (a) Reasons for doing it

In the postal survey speeding was represented (for questions about reasons) by 'driving over 40 mph in a 30 mph area'. Drivers with high, medium and low speeding scores were compared in terms of the 'reasons for' which they endorsed as explaining their actions 'very well' or 'fairly well'. The first impression from the results was the large proportion of drivers, especially among those with high speeding scores, who said they broke the limit because they were confident in their driving, they thought the limit should be higher, and they decided for themselves what speed was appropriate to the conditions. Most high speeders were in a hurry, and they did not think they would have accidents. In all three score groups quite a number said they broke the limit without realising it. The behaviour of other drivers was less often cited among reasons, nor did many respondents say that speeding depended on their moods (cf. Stradling et al 1991).

The second impression was that all three speeding score groups put the reasons in virtually the same rank order: high, medium and low speeders had the same reasons for breaking the limit, but interestingly, the high speeders endorsed most of them more strongly than the medium speeders, who in turn endorsed them more strongly than the low ones. The disqualified sample gave a very similar picture.

A factor analysis was carried out of the main sample's responses on the frequencies of 'reasons for' and seven factors were extracted, of which the first explained 27% of the variance and the others each explained no more than seven per cent. This first factor comprised the following:

- I think the speed limit should be higher on some roads
- I'm confident of handling my vehicle at that speed
- I decide for myself what speed is OK for the road traffic conditions
- I don't think it will lead to an accident or near accident
- I please myself how I drive
- It's not really wrong to do it.

This factor may be seen as a strong expression of a driver's feeling of being in control and self-confidence in driving: that one is sure of one's own skill and will make one's own decisions how to drive, without reference to the rules.

Turning now to our speeding study, drivers interviewed were in two groups, depending on whether they had been stopped for exceeding the 30 mph or the 70 mph limit. (Nearly all were exceeding it by more than 10 mph.) From answers to the question 'Why were you speeding just now?' both in free response and as endorsed from a list, the results on the whole gave a similar picture to those from the postal survey. In free response, drivers' most common reason was that they were in a hurry, often in connection with their jobs. From the list the item most frequently endorsed was confidence in their own driving, particularly among those exceeding 70 mph. Half also said they were speeding without realising it. Such 'inadvertent' speeders were more common in the 30 mph area, whereas the 70 mph group contained more 'deliberate' offenders who wanted to decide their own speed and thought the limit should be higher.

Speeding study respondents were asked how often they drove at more than 10 mph above whichever limit they had just been stopped for exceeding. Their answers were compared with those of the main sample to similar questions, and suggest that the speeding study drivers, especially the 70 mph group, were likely to be drawn from the same population as the main sample's high and medium scoring speeders.

Between them, the two samples give a fairly consistent picture of reasons for exceeding speed limits. In many cases the speeder is a driver who is confident in his/her ability to handle the vehicle, who feels in control, who wants to make his/her own decisions, and is in a hurry. Also frequent are drivers who break the limit without realising it, a point that is taken up later in the chapter. In some respects this picture differs from that obtained by Mostyn and Sheppard's (1980) survey of a random sample of drivers in 1976. In that group the most frequent reason for speeding (given by 38%) was being in a hurry, but almost as many said they had to speed to avoid a potential danger. Those who relied on their own capability, decided speed for themselves, and those who disagreed with the limits were less numerous than in our study.

#### **(b) Reasons for not speeding**

The reasons endorsed by our main sample respondents for not driving over 40 mph in a 30 mph area were also analysed. All three speed score groups gave first or second place to 'I try to drive with consideration for other road users' and 'I don't really want a fine and an endorsement'. But then the rank orders diverged. The low speeders emphasised that it was wrong, against the law, and might lead to an accident. The medium speeders emphasised (to a lesser extent) the chance of accident and of being stopped by the police. The high speeders gave third and fourth place to 'traffic conditions don't allow me the opportunity' and 'I'm not in a hurry', and these were the only reasons the high speeders endorsed more strongly than the other two groups. Thus it seemed that, while the three speeding score groups had much the same reasons for breaking the limit, they differed in

some of their reasons for not doing it; in particular, the high speeders felt restrained by lack of opportunity. This reinforces the image of high speeders as drivers who wanted to decide for themselves. By and large the disqualified sample gave a similar range of reasons against speeding, though fewer of them felt that speeding was wrong, suggesting they might have less moral commitment to the law.

A factor analysis of the main sample on the frequencies of 'reasons against' extracted six factors, of which the first explained 25% of the variance and the others each explained no more than nine per cent. The chief factor comprised:

- I ignore pressures from drivers close behind who want me to go faster
- I don't let worries or moods affect my driving
- I don't let myself get frustrated or impatient in traffic
- I don't feel a need to keep up with other traffic in front
- I try to drive with consideration for other road users.

This factor may be seen as expressing a driver's emotional stability. The image it suggests is quite compatible with the previous one of the confident speeder: here is a driver who feels in control, making his/her own decisions - but in this situation keeping within a 10 mph excess of the speed limit.

### **3. DRINK-DRIVING**

#### **(a) Reasons for doing it**

Although it appears that fewer people drink and drive these days (Sabey 1988), 102 drivers (22%) in the main postal survey admitted that they occasionally drove when they thought they were over the legal blood-alcohol limit, though nearly nine out of 10 of them said they did it only rarely. When their reasons were listed in order of frequency the figures suggested that these drivers justified their behaviour mainly by a feeling of confidence in their driving ability and a wish to decide the matter for themselves rather than be restricted by the law, combined with beliefs that other transport was inconvenient and that other drivers did it too. Immediate social pressures from companions played less part. Over all the reasons there were virtually no differences between those respondents who said they only rarely drove while over the limit and the few who admitted doing it more often. The disqualified sample contained only 18 people who admitted that they ever drove while over the alcohol limit nowadays, and for those 18 the pattern of reasons was very similar.

Comparing this picture with our pub study results, we found that 73 pub patrons (32% of the total drinkers intending to drive) said that they would or might be over the limit by the time they left but would nevertheless drive away. By far the most common reason, given by over three-quarters, was the belief that they would be fit to drive, and could handle the task. Next in frequency were reasons of convenience (eg. because of the weather), and willingness to take the risk of being caught, each mentioned by a quarter. These results echo those from the main sample, giving the strong impression that drink-drivers like to decide for themselves, and that this depends on whether they feel fit to drive (i.e. whether they will be in control). A main subsidiary reason is the convenience of driving rather than seeking alternative transport. We comment elsewhere (Corbett, Simon and Hyde 1991) on the extent to which such drivers' belief in their fitness is realistic.

#### **(b) Reasons for not drink-driving**

The reasons main sample respondents gave for not driving while over the blood-alcohol limit were analysed for three sub-groups of drivers:



- (1) 113, comprising those who said they never drank alcohol, and some others who said they never drank any before driving;
- (2) 140 alcohol-drinkers who said they never drove while over the limit;
- (3) 100 who admitted to driving while over the limit.

For brevity, these groups will be referred to as 'non-drinkers', 'legal drinkers' and 'drink-drivers'; they comprised 77% of the main sample (the status of the rest was unclear). While the three groups were broadly similar in their 'reasons against' they also showed some differences in emphasis. All gave high priority to avoiding a disqualification and fine (this reason was endorsed by at least 87% in each group). But of the 'non-drinkers' as many or more stressed that drink-driving is wrong, against the law, might cause an accident, that alcohol reduces driving skills and that they were determined not to do it. 'Legal drinkers' stressed most the risk of accident, reduced skill, and their firm intentions. For 'drink-drivers', however, the chief reasons were fear of the penalty and the chance of being caught. This comparison suggests that while all three groups were conscious of the penalty, the 'non-drinkers' were motivated by moral commitment to the law, personal morality and feelings of responsibility; the 'legal drinkers' felt responsible too; but the main constraining reasons for the 'drink-drivers' concerned the deterrence of the law, and this is discussed in Chapter 5. (It is fair to add, however, that four-fifths of the 'drink-drivers' also endorsed accident risk and consideration for other road-users.)

Examining the responses of the disqualified sample, we found, not unexpectedly, that 92% endorsed the wish to avoid a further disqualification and fine. Over 80% endorsed firm intention, the risk of accident, and 'people I care about don't like me to do it'. This implies that they knew very well the risks of drink-driving and mostly tried to refrain from it, and that encouragement by close friends or family could help them stick to their decision. This latter reason may help to explain why and how 80% of formerly disqualified drink-drivers in our sample had since given up the behaviour. Chapter 5 looks further at the experience of disqualification.

When we approached patrons in the pub study, 26 drivers were not drinking any alcohol, their most common explanation being that they wished to avoid impairment by drink. One hundred and fifty-three alcohol-drinkers intended, or hoped, to be under the limit when they drove away, though, as is shown in our separate report (Corbett, Simon and Hyde 1991) not all were confident that they would be under, and it seemed likely that some in fact would not. These patrons' most common reason for trying to stay under the limit was the fear of losing their licence, mentioned by 61%. Twenty-nine per cent mentioned the risk of accident, 22% said that drink-driving was wrong or unlawful, and other reasons were less common. It is interesting that, unlike those drivers who were not drinking any alcohol, this group hardly mentioned impairment by alcohol as a reason for trying to stay under the limit. The overall picture suggests that for pub patrons who are at some risk of drink-driving the main constraining reason is fear of the penalty, reflecting the findings from the 'drink-drivers' in the main sample. Fear of the penalty is discussed in more depth in Chapter 5.

#### **4. HIGH SPEEDERS WHO DO AND DO NOT DRINK-DRIVE**

We saw in Chapter 3 that (in the postal survey) high speeders and drink-drivers were both more likely than the remaining drivers to offend in other ways too. In fact one third of the high speeders were also occasional drink-drivers (and 36% of the drink-drivers were also high speeders). But two-thirds of the high speeders denied ever driving with excess alcohol, and it is interesting to compare them with the others who admitted it. The two groups were much the same on background variables, but the data suggest differences between them in their reasons for not drink-driving. Both emphasised fear of the penalty, but at least 85% of those who never drove with excess alcohol endorsed the risk of accident and reduction in driving skill, that doing it was wrong, and that they stuck to their

intentions not to. For high speeders who admitted drink-driving the chief reasons against it were the penalty and the chance of being caught, and their third most important reason was 'people I care about don't like me to do it'. Thus it seemed that this small group of drivers, who took risks by speeding and drink-driving, could nevertheless sometimes be influenced by the concern of people they cared about.

## **5. RUNNING RED LIGHTS**

### **(a) Reasons for doing it**

Almost half (47%) of the main sample said they occasionally drove through traffic lights (at a junction) that had just turned red, though for the great majority it was 'only rarely'. For many people it seemed to be a practical matter of having to move on if the lights changed while they were queuing in the middle of a junction. About one quarter said they did it through not concentrating or through misjudging their speed, which suggests some degree of cognitive failure. But for the more frequent offenders the main reason was 'I decide for myself if it's OK to drive through', and these people more than the others also said they were in a hurry, got frustrated and impatient in traffic, and did not think it would lead to an accident. The disqualified sample gave much the same picture of reasons as the infrequent red-runners in the main sample.

A factor analysis of the main sample's frequencies of reasons for red-running extracted eight factors, of which the first explained 29% of the variance and the others 11% or less. The chief factor comprised the following:

I get a kick out of doing it  
The penalty wouldn't really bother me  
The time pressures of my job force me to  
I don't mind taking chances  
It's not really wrong to do it.

This factor, which might be labelled 'macho driver', suggests an attitude of self-centredness and irresponsibility on the road, and lack of moral commitment to the law.

### **(b) Reasons for not running red lights**

The pattern of reasons endorsed by the main sample was very similar to that produced by the disqualified drivers. The impression is that the great majority, who ran red lights never or only rarely, refrained because they were well aware of the danger and respected that traffic law as being important for the safety of road users generally. Two thirds of them said they ignored pressure from drivers behind to keep going. The small group who ran red lights more frequently put their reasons in much the same order but not surprisingly endorsed most of them less strongly. The biggest differences reinforced the picture noted above of frequent red-runners having less respect for the law generally and being more inclined to do as they pleased.

## **6. PERCEPTIONS OF ACCIDENT RISK**

A consistent finding from the various parts of our study was that the more drivers engaged in offending actions the more likely they were to discount the risk of accidents. In our postal survey, drivers in all the offence-prone groups - the high speeders, the drink-drivers, the more frequent red-runners - were more inclined than other respondents to discount the risk of mishap, endorsing more frequently the reason 'I don't think it will lead to a near-accident or accident'. For instance, 53% of high speeders but only 14% of low speeders endorsed this reason. This is reinforced by the finding that few high speeders and drink-

drivers seemed positively to enjoy risk-taking, since only nine per cent of the former group and four per cent of the latter group endorsed 'I don't mind taking chances' as a reason for doing it. On the other hand, running red lights was a little different as 36% of the more frequent offenders endorsed this reason. This suggests there is more of a 'daring' element involved in frequent red running, contributing to the 'macho driver' factor described above. But with speeding and drink-driving it appeared that many who did these things simply did not believe they were risking an accident. Further support for this comes from the speeding study where 22% of respondents denied that there was any link between speeding and accidents for drivers in general, and 43% said there was no such link for them personally, in most cases because *they* were safe drivers or they only exceeded the limit where it was safe to do so. Moreover, the more frequent speeders were more likely to deny the link. With respect to drink-driving, perception of accident risk was also low. In the pub study, 93% of the drivers who said they might be over the alcohol limit on departure believed their risk of accident then would be low or nil.

In actual fact, our drivers' perceptions were realistic since, as we saw in Chapter 1, accidents are rare events. Nevertheless, almost four in 10 reported that in the past they had had at least one near-accident or accident while engaging in one of 12 offences (25% reporting this in respect of speeding, drink-driving or red-running). Although, as we show in Chapter 6, these events were far more likely to be near-accidents than actual accidents, it does seem that some drivers are apt to discount these earlier events in weighing up the likelihood of future accidents occurring in similar circumstances. This lends support to the notion that drivers do not believe their offending actions will culminate in accidents.

With respect to speeding, our results tend to support those of Rothengatter (1988), who found that it was not that speeders and non-speeders differed in their *evaluations* of the risky consequences of speeding, but rather that they differed in their beliefs about the *likelihood* of negative consequences arising from it. He noted that 'it cannot be concluded that fast drivers are unconcerned about risks, they simply do not believe their risk is increased by driving fast'. A recent study by Hendrickx and Vlek (1991) shows that drivers are at least sensitive to risk information, whether or not their beliefs about risk are changed by such information. These researchers showed that in an experimental study of drivers' choice of speed at blind bends, those who were given detailed information on the risks of driving fast in such places drove more slowly. Given the rather gloomy conclusion of Rothengatter, the results of this latter study may hold out a ray of hope for the future.

## **7. WHY DRIVERS BREAK AND/OR ADHERE TO TRAFFIC LAWS IN GENERAL**

Up to this point we have focused largely on the endorsement of lists of reasons that helped to explain why our samples of respondents broke and adhered to three specific traffic laws. In the remainder of this chapter, we shall broaden out the discussion by drawing upon data gathered in free response to questions posed in our in-depth interviews. In this section we consider why drivers break and/or adhere to traffic laws in general.

To initiate this train of thought among our 98 interviewees, they were asked to say whether they broke traffic rules often, sometimes, rarely or never; and then to try to think about why they broke them (if they did) and why they tended to stick to them (when they did). It was explained that we were interested in general principles rather than in specific examples, and after interviewees had explored their own principles out loud, these were fed back to ensure we had captured the essence of their lawbreaking and law-adhering 'philosophies'. For coding purposes up to three main reasons were allowed per driver for each question (few drivers could think of more), and for ease of discussion we shall refer to subgroups of our interviewees as high offenders, low offenders, and disqualified drivers.

### **(a) Why drivers break rules in general**

The most common explanation, offered by a third of the total (see Table 4.1), was that they broke the rules in circumstances when they considered it safe to do so. Thus in order to be committed any unlawful action had to be perceived as a safe manoeuvre. This was the main motivating principle for the disqualified group. The next most common response (given by 24% overall) indicated that drivers broke laws unintentionally or without realising it. However, there were marked differences between the groups in the proportions citing this reason. While only nine per cent of high offenders and 16% of disqualified drivers mentioned unintentionality, 44% of low offenders did so. It was the most common response by the low offender group.

Not surprisingly, being in a hurry or under pressure was another major reason for breaking rules in all subgroups of drivers (mentioned by 23% overall), and the most common reason for the high offender group (34%).

Breaking laws for reasons of convenience or laziness was mentioned by 21% of all interviewees, although low offenders were far less likely to account for their offending in this way. One previously disqualified driver explained his thinking as follows:

'I ignore double yellow lines and get two tickets a week. But I'd never park where I'm causing an obstruction or where you get clamped. I'm just too bone idle to find a car park or meter.'

Another main reason, more prominent among disqualified drivers (and mentioned by 17% of the total), was the idea that they broke the law if they believed they could 'get away with it' (i.e. not be caught). Two examples illustrate this viewpoint:

'Basically, I drive at speeds I find comfortable since you don't get caught for speeding round here. I might do no right turns or U-turns if it is easier or more convenient, but I don't park illegally because they're red-hot on a tow-away system here.'

'I'll do what I know I can get away with. I'll push my luck as far as I can.'

That law-breaking on the roads is motivated by a wide range of reasons is apparent from the length of Table 4.1. Apart from the more common ones mentioned above, some others are worth noting. Seven high offending younger drivers were at pains to point out that traffic offending for them was a statement of their individuality and desire not to conform to perceived social norms. Two comments were:

'Society and me don't like being dictated to, and if you follow the rules and regulations you're not seen as much of an individual.'

'You feel confident. You don't want other people to tell you how to drive. You want to make up your own mind.'

Sometimes this individuality was located within a sub-culture with which the driver identified, such as a peer-group. One young man commented:

'If I go in a convoy with my mates, at times you feel you're the best, and if the front car does something you've got to follow - not giving way, no right turns, not looking in the mirror - forgetting all the rules you learn when you pass the test. What people say you should or should not do doesn't come into it.....you feel different from other drivers.'

**Table 4.1: Reasons for breaking traffic rules in general**

Reason	N = Interviewees in free response			
	% of drivers giving it			
	Main sample		Disqualified Sample	All Interviewees
	High offenders (N = 32) %	Low offenders (N = 34) %	(N = 32) %	(N = 98) %
In circumstances when it is considered safe to do so	31	29	38	33
Unintentionally/ without realising it	9	44	16	24
When in hurry/under pressure	34	21	16	23
Convenience/laziness	28	9	28	21
Thinks can get away with it/perceives low risk of apprehension	19	9	25	17
Sometimes safer to break rule	9	15	13	12
To avoid pressure from other drivers	16	12	6	11
Vehicle built for higher speeds	9	6	13	9
Part of the subculture	13	13	3	9
Rebellious/defiant/individualist	13	-	9	7
Enjoyment of fast driving	9	-	9	6
Can't afford to fix defective vehicle	6	3	6	5
When can't see purpose of rule	9	-	3	4
Other	9	6	3	6

Often linked with this idea of individuality or rebelliousness was an expressed enjoyment of fast driving. Several young drivers who had been disqualified for driving at well over 100 mph thought it was fun to see how fast cars would go, although enjoyment of speed was not confined to the young. Two not-so-young disqualified speeders remarked:

'If I'm driving from Scotland I like to do it quickly - it also keeps me fresh and awake in the outside lane. I don't think I'd really enjoy it if I couldn't go a bit faster. If not, I'd probably get bored and have an accident.'

'I sometimes drive fast for pleasure and power. I might feel quite smug driving fast with loud music and an empty road.'

Such reasoning fits in with the picture given by Rothengatter (1988) who found that of four factors identified as components of attitude to speeding the largest was pleasure in driving, and that fast drivers perceived more pleasure.

Finally, it is worth bearing in mind the comment of one driver, an admitted alcoholic, who said he broke the drink-driving laws daily because he 'couldn't help it' and needed a few pints to feel normal in order to drive.

#### **(b) Why drivers adhere to rules in general**

Interestingly, when drivers were asked why they kept to the traffic rules in general (when they did), they gave a narrower range of reasons (see Table 4.2).

Three main themes emerged. First, 45% of interviewees overall said they adhered to traffic rules in circumstances when they decided it was unsafe to break them. This corresponds with the most prominent reason that was given for breaking rules, i.e. circumstances in which it was considered safe to do so. Thus, perception of what is or is not a safe manoeuvre in the immediate situation appears to be a major guiding influence on drivers' decision to break or adhere to the traffic laws. However, while over half the high offenders and disqualified drivers cited this as a reason for keeping to the rules, only a quarter of the low offenders mentioned it. We shall take up this point below.

Second, 45% of interviewees gave as a reason their wish to avoid the penalty, with high and low offenders mentioning this in equal proportions and the disqualified slightly more often. However, a qualitative difference was noticeable between high and low offenders in the way the idea was expressed. High offenders usually stated it simply and straightforwardly, often in economic terms, such as:

'I don't want to be stopped by the police and get points on my licence because then your insurance goes up. With drink-driving it's hefty fines, and if I had no insurance or MOT and had an accident I'd be paying up for ages.'

For low offenders the wish to avoid the penalty seemed to have other or additional meanings, often connected with a fear of coming into contact with the police, or a desire to 'keep a clean sheet'. For example:

'I'm frightened to death of getting any penalty and you'll only get in trouble with the police. I wouldn't want to get involved in anything to do with them.'

'I don't like getting caught. I remember the police from being a young kid. That's always stuck with me and I don't want to blot my copybook now.'

**Table 4.2: Reasons for adhering to traffic rules in general**

N = Interviewees in free response

Reason	% of drivers giving it			
	Main sample		Disqualified Sample (N = 32) %	All Interviewees (N = 98) %
	High offenders (N = 32) %	Low offenders (N = 34) %		
When decides rule unsafe to break in the circumstances	50	26	59	45
Wish to avoid/fear of the penalty	41	41	53	45
Wrong to break/likes to keep to rules	6	68	-	26
Rules there for safety, even if can't see why	-	21	6	9
Consideration for others	9	9	9	9
When sees no reason/ has no desire to break	9	12	3	8
When not in a hurry/ not under pressure	12	3	3	6
Wants to keep a clean sheet	-	12	-	4
Other	-	-	6	2

A prevalent view too among low offenders was that it was it would be 'just their luck' to get caught by the police if they offended deliberately. It may be that a low frequency of law-breaking goes hand in hand with a high perceived risk of apprehension, the proposition having been only rarely tested by low offenders, and it is this that constrains their offending. Alternatively, low offenders may rely more on internal than external controls to restrain their unlawful actions. The following remarks illustrate these ideas:

'I feel a lemon driving at 70 on the motorway. But I'll be the mug who gets caught at 80. I've never been caught but I feel I will if I do it.'

'It makes life easier if you follow the rules. It makes me feel guilty if I break them. If I did, I'd get caught out or have an accident. It would be just my luck that something would happen.'

The last comment above leads into the third main theme explaining why drivers adhere to rules: moral commitment to the law. Over two-thirds of low offenders, but only six per cent of high offenders and none of the disqualified drivers, were concerned with the idea that it was wrong to break rules, or that they preferred to stick to them despite occasionally feeling irritated by their demands. A related reason was that rules were there for drivers' own safety even if the purpose was not immediately apparent. Two examples illustrate this theme:

'I feel a bit edgy when I'm speeding and it's a bit on my conscience - doing something I shouldn't be doing really. If the law was raised to 35 I'd feel better because then I wouldn't be breaking it.'

'I was brought up to stick to rules in every area of life, not just driving. They should be followed even if you're not sure what their purpose is. Even when I think a speed limit is low I try to stick to it.'

### (c) Summary

It seems that lawbreaking and lawkeeping behaviours on the roads are motivated by a wide range of reasons or principles, some common to most drivers but having more or less weight according to the type of driver concerned. The general picture is one where many drivers, whether low or high offenders, weigh up the safety of the immediate circumstances in decisions whether or not to stick to the rules, professing to break them only when they consider it safe to do so. External pressure of time is given by some drivers of all types as a reason to 'cut corners'. The wish to avoid the penalty is a strong motivation among all groups to refrain from breaking the law.

Thereafter, the reasons mentioned have less wide application, distinguishing instead the profiles of high and low offenders. High offenders, including some among the disqualified group who were high offenders, were more often motivated by convenience or laziness to break rules than low offenders, while the latter group were more likely to say that their unlawful driving was unintentional. Some high offenders, particularly young drivers, broke rules for fun, enjoyed speed, and wished to express their individuality or youthful rebelliousness through rule-breaking.

While judgements as to unsafe situations and the likelihood of being caught (or what they could get away with) were the main inhibiting reasons for high offending drivers, low offenders were constrained more by other reasons. These centred on the assertion of the 'rightness' of rules and the view that they were there for the benefit of everybody. Low offenders did not always like or agree with the rules, but preferred to stick to them rather than incur the possible costs of a penalty or feelings of guilt or anxiety. Prominent also among low offenders, and clearly distinguishable from the explanations offered by virtually all high offenders, was an expressed fear of being caught. The impression was that high offenders were guided more by perceived external constraints to control their unlawful driving, while low offenders relied more on internal controls, having learned much earlier to abide by rules of all kinds.

## 8. DRIVERS' ATTITUDES TO UNLAWFUL DRIVING

Having considered the reasons why drivers break and adhere to traffic rules in general, in this section we delve more deeply into the underlying attitudes that drivers hold about unlawful driving behaviour. For instance, if some drivers are apparently quite willing to disregard the traffic rules, what purpose do they see the rules as serving, especially if they are high offenders? And should it be found that some high offenders are unconcerned by their own levels of traffic offending, would they show similar unconcern if all drivers broke the laws to the extent that they do? Since we found that virtually all drivers admit



breaking traffic laws occasionally, but (so far as is known<sup>1</sup>), fewer people commit non-traffic crimes and do it less frequently, what differences do drivers perceive between offending on and offending off the road? Taking this further: most people would probably consider offences like theft and armed robbery as 'crime' and 'immoral'. However, do drivers hold similar views about the traffic offences they commit, and if not, what features distinguish for them the concepts of crime and immorality on the roads? These are some of the issues we consider below.

To preface this discussion, we should point out that our use of the term 'attitude' relates to our interpretation of drivers' free responses to the questions posed in interviews with them rather than to any results of attitude-scaling techniques. In the absence of previous research in this area we hope our qualitative findings will encourage more rigorous research attention in future.

#### **(a) The purposes served by rules**

We asked our interviewees: 'If so many drivers break the traffic rules some of the time, what purpose do you think the rules serve?' This question provoked considerable thought among many drivers, and frequently one purpose fused with another in their minds. However the most common response, expressed almost equally by high and low offenders and by the disqualified, was that if no rules existed there would be chaos. Closely tied in with this idea was the view that it was necessary for rules to exist but it was not always necessary to adhere strictly to them. Rules were to be treated not always at face value, but as guidelines to the limits of safe behaviour, or to set starting points or baselines of safe or ideal behaviour. Some interviewees pointed out that rules are needed not only to curb idiosyncratic tendencies but because rules are the mark of a civilised society. A few examples will illustrate the range of views:

'Everyone's got to have something to follow, otherwise we'd be back in the Dark Ages. It wouldn't be a civilised society not to have them, so you've got to have them even if people break them.'

'Certain rules are there to protect you. Others you should be able to bend to a certain extent.'

The main picture to emerge was that society needs traffic rules so that drivers know what the agreed normative standards are, to help prevent accidents and to aid traffic flow, but that there is some latitude for manoeuvre and individual judgement around the rules. Not unexpectedly, high offenders were most likely to believe the purpose of rules was to act as guidelines (38% of high offenders, 18% of low offenders, and 31% of the disqualified saying this in free response), while low offenders were most likely to express the belief that at least most drivers stay somewhere near the rules and that some drivers keep them. Thus it appeared that the more drivers admitted breaking traffic rules, the more they asserted that rules were to be treated as guidelines. However, apart from these differences, it is perhaps surprising that those who broke traffic rules the most and those who broke them the least perceived rules to serve similar functions.

#### **(b) Rules as guidelines**

The idea of rules as guidelines was developed further in our interviews. Several high

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1. 1984 British Crime Survey results show, for example, that only 18% of a representative sample of the adult population admitted to committing one of a range of eight infringements such as fiddling work expenses, tax evasion, or evading customs duty during the previous 12 months. Eight per cent admitted between two and seven infringements (Mayhew and Elliott 1990)

offenders, for example, said that rules only applied to normal circumstances, and that in an abnormal situation, such as an accident or traffic jam impeding traffic flow, they could be treated as guidelines, allowing the driver to make illegal manoeuvres like forbidden right turns or overtaking on continuous double lines. A few other high offenders believed that rules did not always mean what they signified. For instance, one driver said:

'Thirty tells me not to drive at 30, but that there may be schools and zebras and parked cars, so I will interpret the 30 sign accordingly and pay more attention to the traffic and road signs.'

But a significant minority of high offenders expressed a rather different view: they had dismissed many rules as standards for their own behaviour, and instead had developed their own code beyond the law. For example:

'You study the rules in order to pass the test, and once you've got your certificate you "branch out and specialise" as you might do if you become a surgeon, or at least you create your own standards and rules.'

'Personally, I've set my own standards for myself irrespective of the laws and I'll do that provided I feel it's not dangerous and within my own standards.'

The last comment suggests that personal codes of driving behaviour were to some extent based on perceived safety margins or acceptable levels of accident risk, but further probing revealed that for some drivers the estimated risk of apprehension also played a part, as will be seen from the following.

We asked all interviewees to imagine that they were on a 30 mph limit road 'in reasonable driving conditions', driving along at their ideal speed, and then at their ideal speed plus 10 mph. The great majority of drivers, whose ideal speed was higher than 30 mph, were asked what differences they would feel between this speed and the same speed plus 10 mph. In other words, if the legal limits do not always constrain drivers' choice of speed, what does?

The crucial difference for almost half the respondents in each sub-group was the view that they would still be in control at their ideal speed but were likely to feel out of control at the higher speed. Since the ideal speeds of low offenders and high offenders tended to be somewhat different (in the expected direction) this not only highlights individual variation in the speeds with which drivers feel comfortable, but brings to mind the concept of the 'illusion of control' studied by McKenna and colleagues (1990, 1991) 'where through the exercise of personal skill drivers believe they can create relative immunity to negative events such as accidents'. This illusion may be apparent in particular among those (mainly young male) drivers who said they would feel in control at between 60 and 70 mph in a 30 mph area.

Among the remaining interviewees, low offenders were more likely to say that they just would not go above their ideal speed and so could not consider how they would experience a difference, while high offenders were more likely to say that at their ideal speed they had more chance of avoiding the police. This, of course, does not mean that the risk of apprehension played no part in shaping the personal driving codes of low offenders. But as their ideal speeds mostly did not exceed 40 mph, while those of high offenders ranged up to 60 mph, the latter group's actual chances of attracting police attention would probably be greater.

Thus drivers who are not dissuaded by the law from breaking legal speed limits nevertheless appear to set their own boundaries to excess speed, by means of a personal code framed around speeds at which they feel in control and which have an acceptable perceived risk of police action.

**(c) Should the number or content of rules be changed?**

Despite the ability of most interviewees to give several examples of their rule-breaking behaviour, over three-quarters (evenly distributed among high and low offenders and disqualified drivers) said that they thought the existing number of traffic rules was 'about right', and few in free response could think of any changes they would like made.<sup>1</sup> This seems somewhat paradoxical, since it might be argued that if the majority break rules occasionally it could indicate that drivers would favour changes to or abandonment of some of the rules. Several points may help explain the paradox. First, it seems that most drivers acknowledge the need for the existing rules on account of the purposes they are seen to serve. Second, while low offenders tended to accept the rules because they had faith in the judgement of the law-making authorities, high offenders were more likely to think that rules were acceptable provided that some could be treated as guidelines.

Third, however, we found a smaller number of high offenders (including some from the disqualified group) who had a rather hypocritical attitude (which they readily acknowledged), as follows. If rules were added to or made more stringent these people would feel greater constraint than now; on the other hand, if some rules were abolished or relaxed all drivers would be subject to fewer constraints, which would be undesirable as it would raise the risk of accidents. A parallel view, unsurprisingly, was that it was good that most drivers kept the rules to a greater extent than they did, as this allowed them greater freedom to please themselves in comparative safety. Some examples illustrate this thinking:

'It's not alright if everyone did 50 down the street, only if I do it. There'd be chaos.... Rules are there, and you've got to uphold them, even though I don't because I've got a weakness for speed.'

'Laws are for others to stick to, and it's right to persuade them to drive at 30 so I can drive fast. Hypocrite, aren't I?'

In other words, this group believed that rules were for other people.

**(d) Differences between offending on and off the road**

As it appears that many normally law-abiding people are willing to break the rules once behind the wheel of a vehicle, we sought further insight into drivers' underlying attitudes by exploring what differences interviewees would see between law-breaking on and off the road. Four main themes emerged, mentioned fairly equally by high and low offenders and the disqualified group.

The first theme embraced the ideas that with a traffic offence harm was not intended, there was little or no premeditation, respect was not necessarily lost for other road users, and providing no accident resulted the driver became his or her own victim if caught. The converse was thought to be true about non-traffic offences.

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1. However, when asked specifically, almost four in ten suggested that some speed limits (usually on motorways) should be raised, while only four per cent wanted them reduced. In contrast, more than half of all interviewees thought the legal blood alcohol limit should be reduced, and these included almost a third who thought it should be set at zero. Not unexpectedly, low offenders were more likely than high offenders to advocate a zero limit (38% compared with 25%), but it was interesting that 35% of drivers previously disqualified for drink-driving shared their view. Only two drivers (both of whom had been disqualified for drink-driving) advocated relaxing the blood alcohol limit.

The second theme was that on the road rule-breaking was socially acceptable, almost a social norm. So being caught for a traffic offence was not necessarily shameful, as it would be with a non-traffic offence. Some interviewees felt that there was 'safety in numbers' when offending on the road, when drivers could 'spread the guilt'. This may explain why some high offenders told us in the interview that they broke rules only rarely. It seemed that for them, if all drivers were (for example) speeding, it was not unlawful as legality was to be found in social consensus.

The third theme to arise was that traffic offences were perceived as carrying a lower risk of getting caught, and lower penalties. Several people remarked that this showed that society distinguished between traffic and non-traffic offences, regarding the former as less serious.

The last main theme focused on the fun and enjoyment to be found in breaking traffic rules which could not be equalled in other kinds of offending. Drivers could also "show off" or demonstrate "machismo" in a socially acceptable way, which would not cause such admiration among peers if non-traffic offending was involved. This echoes a notion raised by Collett and Marsh (1986) that the act of driving is a great equaliser - people of widely varying status in everyday life are merged on one level on the road. This may give the less advantaged an opportunity for 'one-upmanship', perhaps by engaging in risky manoeuvres that might be applauded by friends. Linked with this idea is the sense of freedom and independence that driving can give which might not be similarly available off the road. Indeed, for young people, the act of driving may represent their first expression of adult independence, and thus it is perhaps less surprising that some may 'over-react' to this.

Finally, a few drivers mentioned the idea that the vehicle itself afforded insulation from the outside world. Offences could be committed in the comfort and safety of a space that was like an 'extension to the living room', and other drivers were 'faceless strangers' who did not have to be confronted. In contrast, non-traffic offending sometimes required close physical contact with other people and was rarely comfortable to commit.

Thus drivers distinguished between law-breaking on and off the road mainly by perceiving traffic offences as intending no harm, being socially acceptable, likely to involve a lower risk of apprehension and lower penalties (possibly untrue in reality), and committed for fun and pleasure. In general, the converse was thought to be true of non-traffic offending.

#### **(e) Are traffic offences crime?**

To explore further the distinction between law-breaking on and off the road, we wished to know if drivers conceived of traffic offences as 'crime', as they might commonly conceive of robbery or assault. Alternatively, would only some traffic offences be seen as crime, or would there be differences perceived between, say, exceeding a speed limit by 10 mph and 20 mph?

Here, it is fair to mention that defining what is to be considered as 'crime' has exercised the minds of philosophers, sociologists and criminologists for many years, starting at least as far back as 1764 with Beccaria's treatise on crime and punishment. For instance, it is too simple to say that crime consists of all those acts that are violations of the criminal law, since this begs the questions of who were the architects of the law and what were their motivations. Clearly, too, definitions of crime must reflect social changes across time, and as such are socially constructed. But the widespread incidence of some may lead those who commit them to believe they are 'not crimes'. Either way, it was unlikely that drivers in our study would express complete agreement, and we merely outline here their range of views, drawn from the in-depth interviews and the speeding study.

First, we asked previously disqualified interviewees to imagine that they had been caught and prosecuted for (a) parking on a single yellow line during a prohibited period and (b)

driving through lights that had just turned red. They were then asked whether or not they would feel (1) guilty and (2) that they had committed a crime. Second, we asked drivers who had just been stopped for speeding whether they felt guilty about it and that they had committed a crime. Third, in the imaginary scenario of driving along a 30 mph road at their ideal speed and ideal speed plus 10 mph, we asked interviewees whether neither, either or both actions would cause them feelings of guilt and would be moral or immoral. (The link between crime and morality has been the subject of jurisprudential debate for several centuries - see Hart, 1965 - and of research for the last decade - see Tittle 1980; Grasmick and Green 1980).

Of the disqualified drivers, only about one in 10 said in relation to illegal parking they would feel both guilty and that they had committed a crime, while approximately three-quarters said the same about driving through red lights. So it seems that feelings of guilt may be closely linked with conceptions of crime. For the parking offence, almost the only reason respondents gave to explain their feelings was that they would have broken a law. For the 'red-running' offence, however, only one in five explained their feelings in those terms, the remainder believing that a prosecution would bring it home to them that they had committed a dangerous act. In the ensuing discussion interviewees divided into four camps. A few thought a breach of *any* traffic rule was a crime, one saying, 'A car is a lethal weapon - a driver is like a man walking round with a loaded gun.' Some saw only breaches with the *potential* to cause harm as crime, while others defined as crime only breaches which *resulted* in harm. At the other extreme, several did not perceive any road traffic offence as crime, largely because of the perceived *lack of intention* to cause harm.

Although we had less time to explore this issue at the roadside with drivers who had just been stopped for speeding, their responses broadly supported these findings. Only 38% said they felt guilty and only 25% felt they had committed a crime (another 17% saying it was only technically a crime). Their usual explanation for either feeling was that they had broken the law. The majority who did not feel guilty or criminal said that no harm had been done and that their action had not been dangerous; several also said that the matter was not a crime because it was trivial.

Of our in-depth interviewees whose ideal speed in a 30 mph area was greater than that, about a third believed that driving at both their ideal speed and ideal speed plus 10 mph would be morally wrong, mainly because they would be breaking the law at both speeds. As might be expected, low offenders were more likely to think in this way than either high offenders or disqualified drivers. Over another third believed that their ideal speed was not morally wrong, but adding 10 mph to it would be. (Low offenders were less likely to take this view.) The distinction centred on the notion that the risk of causing harm to others was greater at the higher speed since the driver was less likely to feel in control and would be outside his or her own safety margins. An example was as follows:

'It's not morally wrong to do 60 [in a 30 mph area] if you can get away with it, but at 70 that's breaking the law too much. It's just wrong because you can't control the car if you have to brake suddenly.'

Finally, one in seven thought that neither speed was morally wrong for a variety of reasons, and a few others remarked that morality did not come into the question. High offenders and the disqualified drivers were prominent in these groups, and one remarked:

'We've each got our own moral code and 60 or 70 mph in a 30 area would be within mine. It's not a question of rules and law, but what I feel in control of.'

The impression emerging, therefore, was that drivers conceived of the morality or immorality of speeding in much the same terms as they conceptualised speeding and other traffic offences as crime, suggesting that the degree to which an offence is labelled

immoral depends in part on the degree to which it is also perceived as a crime. Nevertheless, while feelings of guilt were quite closely linked with feelings that a crime had been committed, feeling that an action was morally wrong was not always associated with guilt feelings. To illustrate this: almost a half of those drivers who thought that driving 10 mph above their ideal speed would be morally wrong professed that they would not feel guilty about it, while about one in five of those who said their ideal speed was not morally wrong nevertheless said they would feel guilty.

Finally, it is worth noting the distinction that several drivers made between different kinds of traffic offending. Some high speeders who did not think speeding a crime or morally wrong nevertheless had strong views about the immorality of driving with excess alcohol, their opinions being based on the notion of control:

'Drinking and driving is a cardinal sin - like beating up an old lady. Because you're not in control and putting lots of other drivers' lives at risk. I don't feel in control with one and a half pints of lager even though I'm under the limit, but when I decide it's safe to drive at a higher speed I'm in control, and I don't feel that's wrong.'

'I don't agree with it [drinking and driving]. Anybody who does it should be shot.'

#### (f) Summary

Our brief survey of drivers' attitudes to unlawful driving behaviour has revealed a wide range of contrasting views, underlining the complex and multi-factorial nature of motives for breaking rules on the road. Underpinning much of the discussion has been the idea of feeling in control, which for many drivers formed the bench-mark for perceptions of manoeuvres and actions as moral or immoral, crime or not crime, safe or unsafe, and causing or not causing feelings of guilt.

The big majority of drivers identified the existence of a personal code of conduct for driving, a code which did not always coincide with legally prescribed standards. Its main ingredients seemed to be the need to feel in control (to reduce accident risk), the perceived risk of enforcement, and the acceptable risk of enforcement. Yet while these were common to most codes, individual variation among drivers produced a wide range of behaviour in practice. Thus, for example, some younger drivers would set the boundaries for feeling in control and accepting the perceived risk of enforcement at 60 mph in a 30 mph area, while other drivers would set the same boundaries at, say, 40 mph in a 30 mph area.

Personal codes not only set the margins by which drivers broke the laws, but they also underpinned the decision whether or not to break a particular law. This became apparent when drivers explored their attitudes about the meaning of rules. While all acknowledged the need for traffic laws, some drivers believed it was not always necessary to adhere to them. High offenders were more likely than low offenders to think that many rules could be treated as guidelines, open to individual interpretation. Thus attitudinal differences appeared to translate into behaviour. Similarly, the idea that it was generally socially acceptable to offend on the road was acknowledged by high and low offenders alike, but low offenders were more likely than high offenders to use the legally prescribed rules for their own standard of conduct rather than embracing the perceived social norms or consensus. Thus variability in the personal meaning of rules seemed to distinguish both individual attitudes to unlawful driving and individual codes of behaviour.

## **9. SOCIAL COMPARISON WITH OTHER DRIVERS**

Only some drivers can have above average driving skills, yet studies show that the majority of drivers believe they are more skilful than the average (Svenson 1981, McKenna et al 1991). Further, Finn and Bragg (1986) found that most drivers believed they were less likely than other drivers to be involved in accidents. Recent research by McKenna (1991) suggests that it is the perception of being in control that underlies the bias of invulnerability, since, for example, perceived risk increased when drivers were asked to imagine that they were in the passenger as opposed to the driving seat.

Other studies have tried to fill in the picture of the social comparisons that drivers make, comparing the assessments of young and old drivers (Matthews and Moran 1986), socio-economic groups (McCormick et al 1986) and male and female drivers (McKenna et al 1991). Our study only touched on social comparisons, but as most of our interviewees were chosen for their contrasts in offending and accident rates it was worth noting the self-assessments and social comparisons made by these sub-groups and by the disqualified. In what follows we shall, as before, compare high and low offenders and the disqualified group, where appropriate, reserving the accidents dimension for Chapter 6.

### **(a) Self-assessments of skill and confidence**

Unlike other research, we did not find that the majority of our main sample of interviewees assessed their own driving skill as above average. Thirty-four per cent thought they were above average, 60% said they had average skill, while the remainder thought they were below. One young driver remarked, 'I'm careless and not that good with cars. I'm on my sixth now - they've either crashed or died on me, but they were all old.' Those who felt their skill was above average were asked how they judged this, and the most common reply (given by half of them) was that they read the road well and anticipated the actions of others. Asked how confident they were in driving, 42% of the main sample said they were 'very confident' and 55% said 'quite confident', only two respondents admitting little or no confidence in their driving.

High and low offenders showed only small differences in expressions of skill and confidence. Among high offenders 38% said they had above average skill and 47% were very confident, while the corresponding proportions among low offenders were 30% and 38%. The disqualified interviewees expressed rather more faith in themselves, 53% saying they had above average skill and the same proportion that they were very confident.

Age and gender were more closely related than offending levels to these self-assessments. Older drivers felt more skilful and confident than younger ones, and males felt more so than females even when exposure was allowed for. These differences, which are shown in Table 4.3, would account for the slight differences noted above between high and low offenders and between the disqualified and the main sample (since the disqualified group included very few females and no very young drivers). Similar patterns between male and female drivers have been found by McKenna et al (1991).

Although the majority of our respondents rated their skill as average, the bias noted by other researchers was present since so few thought they were below average. Of our total sample of interviewees (main sample plus disqualified) 55% thought they had average and 40% thought they had above average skill.

### **(b) Self-assessments of safety**

Approaching the question of social comparisons from another angle, we asked interviewees whether, if all drivers were to drive like them, breaking the laws in the same ways and to the same extent that they did, the roads would be safer or less safe. Once again a bias was noted, in that 71% of all interviewees thought the roads would be safer, largely on

**Table 4.3: Self-assessments of driving skill and confidence, by age and gender**

N = 65 main sample interviewees

Self-assessment	Males		Females	
	18-24 (N = 17)	25 + (N = 15)	18-24 (N = 12)	25 + (N = 21)
% saying they had above average skill	35	60	17	24
% saying they were 'very confident'	53	69	17	29

account of their relative skill and safe behaviour when driving. Low offenders were most inclined to believe this (85% did), but so too did 61% of high offenders and 63% of the disqualified group. Older drivers were more inclined than younger ones to say 'safer', but there were no differences between the sexes.

The finding that 87% of high offenders thought the roads would be safer or 'about the same' suggests that these drivers did not perceive their law-breaking actions as dangerous and that they only broke the rules when it was thought safe to do so. This is consistent with our earlier discussion of reasons for rule-breaking.

In contrast to the majority who believed the roads would be safer, 13% of the total, including 29% of the disqualified group, thought the roads would be less safe if everybody drove like them. Two of these drivers believed they had less skill and were not very confident when driving, while the majority thought that other drivers would not have the same degree of skill as they had, which could lead to more accidents if others tried to copy their style. In the eyes of this group, apparently, breaking the law required above average skill to offset the increased accident risk caused by offending. A few such respondents drew upon the notion of control to explain their view. For example:

'I feel part of the car when I'm in it. I feel very much in control and know I react faster than other drivers.'

A final question that interested us was how our respondents would perceive 'worse' drivers, defined as 'those who break the rules more than you do'. Not unexpectedly, low offenders had a stronger negative opinion of such drivers. More of them tended to feel angry, to think worse drivers were irresponsible and had no consideration for others, and to hope they would be apprehended. One said, 'When I see them zooming along I think, "You fool, I wish the police would catch you"'. From the perspective of low offenders, our high offenders would be among these 'worse' drivers. But all the high offenders answered this question readily, which suggests that 'worse' is perhaps a relative concept. However, high offenders tended to have a milder and more accommodating view. Most frequently they said something like 'it's up to them provided they leave me alone'. Some said it depended on which laws the others were breaking and whether their actions caused any harm. Moreover, several commented that in some circumstances 'worse' drivers might be admired, for doing something more daring or getting away with something that they



themselves had not considered. One remarked:

'If he was speeding, I'd quite admire him if he was overtaking and I'm not, and it's safe'.

**(c) Summary**

Perceptions of relative driving skill and safety revealed a bias among our interviewees, more saying they were above average than below average drivers, and the majority thinking the roads would be safer if others drove like them. As this bias was almost as much in evidence among high as among low offenders, its strength is underlined.

However, age and gender differences moderated the bias to some extent. Older drivers tended to believe they were more skilful and that roads would be safer if others copied their style, and males believed they had more ability, even when exposure to driving was taken into account. Though there was no gender difference in the proportions believing that roads would be safer, the few women who believed roads would be less safe tended to explain this by their perceived lower ability, while men who believed it were apt to say that other drivers did not have as much skill as they had, the implication being that extra skill was needed to break the rules safely.

## CHAPTER 5: DETERRING TRAFFIC OFFENCES

### 1. INTRODUCTION

One of the main objectives of sanctions imposed by the criminal courts is to dissuade potential offenders by the threat of punishment (this is usually known as general deterrence), and to persuade convicted offenders to desist from further crime through the experience of punishment (individual or specific deterrence).

Deterrence policy is based on the assumption that people make rational decisions, and exercise free choice in whether or not to offend. It aims to increase the perceived costs of offending while decreasing the benefits, so that the former outweigh the latter. In assessing costs and benefits, the would-be offender is said to weigh up three factors: the perceived risk of being caught, the fear of being caught, and the fear of the likely penalty. Thus, for example, a person may fail to be deterred from drink-driving, despite greatly fearing disqualification, because he perceives the risk of apprehension as very low. Alternatively, a driver may be deterred from speeding not because he fears a fine and endorsement, but because he believes there is a high risk of being caught and he strongly wishes to avoid that experience.

This is the basis of deterrence theory, but practice may be somewhat different. As research has discovered, there are many reasons why some people offend and others do not, why some give up and others continue, in addition to the three factors mentioned above: for example, enjoyment of the offending action or lack of moral commitment to the law. Moreover, some offences and some offenders may not be deterrable. Punishment may hold no fear for some people, some offences may be committed without premeditation, and some offenders may be unaware that they have committed an offence.

While these are some of the potential and actual difficulties associated with the deterrence objective, it is still one of the main planks of current criminal justice policy, and in this chapter we address the conditions necessary for it to work in the context of traffic crime, drawing upon findings from our study. First, however, we shall look briefly at other research carried out in a driving context which has tried to assess the general or individual deterrent effect of various sanctions, changes to sanctions, and particular policing initiatives. To increase relevance to our own study we shall focus on the penalty of disqualification and on initiatives designed to curb driving with excess alcohol.

#### (a) Disqualification as an individual deterrent

Suspension of the driver's licence as an individual deterrent seems to have some limited success, depending on how 'success' is measured. Combined research evidence, as reviewed by Robinson and Smiley (1987), suggests that about two-thirds of disqualified drivers comply with the order, but it is not known whether they do so through fear of being caught or further penalised in the event of a breach, or more for other reasons such as possible social stigma, the care of family and friends, or a dislike of driving uninsured. Among those who do not completely obey the disqualification order, many claim that during suspension they drive less frequently (Wells-Parker and Cosby 1988), more safely (Robinson 1979; Duncan et al 1990), and with fewer accidents (Harrington 1972).

After their suspension has ended, some drivers claim to adopt safer patterns of driving (Hagan 1977; Ross and Gonzales 1988), although Duncan et al (1990) found that 45% of previously suspended drivers gathered at least one further traffic conviction in the following one or two years. However, it seems that only a small proportion of licence-holders are disqualified more than once in their lives, and these are least likely to be people whose first disqualification was for drink-driving (Kriefman 1975), and people who complied with their suspension (Duncan et al 1990). Thus, in so far as disqualification is likely to be imposed on the 'worst' offenders, it is arguably a relatively effective individual

deterrent. Yet the precise reasons why a driver modifies bad habits or refrains from them entirely may have little to do with the deterrence assumptions of the criminal justice system.

#### **(b) Policing initiatives as general deterrents**

Here we look at initiatives and legislative changes designed to reduce the incidence of driving with excess alcohol. Ross (e.g. 1982), the foremost researcher in this field, concluded that changes introduced in Britain by the Road Safety Act 1967, and enforcement initiatives in the Netherlands, France and Canada, produced a decline in drink-driving fatalities and traffic law violations but that by and large it was short-lived; and that tougher penalties introduced in different countries had little deterrent effect (e.g. Ross 1977, Ross 1991). He believes that the measure most likely to increase general deterrence is swiftness of punishment, basing his conclusion on evidence from administrative licence revocation procedures recently introduced in the United States (e.g. Nichols and Ross 1990).

Hemel (1988) reached a different conclusion after evaluating the random breath testing (RBT) initiative introduced in New South Wales, Australia, in 1982. Here, high policing priority ensured that the average motorist had an annual one-in-three chance of being breath-tested. Since 99% of drivers stopped were found to be under the limit, the reduction in fatal accidents during the first two years of the operation seemed to be the result of deterring the average motorist rather than catching actual offenders. According to Hemel the prime ingredient in maintaining the effectiveness of RBT was a high visible level of police enforcement to ensure sufficient exposure.

Cairney and Carseldine (1989), following up the New South Wales RBT operation, concluded that the driving public might have become habituated to RBT, and that the memory of it rather than visibility *per se* could be the key to the success of future operations. Although levels of breath-testing activity had remained stable, drivers perceived them to have been reduced, and fewer (compared with an earlier survey) agreed that the risk of apprehension was a constraint. On the other hand, they estimated the risk of being charged with drink-driving as 'higher' or 'much higher' since RBT was first introduced.

Despite these findings, RBT is unlikely ever to eradicate drink-driving. Cairney and Carseldine found one group of drivers who believed it was possible to avoid RBT operations by using back streets, and another group who rejected both the blood-alcohol limit and the idea of RBT.

Summing up, it can be said that measures of general deterrence in the field of drink-driving have occasionally be found to reduce fatalities, although the effect of some tends to wane in the longer term. Whether the incidence of drink-driving is reduced directly as a result of policing initiatives is less certain. In England and Wales fewer motorists were caught driving with excess alcohol over the Christmas period in 1990, despite greater police activity (e.g. Daily Telegraph, 3.1.91). Yet the apparent decline in drink-driving may have been produced by other factors, such as a general change of attitude among the public and greater social awareness of the impairment caused by alcohol. As with individual deterrence, it is not always easy to prove that a general deterrent effect results directly from changes in legislation, sanctions, or enforcement practice.

## **2. DETERRENCE IN THE PRESENT STUDY**

We shall present our results under several headings. First we look at drivers' beliefs about the risks of apprehension, their knowledge of the likely penalties, and the extent to which they feared or wished to avoid them. Then we examine how some of our respondents had

experienced disqualification: the effect it had on their lives, whether they did or did not drive while disqualified, and why. Finally we look at driving behaviour following disqualification or a fine, and at the measures respondents said would deter them from speeding or drink-driving. In all this we continue, where appropriate, our pattern of comparing high and low offenders.

As data for some of our discussion on perceived risk of apprehension and feelings about penalties, we refer to Table 5.1. This presents statements endorsed by our main survey respondents as reasons for and against driving over 40 mph in a 30 mph area, failing to stop at red lights, and driving with excess alcohol. Table 5.1 compares the responses of different groups on the chance of being stopped by the police and on whether the penalty would bother them. Other data will be introduced as needed.

**Table 5:1 Beliefs about the risk of apprehension and wish to avoid the penalty**

N = main survey sample endorsing reason 'very/fairly well'  
as explanation for engaging in or refraining from behaviour

Reasons for:	Driving over 40 in a 30 mph area		Failing to stop at red lights		Driving with excess alc.
	High Speeders (N = 107) %	Low Speeders (N = 88) %	Frequent Red Runners (N = 33) %	Rare Red Runners (N = 180) %	Those ever doing it (N = 102) %
There's not much chance of getting caught/being stopped by police	28	9	24	12	18
A fine & endorsement/ the penalty/the disq & fine wouldn't really bother me	5	7	15	3	10

  

Reasons against:	High <sup>1</sup> Speeders (N = 89) %	Low <sup>2</sup> Speeders (N = 147) %	Frequent <sup>1</sup> Red Runners (N = 28) %	Rare <sup>2</sup> Red Runners (N = 400) %	All main <sup>2,3</sup> sample (N = 435) %
There's a chance of being stopped by the police	47	61	36	65	78
I don't (really) want to get a fine & endorsement/be disq & fined	75	81	68	81	89

**Notes**

1. Excludes those who nearly always do it.
2. Includes those who never do it.
3. No driver admitted to nearly always doing it.

**(a) Beliefs about the risk of being caught**

**(i) Speeding**

Table 5.1 shows that the statement 'there's not much chance of getting caught' was endorsed as a reason for speeding more by drivers with high speeding scores than by those with low scores (28% compared with 9%), while low speeders were more likely than high speeders to endorse 'there's a chance of being stopped by the police' as a reason for not speeding (61% compared with 47%). Thus belief that the risk of apprehension was low motivated more high speeders to drive fast, while belief that there was a chance of apprehension motivated more low speeders to refrain.

However Table 5.2, which compares interviewees' answers to the question 'What do you think your chances are of getting stopped for speeding in the next 12 months?', shows that high speeders believed there was a greater likelihood of being caught for speeding than low speeders. (For instance, eight per cent of low speeders but 22% of high ones believed the risk was 'quite high' or 'very high'.) As we noted in Chapter 4, some low speeders tended to believe that if they did speed deliberately it would be 'just their luck' to be caught and so refrained wherever possible. The data suggests that drivers who exceed speed limits often and by wide margins do it because from experience they perceive a low risk of apprehension relative to the frequency of their offending, while those drivers who have less experience of speeding are deterred by the belief that if they did it more frequently they would be caught. But since low speeders offend less often, it is not surprising that their estimate of the actual chance of being caught is lower than that of their counterparts who speed more frequently.

**Table 5:2 Perceived risk of being caught for speeding**

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N = 97 interviewees

Risk	High Speeders (N = 50) %	Low Speeders (N = 47) %
Nil	4	28
Very low	34	34
Quite low	40	30
Quite high	16	6
Very high	6	2

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**(ii) Running red lights**

In common with the pattern of results for speeding, Table 5.1 shows that drivers who admitted frequently running red lights were more likely to endorse 'there's not much chance of being stopped by the police' as a reason for engaging in it than rare red-runners (24% compared with 12%); and they were less likely to endorse 'there's a chance of being stopped by the police' as a reason for refraining than those who ran red lights rarely or never (36% compared with 65%). Thus belief in a low risk of apprehension was a greater motivation to those who ran red lights frequently, while conversely a concern with the risk of being caught was a greater restraint to those who rarely or never offended.

### **(iii) Drink-driving**

Fewer than three per cent of our main survey respondents admitted driving with excess alcohol more than rarely. It was therefore not feasible to compare rare and more frequent drink-drivers to see whether a similar pattern would emerge. As it turned out, Table 5.1 shows that only 18% of those who admitted ever doing it endorsed 'there's not much chance of being stopped by the police' as partly explaining their behaviour, while 78% of all respondents endorsed the converse reason for not drink-driving. Since Riley (1984) estimated from the British Crime Survey that the chance of being caught on any one drink-driving occasion is only one in 250, it is interesting that the risk of apprehension appears to figure so prominently as a general restraining factor.

In the pub study drivers who thought they would or might be over the alcohol limit on departure were asked to estimate their chances of being stopped by the police. Seventy-four per cent said the risk was quite low or very low, and another 11% said it was nil. These people had already decided to break the law on that occasion. The other main group in the pub study, drivers who intended or hoped to be under the limit, were asked why they were doing so and 20% in free response mentioned the risk of being caught if they were 'over'. If we had asked them, like the first group, to estimate that risk we might have elicited higher figures, because 61% mentioned in free response the fear of losing their licence (which pre-supposes being caught).

These findings from the pub study cannot be compared directly with those about the risk of apprehension in respect of speeding and running red lights. But they do support the overall impression that for drivers who offend frequently, belief in a low risk of apprehension is a stronger reason for doing it than it is among those who offend less often; while the converse is that among drivers who break laws less often or not at all belief about being caught is a greater restraint than among more frequent offenders. In other words, high or frequent offenders play up their beliefs about the (low) risk of apprehension to support their offending behaviour, while low or rare offenders play up their belief that there *is* a risk of being caught to help them refrain.

### **(b) Knowledge of the likely penalty**

A penalty's effectiveness as a deterrent depends partly on potential offenders knowing accurately what the penalty is. By and large, drivers whom we asked in our study were well aware of the standard sentences for driving with excess alcohol and for speeding. This is in some contrast to the situation with non-traffic offences, where offenders' estimates often bear little relationship to actual types and lengths of sentences used by the courts (see, for example, Bennett and Wright 1984). In our pub study only a few drivers who thought they might be over the alcohol limit on departure were unaware that disqualification was mandatory following conviction, and the vast majority of our in-depth interviewees were aware that a fine or endorsement was the usual penalty for excess speed.<sup>1</sup> But there was some confusion about speeds necessary to attract a disqualification, a matter of concern to several high speeders who liked to speed close to but just under the supposed 'limits' on motorways.

### **(c) Fear of or wish to avoid the penalty**

If there is no fear of the penalty even a high perceived risk of being caught is unlikely to deter many potential offenders, although the social stigma may restrain some. Evidence that our drivers were keen to avoid the penalty comes from several sources, and the general finding was that for many people fear of the penalty was of greater concern than the risk of apprehension.

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1. However, all these drivers would have been reminded of it in the postal questionnaire they had completed some months earlier.

### **(i) Speeding**

Table 5.1 shows that only five per cent of high speeders and seven per cent of low speeders endorsed the reason 'a fine and endorsement wouldn't really bother me' to explain why they engaged in driving over 40 mph in a 30 mph area, and this was the reason least likely to explain drivers' speeding behaviour. On the other hand the statement 'I don't really want a fine and an endorsement' was supported by 75% of high and 81% of low speeders as a reason for not doing it (excluding those who 'nearly always' engaged in it), and this was the second most frequent reason in the list. The pattern of drivers' responses, whether of high or low speeders, suggests that the wish to avoid the penalty was a more important consideration than the risk of being caught.

### **(ii) Running red lights**

The same two reasons concerning the wish to avoid the penalty were presented as possible explanations for and against running red lights, and Table 5.2 indicates that a similar pattern emerged to that for speeding. Only 15% of frequent and three per cent of rare red-runners endorsed the reason 'the penalty wouldn't really bother me', while 68% of frequent and 81% of rare red-runners endorsed 'I wouldn't really want to get a fine or endorsement'. Once again, the wish to avoid the penalty seemed a more important restraint than the risk of apprehension for both frequent and rare offenders.

### **(iii) Drink-driving**

Only ten per cent of survey respondents who admitted drink-driving endorsed the reason 'the disqualification and fine wouldn't really bother me', while 89%, whether admitting to drink-driving or not, endorsed the opposite statement, that they wished to avoid disqualification and a fine, as a reason for refraining. This finding, suggesting that few drivers were unconcerned about the penalty, was reflected in our pub study. As already mentioned, 61% of drinking drivers who hoped to stay under the limit said in free response that it was because they feared losing their licence (and indeed, 11% of these mentioned that they had lost it before for drink-driving and wanted to keep it now). Among the group who thought they would or might be over the limit on departure none said (in free response to the question 'why, therefore, are you planning to drive?') that the penalty would not bother them. Even among the 'hard core' of 17 drivers who professed that nothing would stop them from driving with excess alcohol, only two when questioned more closely denied that they would be bothered by a disqualification. (One of these said it would give him a welcome rest from driving, and the other said he could get by without his licence for a while.)

Further evidence that the wish to avoid the penalty was of concern to potential and previous drink-drivers came from our in-depth interviews. Among the big majority who professed never to drive with excess alcohol, around one in six low and high offenders, and drivers disqualified for speeding or on 'totting-up', said in free response that their main reason for refraining was to avoid disqualification. Yet this figure rose to nine in ten among those who had given up drink-driving after being disqualified for doing it.

The conclusion from these findings is that fear of or desire to avoid the penalty is a major concern for most drivers whether or not they engage in the unlawful activity. It also seems to be a more important consideration to them than the risk of apprehension. We might speculate that although high offenders are almost as desirous of avoiding the penalty as low offenders, they focus more on the relatively low perceived risk of apprehension to facilitate their decision to break the law. Low offenders, in contrast, offend less frequently, not only out of concern to avoid the penalty but because they focus more than high offenders on the belief that there *is* a chance of being caught. Illustrating this, one low offender said:

'I have no great respect for the laws because I don't see much enforcement of them. But I'm one of those who expects the worst and it seems to happen. I'm always scared that the law will catch me *once...*as soon as I decide to go at 40 deliberately, I'll get caught.'

### 3. THE EXPERIENCE OF DISQUALIFICATION

Fifty-nine of our postal sample of 78 previously disqualified drivers commented on the particular effects that disqualification had had on their lives. Nineteen had suffered at least two serious consequences, such as loss of employment, financial problems, severe curtailment of social life, and shame among family and friends. A further 10 mentioned only job problems, and nine mentioned only disruption to social activities. Four said it had taught them a lesson, and 12 just remarked that it had been inconvenient. The impression was that the great majority had found it an unwelcome experience and at least half had suffered severely. The longer the disqualification the higher proportion of drivers who experienced at least two major kinds of difficulties, and the higher the proportion whose job was affected. These included all who were disqualified for drink-driving. One, who lived in the heart of the countryside, described it thus:

'Not being able to drive was absolutely miserable. I couldn't go anywhere. I felt chained here in the middle of nowhere.'

People disqualified for no longer than six months were more likely than others to say that there had been little effect or just that it was generally inconvenient. One driver disqualified for speeding was recommended by the magistrate to take a holiday during the period of his ban, which he did.

In interviews we asked those who had experienced disqualification what had been the worst aspect of it. The majority said it had been the loss of freedom and/or the inconvenience, and these respondents were equally divided between those disqualified for drink-driving and those disqualified for other offences. However drink-drivers were more likely to mention the social stigma of the court appearance or general feelings of shame. One man said he rarely drank alcohol when planning to drive but on that occasion he had had two pints without eating previously. He now had the reputation of being a 'lager lout', which upset him at all times and especially riled him at work. Another, who used his period of disqualification positively to change his career, remarked:

'I didn't enjoy going to court. I felt a bit degraded when I came out and knew I'd been banned. I had a lot to lose too - I wrote a £4000 car off and hit some other cars and paid for them over 18 months. I had nothing at the end of it. Having to walk to work in sub-zero temperatures - one and a quarter hours each way - without a penny to your name - a lot goes through your mind. I feel it has taught me a lesson. When everything's taken away you realise it's time to wake up... I was very complacent before. I respect having my own licence now.'

#### (a) Those who drove while disqualified

Of the respondents completing our postal questionnaire, 23% admitted that they did not wait until their licence was restored before driving again. Two-thirds of these said, however, that they 'hardly ever' did it, five said they did it occasionally, and one said he drove as often as before. Of the 32 interviewed, eight had admitted non-compliance with the order on the postal questionnaire. However, in interview, three of the remaining 24 drivers also admitted that they had in fact driven occasionally. This brought the total admitting to driving while disqualified to 27%, although among interviewees it was 34%.



Some said they felt uncomfortable about it; for example:

'When I was convicted, I had no idea. I was dumbfounded, shocked. I didn't realise I couldn't drive again. The thing was the court was in a small town miles from home or anywhere and I'd driven there, so I took the car home. I knew what the consequences would be but I had no choice.'

Drivers disqualified for offences other than drink-driving and speeding were most likely to breach the order (38%), and tended to wait less time before doing so. Those disqualified for drink-driving had a lower breach rate (23%) and were more likely to wait at least three months. Only two of those disqualified for speeding admitted driving before their licence was restored, (and one did it straightaway). Overall, there was no relationship between the length of disqualification and the likelihood of driving while disqualified; this contrasts with the results of Duncan et al (1990) who found there was a relationship. Among our respondents those aged under 25 were more likely to breach the order than older drivers (32% compared with 10%).

#### **(b) Reasons for and against driving whilst disqualified**

In our postal survey the disqualified sample were offered lists of reasons for and against driving while disqualified and asked to endorse those which explained their own actions. When we compared their responses on the risk of apprehension with those on fear of the penalty there was a pattern fairly similar to that noted earlier in this chapter. Of the 16 drivers who had driven while disqualified and gave reasons, five endorsed the statement 'there was not much chance of being stopped by the police', but only one endorsed 'the penalty wouldn't really have bothered me'. Conversely, 81% of the whole sample endorsed, as a reason for not driving while disqualified, the statement 'there was always a chance of being stopped by the police', while 87% endorsed 'I didn't want to get into worse trouble.'

That drivers disregard a disqualification order for reasons unconnected with the risk of apprehension or desire to avoid the penalty (two bases of deterrence policy) is evidenced by the range of other reasons our sample endorsed. The most common explanations, each given by nearly half, were an emergency at home or work, and temptation because they still had their vehicle. A quarter said they would have had practically no social life without their car (c.f. Robinson 1979).

When asked the reasons for not driving while disqualified, moral commitment to the law was apparently a major restraint on all drivers, whether or not they completely observed the disqualification order, with 85% of the total endorsing 'it's against the law' and 79% 'it would have been wrong to do it'. However, those who did breach the order were less likely to endorse these two reasons than those who complied (65% compared with 91%, and 59% compared with 85%, respectively), suggesting that continuing offenders may regard the law more lightly.

The patterns of reasons for and against indicated that drink-drivers were most likely to take their disqualification seriously. For instance, twice as many of them as of the others endorsed 'I felt disqualification was a reasonable punishment for what I had done.' By contrast, those disqualified for speeding were least likely to refrain through feelings of shame, while those disqualified for other offences and who failed to comply were most likely to say that they drove because they 'couldn't be bothered to make other travel arrangements'.

#### 4. DRIVING BEHAVIOUR FOLLOWING A FINE OR DISQUALIFICATION

As mentioned earlier, other research suggests that even if some drivers breach a disqualification order they may at least drive more slowly or cautiously, and subsequent to disqualification some report that they drive more safely. As far as we are aware there is no information on whether fines for speeding subsequently promote slower speeds or more careful behaviour generally. Our study has no 'before and after' data on whether drivers are more cautious following disqualification or a fine, but some of our findings bear indirectly on this issue.

##### (a) Speeding

The first piece of evidence comes from our speeding study. When we asked drivers at the roadside whether the experience of having just been stopped by the police would make any difference to their choice of speed in future, 54% said that it would, or probably would, at least for a while. These drivers were divided between 42% who said they would slow down generally, and 12% who said they would be more careful in the location where they had been caught. A further nine per cent said, in effect, that they would slow down only if they saw the police about. Thirty-seven per cent said the experience would not, or probably not, have any moderating effect, and their most common explanations for this were that they believed themselves to be safe drivers (41% of those who said 'no'), and that their job required them to drive fast (19%).

Police dealt with the speeders in one of three ways. Thirty-four per cent were given an informal warning. Fifty-eight per cent received a fixed penalty notice, which meant they would have to pay a fine of £32 and have their licence endorsed with three penalty points. The remaining eight per cent were reported for prosecution in the magistrates' court, where if convicted they would receive a fine and endorsement unless their excess speed was judged to merit disqualification. Naturally there was a strong correlation between the degree of excess speed and the severity of police action, though a few drivers were reported for court, rather than being given a fixed penalty notice, because they would or could not produce their licence.

Table 5.3 shows that those given an informal warning (the less serious offenders) were more likely to say they would slow down in future than those facing a fine and points, 46% of whom said it would not, or probably not, influence them. The table also shows answers about future speed in relation to other variables. The 'deliberate' speeders, who (for example) endorsed the reason 'I decide for myself what speed is OK for the road and traffic conditions', were less likely to say they would moderate their behaviour than were the 'inadvertent' who had been over the limit without realising it. More of those unwilling to change were habitual speeders, and fewer felt guilty about having been stopped. (They were also more likely to be men.) All this suggests that while some drivers may be motivated to reduce their speed by the experience of a fine, the worst offenders are least likely to be deterred by this penalty.

Our second piece of evidence comes from comparing the current driving behaviour of the main sample of respondents with those disqualified for speeding. Twenty-five per cent of the former group but 79% of the latter had speeding scores that we defined as high. The clear inference from this is that drivers previously disqualified for speeding continued to be high speeders.

**Table 5:3: Speeders: envisaged effect of police stop on future choice of speed, by other factors**

	N	% who will:		
		probably/ definitely slow down	slow down only if see police	probably/ definitely not slow down
<b>Police action</b>				
informal warning	36	72	8	20
fixed penalty	58	47	10	43
reported for court	7	29	-	71
<b>Selected reasons endorsed for speeding on this occasion</b>				
decides speed for self	40	45	10	45
didn't realise was speeding	53	62	9	28
<b>Gender</b>				
male	77	52	8	40
female	23	61	13	26
<b>How often more than 10mph over this limit?</b>				
rarely/sometimes	41	66	5	29
usually/nearly always	26	54	8	38
<b>Feel guilty?</b>				
yes	38	76	5	19
no	58	41	12	47

Table 5.4 provides a third piece of evidence from responses of the disqualified interviewees to our question whether they had altered their driving style as a result of their ban. Six of the 12 who had been disqualified for speeding or from 'totting up' 12 points (many of which would have been received for speeding) said that although they still exceeded limits they had slightly reduced their speeds.

Two said there had been no change in their choice of speed since disqualification, while another asserted that the 'clean sheet' following restoration of his licence had actually encouraged higher speeds than when he was 'waiting' on nine points. He remarked:

'A one month ban is OK. It's not a short sharp shock, quite the opposite. There comes a stage when it's actually welcome. When you've got nine points you know it's going to happen and you can't hang on for three more years. But when you're disqualified for one month then you're back to zero. You've got a clean sheet to be abused once more - off you go again... Just to prove it, I got nine points in six months after a previous disqualification. Then I became more careful because I was told I could risk getting a one year ban if I got to 12 points within a year.'

**Table 5:4 Changes in driving style resulting from disqualification**

N = 32 disqualified interviewees

Change	Number mentioning change		
	All	Those disqualified for: Drink-driving	Speeding/totting
Keeps law for which disqualified, no other change	9	8	1
Slightly more law-abiding re reason for disqualification, no other change	8	2	6
More law-abiding generally	10	9	1
No change re reason for disqualification, but more law-abiding otherwise	2	1	1
No change	2	-	2
Slightly less law abiding re reason for disqualification, no other change	1	-	1
<b>Total</b>	<b>32</b>	<b>20</b>	<b>12</b>

The remaining three disqualified speeders reported some improvement in their driving habits following the restoration of their licence. One said he now tried to keep very close to or under the speed limits virtually all the time but still continued to break other traffic rules; one said he drove just as fast but was more law-abiding on the roads in other respects; and the other said he had reduced his speed and his frequency of other driving breaches as a result of his disqualification. The overall picture is that the majority of those disqualified for speeding tended to lower their choice of speed after getting their licences back, but still drove faster and exceeded the limits more often than other drivers; and that any positive effect of the ban did not generalise widely to curb other unlawful actions.

**(b) Drink-driving**

Our findings suggest that the mandatory, outright, and minimum one-year disqualification for drink-driving appears to have more effect on subsequent behaviour than the discretionary and usually shorter disqualification imposed for speeding, which drivers often have several chances to avoid. In the postal survey, 80% of those formerly disqualified for drink-driving professed no longer to engage in it. (The figure of 20% who still did may be compared with 30% of those disqualified for other reasons, and 23% of the main sample, who admitted occasional drink-driving.) This suggests that disqualification may have a substantial inhibitory effect on those who might otherwise drive with excess alcohol.

This was confirmed in interviews. Table 5.4 shows that 19 of the 20 previously disqualified drink-drivers reported either that they no longer did it, or that they did it only rarely and/or tended to exceed the margins by less. (The remaining driver, an admitted

alcoholic, felt that he had been unlucky to be caught the first time and that he could avoid apprehension in future.) Moreover, nine of the 19 said they were not only more law-abiding in respect of drink-driving but had somewhat curbed other unlawful habits. Thus for some drivers the effect of a longer and more certain disqualification may generalise to reduce other law-breaking actions.

This latter statement however needs qualifying. Despite their experience of a ban, 31% of all respondents disqualified for drink-driving had high speeding scores, compared to 25% of the main sample. So while some former drink-drivers may have reduced their habitual choice of speed following mandatory disqualification, many still tended to break the limits. Part of the reason may be that while a disqualification for drink-driving is certain, long, and outright, drivers perceive that a disqualification for speeding may require them to be caught four times. As one pointed out:

'I've stopped drink-driving because I'm terrified of being caught again. But three points on my [clean] licence wouldn't bother me. Twelve points is an awful lot to get. If I'd got one, I'd think I'd got three more chances, and I haven't been caught yet in eight years of driving.'

To summarise, our findings like other research indicate that not all drivers comply with a disqualification order, but those banned for drink-driving are most likely to do so. After a disqualification for speeding, most of such drivers may somewhat curb their habitual choice of speed to avoid apprehension, but they continue to exceed speed limits and may offend in other ways. After a fine for speeding most 'deliberate' speeders say it will not affect their future choice of speed, but 'inadvertent' speeders say they are likely to slow down. On the other hand, disqualification for drink-driving does seem to inhibit subsequent drink-driving for the majority, and may generalise to restrain other unlawful behaviour.

The differential effect between a disqualification order for drink-driving and one for other offences may be due partly to the certainty, length and outright nature of the former compared with the discretionary, shorter and usually 'gradually obtained' nature of the latter. It may also be due to a difference in social meaning between being caught for speeding and for drink-driving. Many of our respondents who had been fined or disqualified for speeding did not regard it as criminal or wrong (see also the discussion of reasons in Chapter 4), and for some there was a sense of bravado about risking capture or a ban. But many disqualified drink-drivers acknowledged that what they had done was wrong and dangerous, and that disqualification had been a reasonable punishment. For them, too, the sense of social stigma was far greater.

## **5. WHAT MEASURES WOULD DETER DRIVERS FROM SPEEDING AND DRINK-DRIVING?**

Despite the efforts of the police and courts many drivers are not deterred. We asked interviewees who admitted ever exceeding speed limits what measures would be most effective in preventing them from doing so. In the pub study we asked drinkers who expected to be over the alcohol limit and who intended to drive away, what would stop them. Table 5.5 brings together the free responses of these people, highlighting differences between drinking drivers and speeders, between high and low speeders, and between drivers previously disqualified for speeding or on totting-up and those disqualified for drink-driving.

### **(a) Measures to deter excess speed**

Table 5.5 shows that roughly one third of all interviewees who broke speed limits said that much more police enforcement would at least reduce their frequency of speeding and might stop it completely, while just over one in five said that far heavier penalties would be needed to deter them. Such penalties included disqualification (for the next offence or for any), a prison sentence, or a huge fine (say £500).

**Table 5.5: Measures drivers said would deter them from drink-driving or speeding<sup>1</sup>**

N = in-depth interviewees and pub study respondents

	Measures that would prevent intending drink-drivers from so doing: (N = 64) <sup>2</sup>	Measures that would prevent interviewees from speeding:					All disq. (N = 32)
		Low speeders (N = 23)	High speeders (N = 25)	All speeders (N = 48)	Disqualified: speeders/ totters (N = 12)	drink-drivers (N = 20)	
	%	%	%	%	%	%	%
Much more police enforcement	48	39	32	35	17	42	32
Heavier penalties	3	17	28	23	50	5	22
Being caught for doing it/ having or seeing an accident involving it	5	26	16	21	9	21	16
Significant others as passengers	2	9	4	6	8	5	6
Probably nothing	27	9	8	8	-	5	3
Other	3	-	12	6	17	21	19
Zero alcohol limit	8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Better alternative transport	5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

**Notes:**

1. All answers, which the table summarises, were given in free response.
2. This group comprises all respondents in the pub study who thought they would or might be over the limit, who intended to drive away, and who perceived any chance of a police stop.

Concealed in these two figures were considerable differences between types of driver. Low speeders of both sexes, female high speeders and those disqualified for drink-driving were inclined to think that much higher levels of enforcement would be a more effective deterrent for them than heavier penalties. In contrast, male high speeders, and drivers previously disqualified for speeding or through totting-up (nearly all of whom were male high speeders) believed that more severe penalties would be a better preventive measure for them. Since these last two sub-groups on average perceived a higher risk of apprehension than female high speeders and low speeders of either sex, it seems that drivers who see the risk of apprehension as low believe far greater enforcement would be the best deterrent, while those who perceive a higher chance of apprehension think heavier penalties would be more effective. Moreover, the threat of being caught may not be much of a deterrent to male high speeders while penalties remain at their present levels.<sup>1</sup>

The next most frequently mentioned deterrent to speeding concerned events likely to reduce drivers' feelings of invulnerability. About one in five interviewees thought that actually being caught for speeding, or having or seeing an accident linked with excess speed, would be needed to change their habits. This finding may be put together with two others. First, 41% of all our depth interviewees did not believe that reducing speed limits would considerably reduce fatal accidents on the road. Second, in our speeding study, only half the roadside interviewees accepted that raised speeds increased their own likelihood of accident. The need to have it 'brought home' to drivers that speeding can be dangerous is perhaps a task for the future.

In addition to the open-ended question asking depth interviewees what would prevent them from exceeding speed limits, we presented them with three specific options: doubled fines, twice as many traffic police, and a 50% reduction in the number of points needed for a disqualification (i.e. six instead of 12). Overall, high speeders indicated that they would be less deterred by each measure than low speeders, but both groups felt that doubling the number of traffic police (i.e. raising the risk of apprehension) would be the most effective option for them. Halving the number of points was seen as least effective by low speeders, perhaps because they still perceived the chance of being caught twice as remote, while doubled fines were thought least effective by high speeders. Among the disqualified drivers the high speeders (who were the big majority) thought that doubled fines would be least likely to curb their own speeding. Among those previously disqualified for speeding or through totting-up, doubled fines were again perceived as the least effective measure, and doubled police officers as the most effective.

Thus in free response high speeders were most likely to suggest that heavier penalties would best curb their speeding, yet when faced with the three specific options they thought that doubled fines would be less effective than either raising the risk of apprehension (through doubling police manpower) or halving the number of points required for a disqualification. This highlights the complex interplay between risk of apprehension and severity of penalty. One driver previously disqualified for speeding said he was not particularly bothered about the risk of being caught. He explained:

'Most high mileage drivers are reasonably well paid. Most regard the cost of a fine like petrol and oil....but a £500 fine? I doubt whether that would stop me but it would make it quite exciting...only an instant year ban for any offence [of speeding] would stop me, not a month ban.'

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1. The anomaly in this pattern concerns disqualified drink-drivers, of whom most were high speeders. 30% perceived a quite or very high risk of being caught for speeding, and 42% said that much more enforcement would stop them. However, only one driver included in the 30% also figured in the 42%. Supporting the earlier pattern, those perceiving a lower risk said a far higher risk of apprehension was the better preventive measure for them. However, those seeing a higher risk were no more likely to suggest greater enforcement as a deterrent than a variety of other measures.

### **(b) Measures to deter drink-driving**

In the pub study 64 drinkers who intended to drive away despite (possibly) being over the alcohol limit believed there was some risk of being caught. We asked them what would prevent them from taking that risk, and Table 5.5 includes their answers. Forty-eight per cent believed that much more enforcement would be needed to stop them, and several of these mentioned random breath testing or police waiting outside pubs. Only three per cent mentioned heavier penalties. As 85% of all the pub drink-drivers believed the chance of a police stop to be 'quite low', 'very low' or nil, these findings tend to reinforce the pattern that where the risk of apprehension is perceived to be low, more enforcement rather than more severe punishment is the better preventive measure.

The most worrying figure in Table 5.5 is the 27% of drinking drivers who said that nothing would prevent them from driving with excess alcohol. Nearly all these 17 drivers said they were not concerned about the legal limit, their explanations including the belief that they would not get caught, they were prepared to take the risk, they 'knew from experience' that they would reach their destination safely, and that they felt fit to drive.

### **(c) Conclusion**

Our results imply that measures designed by the criminal justice system to deter drivers from unlawful actions do not have a straightforward effect. Whether a speeder or a drink-driver will be prevented seems to depend on the perceived risk of being caught, the frequency with which the driver engages in the unlawful action, and the perceived severity of the penalty.

When the frequency of speeding is low, the perceived risk of apprehension is relatively low. When risk is low, more enforcement is believed to be the most effective deterrent. We have no systematic information on how often the drink-drivers in our pub study broke that law. However the big majority of them perceived the risk of being caught as low and said that tougher enforcement would stop them.

In contrast, when the frequency of speeding is high, the risk of apprehension is relatively high. If fines were only doubled, high speeders believe that greater enforcement would be more effective in limiting their choice of speed. But if instant disqualifications, longer disqualifications, or huge fines were imposed, this would render the penalty a better deterrent than raising the risk of apprehension. In other words, current penalties for excess speed are largely ineffective with high speeders, who are prepared to accept a greater risk of being caught.

In sum, our impression is that drivers most likely to speed would need more severe penalties to deter them because they largely perceive current penalties as insufficient. Those most likely to drive with excess alcohol would require greater police enforcement, since although they think the penalty is sufficient to deter they perceive the risk of apprehension as low.



## CHAPTER 6: UNLAWFUL DRIVING BEHAVIOUR AND ACCIDENTS

### 1. INTRODUCTION

In this chapter we examine the links between traffic offending and accidents, and consider whether there is any support for the reasonable notion that the more a driver breaks the law the higher will be his or her accident risk. As a logical extension of this, we ask whether the 'worst' offenders have the highest accident rates.

At the level of common sense, of course, there is an obvious link. Traffic laws are designed to regulate drivers' actions so that they do not collide with one another, and a motorist who (for example) ignores a red light and drives through a junction when other vehicles are crossing is likely to meet with an accident. But as we have seen, some kinds of offending are widespread, and accidents (in relation to individual drivers) are infrequent, so the picture is not simple.

Here we must note that in seeking correlates of accidents there are considerable methodological problems. One is the low base rate: that is, the low proportion of accident-havers among drivers. In the general population of motorists over any period of a few years the proportion who have accidents is small. This makes it harder to find other factors which distinguish them, because in the whole population, or any representative sample of it, the variation in the criterion to be 'predicted' is narrow. One can instead, arrange a sample in which the base rate is much higher (as in the present study) but this leads to other difficulties which are noted later. A fuller discussion of the base rate problem is given in Simon (1971).

Second, the accident situation is very complex. While the majority of accidents are due in large measure to human error (Storie 1977), this broad term covers a multiplicity of factors which may or may not be present in any one case, and which interact with one another and with other circumstances which may seem to occur by chance. The result is that, as Peck, McBride and Coppin (1971) found, the temporal stability of drivers' tendency to have accidents, though statistically significant in large samples, is low: 'the accident population is largely composed of different drivers from year to year'. These problems are treated in detail by Peck et al (1971), also and by Maycock (1985) who concludes:

'Statistically, therefore, relationships between the true underlying mean accident rate of individuals and any relevant independent variables are obscured by random errors which are at best of the order of 10 times larger than the variations of interest. The generalised linear methodology would appear to offer a means of analysing such data meaningfully, providing sufficiently large samples can be obtained'.

Despite these difficulties, research has proliferated in seeking out the correlates and causes of accidents. Many studies have used data from official records on large samples of drivers, and have found consistent, though low, correlations between accident rates and convictions for traffic offences, even when spurious associations (convictions resulting from accidents) are removed. Peck et al (1971), in the California Driver Record Study which used huge samples (from a pool of 148,000), reported (non-spurious) correlations between convictions and accidents over a three-year period of around .20 for males and .15 for females, though exposure (mileage) was not allowed for. The correlation with accidents was only slightly increased by including biographical variables like age. Speeding convictions had the highest association with accident rates. Additional data, including mileage per week and years of driving experience, was obtained by questionnaire from a much smaller sample of males (N=536), and these variables added significantly to the prediction of accidents, though conviction record still contributed most (and the correlation for the sample of 536 were not cross-validated on another sample). A review of such

studies based on drivers' records is presented by Biecheler-Fretel and Moget-Monseur (1984), and consistently finds a link between convictions and recorded accidents.

But many accidents, and numerous incidents of offending, fail to reach official records. Alternative sources of data could include observation of drivers' behaviour, and drivers' own reports of what they do. However, it would be hard to study the offending-accident link purely by observation because of the infrequency of accidents. But the studies of Quenault and his colleagues contain relevant data obtained from records, observations and self-report. In a paper amalgamating previous findings from several small samples, Quenault and Harvey (1971) compared 177 drivers who had been convicted of careless driving with 363 who had not. All were systematically observed over a test route and their driving styles were classified by Quenault's typology of driving behaviour as 'safe', 'injudicious', 'dissociated active' or 'dissociated passive'. The proportion of 'safe' drivers was much lower in the convicted than the unconvicted group, and the convicted group reported having had more than twice as many accidents, so style of driving did appear indirectly to be linked with offending and with accident involvement.

Self-report data forms the basis of studies by Biecheler-Fretel and her colleagues in France of 'basic driving behaviour' (Biecheler-Fretel and Moget-Monseur 1984; Biecheler-Fretel 1989). This work has features in common with the present research. Samples of drivers were asked (by questionnaire) to describe their usual behaviour by stating (on a scale) their frequencies of a number of actions which were breaches of traffic rules, and to give other personal details including the numbers of accidents and convictions they had had. Analyses included the derivation of behavioural factors, and a scale of deviance, which were correlated with accident rates. Further reference to some of these results is made later.

Before presenting our own findings on offending and accidents, we must enter some statistical caveats which have already been presaged in Chapter 2. First, in our main survey sample the base rate (of drivers who had had at least one accident in three years) was 46%, which is considerably higher than the base rate for the general population of drivers.<sup>1</sup>

Second, as explained in Chapter 2, the sample was originally drawn from two strata of the TRRL database: drivers who had had no accidents and those who had had at least two in the TRRL three-year survey period. The fact that our sample was overweighted with accident-havers (in order to get enough for statistical analysis) would tend to inflate correlations between the accident criteria and independent variables. But also, in a sample stratified by the dependent variable, relationships between the independent variables are liable to be distorted (Blalock 1981), so that inferences from the multivariate procedures we have used, like discriminant function analysis, may be misleading. Nor have we attempted to cross-validate our figures on independent samples.

Thirdly, and cutting across these dimensions of uncertainty, is the temporal instability of drivers' accident involvement to which we have already referred. It was illustrated in our sample by the fact that by the time of our survey the accident classification of some drivers had changed from what it had been when surveyed by the TRRL. Some had moved into a higher category through having had accidents since the end of their TRRL reporting period, while others had moved downwards as their earlier accidents no longer counted for our survey. This temporal instability would particularly affect small samples, and we believe that it partly accounts for the small size of the correlations we found.

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1. Preliminary results (TRRL 1988) from the original large survey sample, from which ours was selected, showed accident rates by age-groups. Male rates ranged from an average of 1.05 accidents every three years for 17-18 year olds to 0.16 for those aged 60+. Female rates were approximately two-thirds of those for males.

Altogether our results can only be pointers to possible relationships between offending and accidents. But in this exploratory study it seemed right to examine the data available with the tools to hand. As an example of this, we approached the offending-accident question from another perspective, and compared four extreme types of driver (defined by high/low offending and high/low accident rates) to see what features if any distinguished between them. We describe our results below, beginning with our analyses of the total survey samples. We then compare the four extreme types, paying attention particularly to scores for 'internality' and 'externality' (Montag and Comrey 1987). Lastly, we consider what can be inferred from some of the circumstances and consequences of accidents which our respondents had experienced.

## **2. SURVEY SAMPLES: ACCIDENTS, ACCIDENT RATES, NEAR-ACCIDENTS AND CONVICTIONS**

### **(a) Accidents and responsibility**

The proportions of the main and disqualified samples who had had one, two, and three or more accidents in the reporting period of three years were analysed. The disqualified sample had had slightly more: 49% had had at least one. (This does not necessarily mean that disqualified drivers are more accident-prone than the average driver. Instead the high proportion with at least one accident may be largely accounted for by the way the sample was chosen (for many, disqualification had followed an accident) and also by the fact that their reporting period was three years three months).

In order to strengthen our criterion of accident rate (see below), we asked drivers, for each accident up to three, to apportion responsibility between themselves and the other driver (if any), using a five-point scale from 'all my fault' to 'all the other driver's fault'. Overall, respondents admitted almost half the responsibility for the accidents in which they had been involved. As most accidents are largely due to human error (Storie 1977), an objective apportionment of fault would be expected to result in a roughly similar pattern, so the table suggests that our respondents were being fairly frank. This impression was reinforced in interviews, where even some high offenders were quite open about accepting blame for their accidents. The disqualified sample on average took somewhat more responsibility than the main sample, and this too accords with what would be expected objectively from the fact that many had been disqualified following an accident. A comparison in the main sample between males and females of different age groups, in regard to the degree of responsibility they accepted for their most recent accident, showed no clear differences except that those admitting least responsibility, on average, were females aged 25 +.

In calculating the accident rate for each driver we took into account mileage, the total number of accidents in three years, and the degree of admitted responsibility for up to three. The rate is expressed as the number of accidents per 100,000 miles, averaged over three years and weighted by responsibility. The distribution is extremely skew, with about half the respondents having a rate of zero and a very few accident-havers showing extremely high rates because of low mileages. Because of this, in analyses against other variables we either used rank-order comparisons or divided the accident rate into three ranges according to its distribution in the main sample. These ranges were: low (zero, comprising 54% of the main sample, 49% of the disqualified); medium (0.1 to 13.0, comprising 23% of main sample, 23% of disqualified); and high (13.1 and upwards, comprising 23% of main sample, 28% of disqualified).<sup>1</sup>

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1. As elsewhere, cases with missing information are omitted from these figures. For the main sample N = 406, and for the disqualified N = 65.

Our main findings on the relationships between offending variables and accident rate are given in the next main section. Here we look briefly at two other sub-topics: near-accidents, and the accident rate of the survey respondents classed according to their experience of conviction (or disqualification).

**(b) Near-accidents while offending**

The questionnaire asked drivers whether they had ever had an accident or a near-accident while engaging in each of 12 offending actions. The offence attracting most 'yes' answers was driving over 40 mph in a 30 mph area; 18% of the main sample said they had had an accident or near-accident while doing this, and next in frequency (13%) was failure to observe a traffic sign. The disqualified sample showed a fairly similar pattern, except that very many more of them mentioned drink-driving, as would be expected from the way that sample was chosen. A driver's total number of 'yes' answers can be regarded as a kind of 'variety' score

For the 18-20 year olds the reporting period for this question would be the same as that for the questions on actual accidents. When (for this age-group:  $N = 110$ ) we cross-tabulated the 'variety score' against the number of actual accidents, both the total number and those for which the driver admitted at least half the responsibility, there was no relationship in either case. This implies that most of the incidents comprising the 'variety score' were near-accidents rather than real ones. Since in each age-group there was a positive correlation between the offending score and the 'variety score', but not between the 'variety score' and the number of accidents, it would seem that near-accidents while offending were more closely linked (in our small sample) with habitual levels of offending than with the likelihood of real accidents (regardless of whether the driver was breaking the law at the time).

**(c) Convicted and disqualified groups**

In Chapter 3 it was seen that the (formerly) disqualified drivers in the total survey sample were not, as a group, at the extreme end of the scale of traffic offending: in fact they lay between the 'medium' and 'high' offending groups, as did the group of drivers who had been convicted but not disqualified (Table 3.3). Table 6.1 compares the same five groups (unconvicted with low, medium or high offending scores; convicted but not disqualified; disqualified) in regard to the three categories of accident rate.

First, it suggests that drivers convicted of traffic offences were no more likely than unconvicted high offenders to have high accident rates. Second, the table indicates that the disqualified were very like, and no worse than, the unconvicted with high offending scores. Thus in our sample the disqualified could not be said to represent a 'hard core', in relation either to offending or to accidents.

**Table 6.1: Five categories of driver (main and disqualified samples together) compared on accident rate**

Category	N	% with accident rate		
		low (zero)	medium	high
(1) Unconvicted, low offending score	119	71	14	15
(2) Unconvicted, medium offending score	115	60	19	21
(3) Unconvicted, high offending score	105	48	22	30
(4) Convicted but not disqualified	48	17	54	29
(5) Disqualified	70	47	24	29

**Notes:**

1. Mann-Whitney tests comparing all possible pairs of groups on accident rate show that, as would appear from the table, groups (1), (2), (3) and (4) all differ from each other, but group (5) is very like group (3).
2. Group (4) has only a small proportion with zero accidents, because for many of these drivers their conviction resulted from an accident.

**3. LINKS BETWEEN OFFENDING VARIABLES AND ACCIDENT RATE**

**(a) Analyses of accident rates**

We now turn to examine the relationships between offending and accident rates. Table 6.2 shows rank order correlation coefficients between offending score and accident rate, males and females separately, for the broad age groups 18-24, 25-54, and 55+. Table 6.3 does the same for speeding score and accident rate.

**Table 6.2: Main sample: correlation between offending score and accident rate, by age and sex**

Age group	Sex	N	Rank order correlation (tau-C)	p sig.
18-24	M	98	.11	.059
	F	87	-.01	.454
25-54	M	75	.12	.044
	F	81	.06	.164
55+	M	36	.04	.256
	F	22	-.04	.379

It can be seen in Table 6.2 that the offending score appears to be slightly correlated with accident rate for males (at least those below age 55: correlation coefficient .11 for 18-24 year olds, .12 for those aged 25-54), but not for females. This was confirmed by separate discriminant function analyses which were offered age and offending score as variables with which to discriminate between the three categories of accident rate. The function for males used both age and offending score but gave much greater weight to age; the function for females used age only.

**Table 6.3: Main sample: correlation between speeding score and accident rate, by age and sex**

Age group	Sex	N	Rank-order correlation (tau-C)	p sig.
18-24	M	100	.04	.278
	F	89	.03	.364
25-54	M	75	.06	.199
	F	83	.12	.033
55 +	M	37	.11	.046
	F	22	.00	.500

Table 6.3 shows a correlation between accident rate and speeding score only for females aged 25-54 (correlation coefficient .12) and for males aged 55+ (correlation coefficient .11). A discriminant function analysis for males used only age, disregarding the speeding score, while one for females used both age and speeding score but neither variable discriminated well. Moreover, none of these functions was particularly successful in classifying cases into accident rate categories.

These findings indicate that neither habitual speeding nor habitual offending in general were strongly linked with drivers' accident rates.

Finally, two discriminant function analyses were carried out to try to distinguish the three categories of accident rate using:

- (a) age, gender, years of driving experience, and offending score;
- (b) age, gender, experience, and seven scores grouping individual offences into driving factors.<sup>1</sup>

Analysis (a) showed that age, offending score, and gender (in that order, with age the most important) played a part in distinguishing the three categories. Analysis (b) accepted age, speeding on motorways, parking and signalling, and alcohol offending to distinguish the three accident rate groups, with age the most important. Neither function was very successful in classifying cases into their correct categories, which shows that adding a measure of experience to the variables describing offending did not improve on the weak 'prediction' of accident rates already obtained.

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 1. The driving factors were those derived from the factor analysis described in Chapter 3 (see Table 3.2), except that we transferred 'lefthand overtaking' to include it with the other overtaking offences.

Similar rank order correlations and discriminant analyses were run on the group of 57 men aged under 55 taken from the disqualified sample. It was found that accident rate had some relationship, independent of age, with offending score and with speeding score, the correlation coefficients being .12 and .17 respectively. So although the disqualified sample was small and of a special nature, the correlations between offending and accident rates were in line with the highest of those obtained in the main sample.

The conclusion from these various analyses of accident rate against other variables must be that in our samples offending was related to accident rate, but only slightly, once other factors (especially age) were taken into account. At best, in the main sample, the correlation was of the order of .12, and that was largely for men.

Our results echo the well-established link between accident rates and age and gender (eg. Broughton 1988), but they also suggest that most of the apparent link between offending and accidents is due to the fact that young drivers, especially men, are involved in more of each. This partly supports the results of Chipman's (1985) study which, comparing 'demerit points' with accidents the following year, found that young drivers had more of each but that the points-accidents link varied little between age-groups. Our results are also consistent with those of Peck et al (1971) in suggesting that the offending-accident link is greater for males than females; yet they differ in that Peck et al found (recorded) offending to be more predictive of accidents than was age.

#### **(b) Presence or absence of accidents in three years**

Examination of the data suggested that for many offending and other variables the relationship with the three categories of accident rate was not linear, and that often the main distinction was between drivers who had had no accidents in the three-year period and those who had had any. (Possibly our formula for accident rate was over-elaborate. But Peck et al (1971) also found that for most kinds of offences the relationships between 'violations' and accidents were non-linear, though the non-linear components were relatively small.) In view of these observations our last set of analyses of the main sample simply attempted to distinguish the accident-havers from the accident-free, using discriminant function analyses on the following sets of variables:

- (1) age, gender, driving experience, mileage, and offending score;
- (2) age, gender, driving experience, mileage, and the seven driving factors described above;
- (3) the seven driving factors only.

The analyses produced three discriminant functions which performed about equally well in terms of the proportion of cases correctly classified: 65% to 67%, compared with the 55% 'success rate' that would be obtained by simply predicting all cases as being in the larger group (those with no accidents.) Function (1) used age, mileage, experience, and (least important) offending score. Function (2) used age, mileage, and several other variables. Function (3), confined to driving factors, used four of them, motorway speeding being the most important.

This last analysis, using driving behaviour variables to discriminate between drivers who did and did not have an accident in three years, may be compared to some of the analyses of 'basic driving behaviour' by Biecheler-Fretel and Moget-Monseur (1984). In a sample of 664 unconvicted drivers, 33% of whom had had accidents, a discriminant function derived from offending factors correctly classified 66%. One of the most important factors there was driving under the influence of alcohol, but in our results motorway speeding played the largest part, alcohol being relatively insignificant. Our findings are more in line with those of Peck et al (1971) who found in California that, of all the kinds of traffic violations studied (including 'major' ones like drunk driving), speeding had the highest correlation with accidents. This suggests that cultural differences may play a role in determining what types of offending are most closely associated with accidents.

### **(c) Reasons for offending: drivers' feelings of control**

In Chapter 4 we saw that a central theme in drivers' reasoning about their actions was their feeling that they were in control and would make their own decisions about how to drive. While interviews revealed that these feelings were widespread, they first became apparent in the postal survey where many respondents, especially the more frequent offenders, chose to endorse as reasons for the three named actions (speeding, drink-driving, and running red lights) statements like 'I'm confident of handling my vehicle', 'I decide for myself if I'm fit to drive', and 'I don't think it will lead to an accident'. We wondered whether drivers who had specifically endorsed such statements would be any less, or any more, liable to accidents than others.

We compiled a 'control score' for main sample respondents from the frequencies of their endorsements of reasons like those quoted above. It was carried out separately for three groups: (1) drivers who admitted speeding (driving over 40 mph in a 30 mph area) but not running red lights or drink driving; (2) drivers who admitted the first two actions but not the third; and (3) drivers who admitted all three. Together these comprised 71% of the main sample. For each group separately we then analysed control scores against accident rates, both for the whole group and for high and low offenders separately.

Nothing positive came out of these analyses: there was practically no relationship between the control score and accident rates. This suggests that the strength of a driver's feelings of being in control may have little real connection with his/her liability to involvement in accidents, and we return to this point in Chapter 7.

## **4. FOUR EXTREME TYPES OF DRIVER**

While we discovered a positive correlation, albeit only a small one, between breaching traffic laws and accident involvement for drivers in general (to the extent that our survey samples represented such), it is nevertheless true that some high-offending drivers do not have accidents and some low-offending drivers do. To approach the question of the link between traffic offending and accidents from another angle, we were able by virtue of our sampling procedure to select from the main sample 205 drivers who fell into the extreme groups on offending score and accident rate, to see what features if any would distinguish between them. The four groups comprised: (1) Type 1: high offending, low accidents (N = 58); (2) Type 2: high offending, high accidents (N = 40); (3) Type 3: low offending, low accidents (N = 86); and (4) Type 4: low offending, high accidents (N = 21). Although comparing extreme groups can lead to further statistical distortion, we may look for clues distinguishing the accident-havers (i.e. high accident rate) from the accident-free (low = zero accident rate) within each level of offending.

The four types were compared on personal and driving variables obtained from the survey, and Table 6.4 sets out those on which they differed.

At both levels of offending (high and low) the accident-havers differed from the accident-free in being younger, less experienced (the contrast among the low offenders is particularly striking), less likely to drive ordinary saloon cars (though still most of them did), and driving rather less on motorways and rather more in built-up areas. Among the low offenders accident-havers were more often female, but among the high offenders accident status was unrelated to gender. There were no clear differences between the four types in regard to mileage, engine size or age of vehicle, or the driver's occupational status, size of home community, or main driving teacher.



**Table 6.4: Main sample: comparison of four extreme types of driver, on personal and driving variables**

N = 205 respondents selected from the main survey sample as high or low on offending score and accident rate

Personal and driving variables		Type 1	Type 2	Type 3	Type 4
		Hi O Lo A (N = 58)	Hi O Hi A (N = 40)	Lo O Lo A (N = 86)	Lo O Hi A (N = 21)
% female		36	35	57	81
Age: %	18-24	52	85	17	62
	25-54	41	13	47	24
	55 +	7	2	36	14
mean no. of years driving experience		8.9	5.3	21.1	7.8
% driving ordinary saloon		75	64	82	60
% driving:					
at least 50% on motorways		17	10	8	-
mainly in built-up areas		55	65	53	67

**(a) Locus of control: driving internality and externality**

Another topic which we investigated in the in-depth interviews, with accident rates particularly in mind, was the 'locus of control' (Rotter 1966). This refers to the extent to which a person feels, on the one hand, that he/she can be in control of events that happen to him/her (internal locus), or on the other hand that personal experiences are caused by outside forces (external locus). Montag and Comrey (1982) developed two separate scales, 'Driving Internality' and 'Driving Externality', from drivers' responses to general statements about the causes of traffic accidents. They found that these scales distinguished between drivers who had and had not been involved in fatal accidents, the accident-free scoring high on internality and lower on externality (Montag and Comrey 1987).

In our interviews we used a 10-item questionnaire to devise shortened versions of the Montag and Comrey scales. As would be expected from their results, we found that, in the whole main sample of interviewees, accident-havers on average scored lower on internality and higher on externality than the accident-free, but the differences were very small and not statistically significant. Looking at our four types of driver separately, we found that the tendency just mentioned was present chiefly among the high offenders. If these figures represent real differences, we might explain them by suggesting the following. For high offenders who are accident-free, their experience reinforces their belief that they can control their vehicle and break the rules with impunity (and we saw earlier that frequent offenders more often endorsed the statements contributing to our 'control' score). High offenders who do have accidents are more likely to attribute accidents to external than internal causes.

Analysing the internality and externality scores by age and gender, we found some contrasts. Among males, drivers over 25 scored higher on internality and lower on externality than younger ones. Among females the older drivers were higher than the younger ones on both scores. Thus there appears to be a gender difference with respect to internality and externality. The interview sample was far too small to attempt analyses by gender, age and type simultaneously. But putting the internality and externality results together with the distribution of the four types by gender and age in the survey sample suggests the following picture. Among men, older drivers, who have fewer accidents, are more likely than younger ones to feel that responsibility for avoiding accidents rests with their own control of the situation. Young men, whose offending and accident rates are high, are inclined to feel that accidents are caused by external events. Among women, older drivers, who are mostly low offenders and have few accidents, feel more than young women that control rests with them, but at the same time they feel that if an accident did happen it would be because of circumstances beyond their control. This parallels the finding noted earlier, that among accident-havers in the survey sample, women over 25 were least willing to take responsibility for their most recent accident.

In other words, our results are not as clear-cut as those of Montag and Comrey (1982): there does not appear to be such an inverse relationship between the two dimensions of internality and externality.

#### **(b) Self-assessments by accident rates**

Despite the foregoing analyses, we have not been able to show large clear differences between accident-havers and the accident-free. Chapters 4 and 5 presented material which gave the overall impression that interviewees differed in various ways according to their level of offending, such that a clear profile of high and low offenders emerged. Yet differences according to the level of accidents were far less obvious: when we compared the accident-havers with the accident-free no distinctive patterns appeared in the reasons why they broke or kept to the rules, their attitudes to traffic law and the morality of breaking speed limits, or their ideas about sanctions designed to deter.

However, there were some differences between drivers in the two accident categories in their self-assessments of confidence and safety, though not in their judgements of their own skill. Forty-seven per cent of the accident-free, compared with 36% of the accident-havers, were 'very confident'. Eighty-two per cent of the accident-free thought the roads would be safer if other motorists drove like them; the corresponding figure for the accident-havers was 63%. It might have been expected that drivers who had had no accidents (at least in the last three years) would be somewhat more confident, and feel themselves safer, than those who had had some; but it is noteworthy that nearly two-thirds of those with high accident rates also felt they were exemplars of safe driving. As will be seen below, some of the drivers who had had accidents said they drove more carefully and safely afterwards as a result, but the majority reported no change in their self-image. This is further evidence for the existence of drivers' bias towards a favourable view of themselves in relation to others.

Altogether it seemed that most of the data we gathered from in-depth interviews tended to distinguish between offending levels but not much between levels of accident rate. This would suggest that habitual styles of driving tend to characterise drivers far more than do rare events like accidents, even though for many analyses we were comparing extreme groups on the accident dimension.

## **5. SOME CIRCUMSTANCES AND CONSEQUENCES OF ACCIDENTS**

Finally in this chapter we consider what interviewees told us about their accidents, and how they felt after such an experience. They were asked to describe up to three accidents occurring since September 1986, or if they had had none in that period, to describe the

most recent one before then. Only 20 interviewees said they had never had an accident, attributing this variously to their skill (three respondents), skill and luck (three), being careful (nine), care and luck (four), or care and experience (one).

Questions on accidents were put towards the end of the interview (so as not to prejudice responses to earlier questions about offending) and not everyone had time to answer fully. Altogether 115 accidents were mentioned (83 by drivers in the main sample and 32 by the disqualified). The next section analyses these 115 or sub-sets of them, especially in relation to whether the respondent was breaking the law when the accident happened.

**(a) Circumstances of accidents**

In 75% of the 115 accidents the interviewee admitted that he/she bore at least a small share of responsibility, even if it was mainly the other driver's fault. It is worth noting that in many comparisons there was no difference in pattern between these 75% and the remainder; and responsibility will not be mentioned again unless it is particularly relevant. Table 6.5 summarises data on several variables describing circumstances of the accident, where these were known and applicable.

**Table 6.5: Circumstances of accidents reported by interviewees**

Features of driver		N = 115 accidents			
		N (100%)	Was driver breaking law?		
			Yes %	No, but was careless or inattentive %	No %
<b>Sample:</b>	main	81	5	40	55
	disqualified	31	52	16	32
<b>Gender:</b>	male	71	24	34	42
	female	41	7	32	61
<b>Age:</b>	18-24	61	21	38	41
	25-54	42	17	31	52
	55+	9	-	11	89
<b>Company:</b> at time of accident, driver was:	alone	66	18	29	53
	with passengers	34	15	44	41
<b>Mood:</b> at time of accident, driver was feeling:	positive; content; happy;	37	30	32	38
	negative; anxious; under pressure; angry;	22	14	41	45
	neutral; normal	42	10	26	64
<b>Tiredness:</b> at time of accident, driver was:	alert	71	14	45	41
	tired	22	20	27	53

In 18% of accidents the respondent said that he/she had been breaking the law at the time; in 33% there was no clear breach of the law but the respondent admitted being careless or inattentive; and in 49% the respondent was apparently law-abiding. This distribution, however, differed between the main and disqualified samples. In the main sample clear breaches (mostly of speed limits) occurred with only five per cent of accidents, but in another 40% the driver had been careless (though this had not led to prosecution). In the disqualified sample 52% of accidents had been accompanied by breaches of the law, often for drink-driving, and this reflects the fact that many of the sample had been disqualified for offences which came to light through accidents. Incidents of careless driving which were not clear breaches were fewer among the disqualified (16%).

Not unexpectedly, drivers who had been breaking the law at the time of the accident were more likely than others to be young and male, and drivers with high speeding scores were more likely than low speeders to have been speeding. (Neither of these statements implies a causal connection, however.)

In one third of the accidents the respondent had been carrying passengers, and incidents of carelessness or inattention were more frequent in this group than among the others where the driver was alone. In 15 of 32 accidents where passengers had been carried and the respondent could remember the details, he/she said that talking to passengers might have contributed to the accident through lowering the driver's attention to the road; in five cases the driver had been talking but thought it had not played a part, and in the remainder he/she had not been talking.

Interviewees were asked how they had been feeling immediately before the accident occurred. Thirty-eight per cent had been feeling particularly positive: happy, content, in a good mood. Twenty-one per cent had been in a negative mood: anxious, under much pressure, or angry. Four per cent said only that they had been tired, and the remainder had been feeling 'just normal' or neutral. Of interest is the finding that those in a positive mood were more likely than others to have been breaking the law; those in a negative mood were more likely to have driven carelessly; while those feeling normal or neutral were more likely to have been keeping the law. High speeders were more likely than low speeders to have been in a good mood. Men were more likely than women to have been in a good mood, while women were more likely than men to have been in a negative one.

In 55% of those cases where the driver had been in a positive mood, he/she thought that that fact might have contributed to the accident; in those where the driver's mood was negative the corresponding figure was 76%. (Accidents for which the respondent admitted no responsibility were excluded from these figures.) Thus strong emotions were thought to have played a part in over half the accidents where they had been present. Simple tiredness, however, seemed to have been less important in our total sample of accidents: when asked specifically whether they had been tired at the time, only a quarter said yes. Unexpectedly, a greater proportion of those who denied being tired said they had been driving without full care and attention.

These analyses of accidents could not proceed very far because of small numbers, and they were a rather special sample because the interviewees were drawn from extreme groups. Nor could we go far in inferring relationships, because we did not ask about occasions when the driver was in a good mood (for example) and had *not* had an accident. But perhaps we may summarise the main impressions from this section as follows. An accident-involved driver who was breaking the law at the time was quite likely to have been a young man, speeding, and in a happy mood. When the driver was experiencing strong feelings, either positive or negative, just before the accident, such feelings probably contributed to it. While most female drivers were law-abiding at the time of the accident, females were more likely than males to have been in a negative frame of mind, which was associated with carelessness and inattention. Simple tiredness seemed to play less part in

accidents than distraction caused by the driver talking to passengers, when these were present. Overall, respondents admitted at least a small share of responsibility for three-quarters of the accidents they had had.

**(b) Changes resulting from accidents**

It is possible that involvement in an accident provides the opportunity for a learning experience, especially of situations to be wary of, or to avoid, in future. Accordingly we asked interviewees who had had accidents whether, as a result, they had changed any aspects of their driving style, and whether the experience had affected the way they saw themselves as a driver.

The answers of respondents in the main sample are shown in Table 6.6. The most common short-term effect, mentioned by nearly two-thirds, was that they drove with greater caution in specific situations, usually ones like that of the accident. Almost another quarter said they had become more cautious generally. There was a slight tendency for these effects to wear off with time, but even so three quarters of those asked said they drove more cautiously in the long term. Slightly more women than men said they had changed in this way, and drivers over 55 were less likely to have changed than younger ones. But there were virtually no differences between high and low offenders, or between high and low speeders, in the proportions saying they had become more cautious.

**Table 6.6: Changes resulting from accidents**

N = main sample interviewees who had had accidents

(a) Changes in driving style	% of drivers (N = 47)
Short-term:	
more cautious in specific situations	64
more cautious generally	23
no change	13
Long-term:	
more cautious in specific situations	60
more cautious generally	15
no change	25
(b) Changes in self-image	% of drivers (N = 38)
Safer driver now?	
yes, safer	45
no change	52
no, less safe	3
More confident now?	
yes, more confident	18
no change	79
no, less confident	3
More vulnerable now?	
yes, more vulnerable	26
no change	74

Nearly half those who were asked said they felt themselves to be safer drivers as a result of their accident(s). A fifth said they felt more confident, usually because they now drove more carefully. A quarter said their previous feelings of invulnerability had altered, as they realised that accidents could happen to them too. But the majority reported no change in self-image. One driver felt she was less safe and less confident than before. Men were slightly more likely than women to have increased in feelings of safety and confidence, but there were no discernible differences in these variables, or in feelings of vulnerability, between age-groups, between high and low offenders, or between high and low speeders.

In the disqualified sample those who had become more cautious were slightly fewer (65% short-term, 48% long-term). The proportions feeling safer, more confident or more vulnerable were much like those in the main sample. Drivers who had been banned for drink-driving did not differ from the rest in regard to caution since their accidents, but they did differ on self-image: several said they felt they were safer, more confident, or more vulnerable than before, whereas all the non-drink-drivers reported no change in these respects. (This is consistent with evidence in Chapter 5 that the disqualified drink-drivers were more likely to have been seriously affected by their ban.) But numbers were very small so these comparisons should not be taken too far.

From both samples together then, there are indications that accidents can to some extent have spin-off benefits by inducing drivers to behave with more caution, though the majority confine this to specific situations, and it wears off slightly with time. Many who thus modify their styles see themselves as safer drivers, though only a small minority feel more confident than before. These results are broadly comparable to those of Sheppard (1982), who found that of 46 drivers who had been involved in an accident the majority said they had learned something from it, and half said they drove better afterwards.

But only a minority of our respondents said they felt more vulnerable after their accidents. The finding that having an accident apparently has little effect in modifying drivers' feelings of invulnerability is consistent with other research showing that the illusion of control is resistant to various experimental attempts to reduce it (McKenna et al 1991), and it underlines the difficulty facing those trying to improve road safety.

Finally, it is noteworthy that in our sample drivers' reported changes over time as a result of their accidents did not seem to be at all related to their levels of offending as measured by current behaviour. Thus high offenders were as likely as low offenders to say that they had changed for the better, or had not. This could imply that respondents perceived very little connection, generally speaking, between offending and accidents, and it is consistent with evidence from the rest of this chapter that such a connection is actually slight.

## CHAPTER 7: SUMMARY AND CONCLUSIONS

This has been a wide-ranging, exploratory study in which we have aimed to broaden our understanding of the nature and extent of unlawful driving behaviour, its links with accident liability, and the motivations that underlie its commission. In this final chapter, after briefly recalling our methods of research, we shall summarise our main findings, draw the threads together, and point to ideas that may help pave the way to improving road safety. Research is an iterative process, and in the last section we shall identify areas deserving of further attention.

A study of unlawful driving behaviour was of special interest to us as criminologists because of its widespread nature, and the fact that breaking traffic laws attracts less social stigma than other kinds of law-breaking. This opened the way for us to enquire into offending among a wide range of drivers before they had entered the criminal justice system, and to examine their decisions about such activities prospectively as well as retrospectively.

### 1. SUMMARY

#### (a) Methodology (Chapter 2)

We relied heavily on drivers' own descriptions of their behaviour and experiences on the road. The use of self-report data has a respectable place in criminology, and we found that, despite some under-reporting, self-report provided more adequate measures of both unlawful driving behaviour and accidents than could have been obtained from the scanty data in official records. Our main dependent variables, constructed from our data, were an individual's 'offending score' and accident rate.

The study was divided broadly into three stages. In the first, 535 drivers completed postal questionnaires designed primarily to measure the incidence of traffic offending and to explore reasons why motorists engaged in three specific unlawful actions - speeding, drink-driving and running red lights - on some occasions and refrained from them at other times. Those respondents who had been disqualified were also asked to describe that experience, and to give their reasons for obeying or breaching the order. In addition, these and other drivers, including traffic police, provided ratings showing how seriously they regarded a range of traffic offences.

The second stage comprised 98 depth interviews with sub-samples of the postal respondents. In these we tried to discover the social meaning that offending had for drivers, their underlying attitudes towards offending on the roads, what social and cognitive factors facilitated offending, and what internal and external restraints curbed it. Since there are practical limits to the amount of police enforcement that is possible, efforts to identify internal controls on offending and reinforce them through driver education could be fruitful in the endeavour to reduce offending and accidents.

The final stage comprised two 'observational' studies in which we conducted brief interviews with drivers who had just been stopped by the police for exceeding speed limits, and with pub patrons faced with the decision whether to stay under the legal blood alcohol limit or to drive away when over it. In both we were interested in the reasons drivers gave for the action they had just taken or were about to take.

A note of caution must be sounded as to the generalisability of our findings, since in various ways our samples were unrepresentative of drivers in general. For instance, our postal survey over-represented young drivers and those who had had accidents. This limited the propriety of using multivariate techniques of analysis, but in this exploratory

study it seemed right to examine the data with the tools to hand as an aid to identifying possible relationships between variables. We make few claims, however, that any relationships are typical.

### **(b) The nature and extent of unlawful driving (Chapter 3)**

#### **(i) How much is there, and who does it?**

The widespread incidence of traffic offending is underlined by the fact that only one per cent of drivers responding to our postal questionnaire denied ever committing any of 25 unlawful actions. Exceeding speed limits was the most frequently admitted offence, with 88% of respondents reporting that they 'sometimes' did it. ('Sometimes' was the mid-point of a five point scale of possible answers, ranging from 'never' to 'nearly always'.) After speeding the most frequent offences were running amber lights, illegal parking, and overtaking by crossing a hatched white line area. Driving with excess alcohol was admitted by 22% altogether, but nearly all of these said they did it 'only rarely'. Seven per cent admitted 'sometimes' running red lights. Among the least frequent offences, admitted 'sometimes' by fewer than three per cent, were pulling out from a side road without giving way to traffic on the major road, and making prohibited right turns. It should be mentioned that the fact that our postal sample over-represented drivers who had had accidents did not account for the high reported frequencies of some kinds of offence.

Analyses focusing on high speeding, drink-driving, and red-running showed that drivers who committed any of these offences were more likely than those who did not to offend in other ways too. Several analyses pointed to the pre-eminence of speeding in the total picture of unlawful driving. In a factor analysis of the frequencies of all offences, to see which ones clustered together, much the largest factor (accounting for 23% of the variance) was motorway speeding.

In general, offending declined with age, and within each age group males had higher offending scores than females. Drivers who had higher annual mileages, who lived in large cities, who drove high performance or sports models, tended to offend more frequently, but the offending score was not related to a driver's socio-economic status or to the types of road on which he/she usually drove. High speeders and frequent red-runners tended to be younger, but drink-drivers were as likely to be of mature age.

The roadside speeding study gave a clear impression that among high speeders was a 'hard core' of deliberate and persistent offenders. A similar inference was drawn from the study of pub patrons, among whom one would naturally expect drinking drivers to be more concentrated. We made a rough estimate that between one quarter and one half of alcohol drinkers who drive away from pubs are likely to be over the limit (see Corbett, Simon and Hyde 1991).

#### **(ii) Formerly disqualified drivers**

It was difficult to compare formerly disqualified drivers with our main sample of postal respondents owing to differences in age and gender composition, (the disqualified group containing few females and drivers aged over 54). Comparisons between males, allowing for age, suggested the following. Drivers who had been disqualified for speeding continued to speed, even at more mature ages when the non-disqualified were slowing down. Those who had been disqualified for other non-alcohol offences were inclined to offend in relation to parking and to the condition and documentation of their vehicles, though, like other drivers, less so as they got older. However, drivers who had been disqualified for drink-driving were no more likely to commit offences in general than the main sample of non-disqualified drivers. (This suggests that disqualified drink-drivers were perhaps more likely than other disqualified drivers to moderate their behaviour after regaining their licence, and we discuss this later in the context of deterrence.)



When we categorised all postal respondents into five groups: unconvicted with either low, medium or high offending scores (three groups), convicted but not disqualified, and those previously disqualified, the latter two groups differed little in offending score, and both lay between the unconvicted medium and high offending groups. So in the samples used, previously disqualified drivers were not wholly at the 'top end' of offending. While, symbolically, convicted and/or disqualified drivers might be considered the 'worst' offenders, our evidence suggests that official and self-reported convictions are not necessarily the best index of unlawful driving behaviour: self-reported habitual frequencies of traffic infringements which do not attract police attention are probably a better measure.

### (iii) Perceptions of the seriousness of traffic offences

Groups of high offenders, low offenders, and formerly disqualified drivers, and a representative sample of licence holders (the public), when asked to rate the seriousness of 12 different traffic offences, all placed them in very similar rank order. But high offenders and the formerly disqualified rated all the offences as less serious than did the public; high offenders rated all as less serious than did low offenders; high speeders rated all as less serious than did low speeders. Consistent with their tendency toward high offending, younger drivers, by and large, rated the offences as less serious than did older drivers. The first implication of these results is that the more a driver engages in unlawful driving behaviour the less seriously he/she is likely to perceive it. But also, taken together with the prominence of speeding in the overall picture of offending - in particular, the finding that high speeders were more likely than those with lower speeding scores to commit any of the other offences too - they suggest that choice of speed may be a critical behavioural determinant of seriousness perceptions of *other* types of offending and perhaps of decisions to engage in *other* types of offending.

## (c) Cognitive and social factors in unlawful driving (Chapter 4)

### (i) Reasons for offending and for refraining from it

Our data showed that motorists' law-breaking and law-keeping behaviours were motivated by a wide range of reasons and principles, some common to most drivers but having more or less weight according to the type of driver concerned. However, respondents' explanations for committing any of the three specific acts - speeding, drink-driving, and running red lights - showed that in general their chief motivation was the feeling of being in control of their vehicle and wishing to decide for themselves how to drive. Most high speeders, for example, endorsed the statements 'I'm confident of handling my vehicle at that speed' and 'I decide for myself what speed is OK for the road and traffic conditions'. Drink-drivers endorsed 'I decide for myself if I'm fit to drive' (and most of those in the pub study insisted that they *were* fit). The commonest reason for running red lights was the need to carry on through a junction when queuing, but the drivers who did it most emphasised 'I decide for myself if it's OK to drive through'. Speeders and frequent red-runners were also likely to say that they were in a hurry, but another common reason for speeding, especially among the less frequent offenders, was that they broke the limit without realising it. Drink-drivers' second most common reason was that it was difficult to make other travel arrangements.

When we combined these results with the findings from the in-depth interviews, the general picture to emerge was that both low offenders and high offenders weighed up considerations of safety in the immediate circumstances and decided for themselves whether or not to engage in an unlawful manoeuvre, rather than letting the law decide. It seemed that pressure of time motivated both high and low offenders to 'cut corners', but high offenders were more likely to explain their offending in terms of convenience or laziness, while low offenders were more likely to say it was inadvertent. Some high offenders, particularly young men, broke rules for enjoyment and to express either their individuality or their identity with a group of friends.

Reasons for refraining from offending were also wide-ranging. The great majority of respondents, in regard to all three specific actions, endorsed the desire to avoid the penalty, and also the statement 'I try to drive with consideration for other road users'. Apart from these reasons, there were differences between groups of drivers. In regard to speeding, low speeders emphasised that driving at more than 40 mph in a 30 mph area (the actual form of the question in the survey) was wrong and might lead to an accident, whereas high speeders felt more restrained by lack of opportunity. People who never drove with excess alcohol emphasised the accident risk and that drink-driving was wrong or unlawful, while those who did occasionally do it refrained more through fear of being caught. The chief reasons against running red lights concerned safety and the law, though they received less emphasis from the more frequent red-runners.

When the interview data were added to the picture, it seemed that the desire to avoid the penalty was one of the strongest restraining factors for high and low offenders alike. However a distinction can be drawn between internal and external controls. For high offenders, major inhibitors were the likely risk of apprehension and the likely penalty, which are external controls. Major inhibitors for low offenders were internal controls in the shape of personal morality, appeal to the 'rightness' of rules, and the *fear* of apprehension. We consider fear of apprehension to be an internal control for low offenders, because objectively they were at less risk of being caught but subjectively they feared it more; and indeed their greater fear of apprehension distinguished them at many points in the study. The probability of having an accident was a greater constraint on unlawful actions for low offenders than high ones, and a consistent finding from the research was that the more drivers engaged in offending the more they discounted the risk.

### (ii) Attitudes to traffic rules

Interviewees were asked: 'If so many drivers break traffic rules some of the time, what purpose do you think the rules serve?' The most common view was that society needed rules to know what the agreed normative standards were in order to prevent accidents and to aid traffic flow. But given the agreed standards, drivers believed that there was latitude for individual manoeuvre around them. Not surprisingly, the more that respondents broke the rules, the more likely they were to assert that rules should be treated as guidelines. Some high offenders had taken this view to extremes and professed to have eschewed most rules as standards for their own driving behaviour, and instead had developed their own code largely beyond the law. Nevertheless, while quite content to break rules themselves, some high offenders thought it was right that other drivers should be made to stick to them so that they themselves could drive as they pleased in comparative safety: in short, rules were for other people.

The large majority of interviewees acknowledged having a personal code of driving standards, which in varying degrees deviated from the rules. For most drivers the central feature of this code was the need to feel in control whatever the action, lawful or unlawful, and the other main components were the perceived risk of enforcement and the acceptable risk of enforcement. However, there was wide variability between individuals in the manifestation of these codes in practice. So while one driver might feel that he/she was in control and accepted the risk of being caught at, say, 40 mph in a 30 mph area, another might set the limit at 60 mph.

Interviewees had different ideas on what type of traffic breach constituted a crime. A few said *any* breach was a crime; some thought only those with the *potential* to cause harm were crimes; others defined as crime only breaches which *resulted* in harm; while a small group did not perceive any traffic offence as crime because no harm was *intended*. The lack of intention to cause harm was seen as one of the main features distinguishing traffic from non-traffic offending. Other perceived differences were that traffic offences were socially acceptable, carried less risk of apprehension and attracted lower penalties, and were often committed for fun and pleasure. The degree to which a traffic offence was

likely to be labelled as 'immoral' largely coincided with the degree to which it was perceived as a 'crime'. However, for many drivers it was the notion of feeling in control that formed the benchmark for perceiving unlawful manoeuvres and actions as moral or immoral, crime or not crime, and safe or unsafe.

### **(iii) Social comparisons with other drivers**

Previous research has shown that drivers typically estimate their own skill as above average. Our study did not directly support this finding, but a bias was still evident, with more interviewees saying they had above average than below average driving ability, and the majority thinking the roads would be safer if others drove like them. The fact that the bias was almost as much in evidence among high as among low offenders underlined its strength. However, age and gender differences moderated it to some extent, with older drivers and male drivers believing themselves more skilful than others. Though there was no gender difference in the proportions believing the roads would be safer, the few women who believed roads would be less safe tended to explain this by their perceived lower ability, while men who believed it were apt to say that other drivers did not have as much skill as they had, the implication being that extra skill was needed to break the rules safely.

## **(d) Deterrence of traffic offences (Chapter 5)**

### **(i) Factors in deterrence**

The two main factors in deterrence theory - belief about the risk of apprehension, and desire to avoid the penalty - were discussed from the perspective of our findings. Results from the postal survey suggested that drivers who more frequently engaged in speeding, red-running or driving with excess alcohol 'played up' their beliefs about the (low) risk of apprehension to support their offending actions, while drivers who rarely or never broke these laws placed more importance on their belief that there was a risk of being caught to bolster their decisions to refrain. For most drivers, whether or not they engaged in the behaviour, desire to avoid the penalty was a major concern, and a greater constraint than the risk of apprehension. We speculated that while high and low offenders were equally keen to avoid the penalty, high offenders focused more on the relatively low perceived risk of apprehension to facilitate their decision to break the law, while low offenders offended less frequently not only out of concern to avoid the penalty but because they focused more on the belief that there was a chance of being caught.

### **(ii) The experience of disqualification**

The majority of our sample of formerly disqualified drivers had found their ban an unwelcome experience, and at least half - mainly those disqualified for six months or longer - had suffered severely in relation to such things as employment, money, family life, or social activities. Just over one quarter of the sample revealed that they had not totally complied with the order. Older drivers, and those disqualified for drink-driving, were the most likely to obey. Both the chance of being caught and the wish to avoid a further penalty were strong reasons for compliance, and weighed more heavily with those who completely observed the ban than with those who did not. The latter gave a range of reasons for driving while disqualified, of which emergencies at home or work, and the temptation of having kept their vehicle, were the most common. Moral commitment to the law was apparently a major restraining influence on both groups of drivers, especially those who fully complied. Reasons endorsed by drink-drivers suggested that they had taken the disqualification more seriously than other groups, and their breach rate was lower.

### **(iii) Driving behaviour after disqualification or a fine**

The majority of interviewees disqualified for speeding reported that on regaining their licence they had somewhat lowered their speeds but still frequently exceeded the limits.

Moreover, any positive effect of the disqualification did not seem to generalise widely to curb other unlawful driving. Overall, it seemed that drivers disqualified for speeding continued to be high speeders.

The deterrent effectiveness of fines for speeding was also limited. In the speeding study, nearly half of drivers who were facing a fine and endorsement as a result of being stopped by the police said the experience would somewhat reduce their speed in future. However, those who professed that it would make no difference were the more deliberate and frequent speeders. So it seemed that while a fine might inhibit speeding among some drivers, those most at risk were least likely to be deterred.

In contrast, disqualification for drink-driving did appear to inhibit that behaviour for the majority, and seemed sometimes to generalise to restrain other offences. This effect might be due to the certainty, length and outright nature of a ban for drink-driving compared with the discretionary, shorter and usually non-immediate disqualification imposed for other reasons. The difference might also be related to the social meanings of apprehension for speeding and for drink-driving. Many respondents who had been fined or disqualified for speeding did not regard this activity as a crime or as wrong, and there was often a sense of bravado about risking capture or a ban. On the other hand, many disqualified drink-drivers acknowledged that what they had done was dangerous or wrong, and that the punishment had been reasonable. For them, too, the sense of social stigma was far stronger.

#### **(iv) What measures would deter speeders and drink-drivers?**

In free response to this question, in relation to speeding, drivers who perceived a low risk of being caught thought that greater enforcement would be the most effective deterrent, but those who perceived a higher risk of apprehension thought the best preventive would be heavier penalties. When specific options were discussed, high speeders thought that if instant disqualification, or huge fines, were imposed for speeding this would make the penalty a more effective deterrent than increasing the chance of apprehension. In the pub study, the great majority of intending drink-drivers perceived the risk of being caught as low, and most thought that greater enforcement would best deter them; only three per cent suggested heavier penalties.

From all our data on this topic the conclusion is that measures designed by the criminal justice system to deter actual offenders do not operate in a straightforward way. Instead, the effectiveness of a measure involves the interaction of the perceived risk of apprehension, the frequency with which the driver engages in the unlawful action, and the perceived severity of the penalty. In sum, we suggest, albeit from our small samples, that high speeders need more severe penalties, because they are prepared to accept a greater risk of being caught and they perceive current sanctions as insufficient to deter. Those most at risk of driving with excess alcohol require higher levels of enforcement, since although they see the penalty as a strong deterrent they perceive the risk of apprehension as low.

#### **(e) Unlawful driving and accidents (Chapter 6)**

##### **(i) Statistical links between offending and accident rates**

The main conclusion from our data was that there was only a slight positive association between various measures of accident rate and various measures of offending, once other factors, especially age, were taken into account. At best, in our main survey, the correlation between offending and accident rate was .12, and that was largely among men. Indeed, our results suggested that most of the apparent link between offending and accidents was due to the fact that young drivers, particularly men, were involved in more of each. Considering the statistical difficulties associated with measuring accident rates,

our low correlations are fairly consistent with those found by other researchers (e.g. Peck et al 1971).

An analysis using offences grouped into 'driving factors' to discriminate between drivers who had and had not been involved in an accident in three years, found that the factor which best distinguished the accident-havers was motorway speeding (though the discrimination was not great). A similar analysis for the same purpose, carried out in France by Biecheler-Fretel and Moget-Monseur (1984) found that driving under the influence of alcohol was the best discriminator. This suggests that cultural differences may play a part in the links between offending and accidents.

### **(ii) Formerly disqualified drivers**

In another analysis we divided all survey respondents into five groups: unconvicted with low, medium or high offending scores; convicted but not disqualified; and (formerly) disqualified drivers, and compared them with respect to accident rate. This indicated first, that drivers convicted of traffic offences were no more likely than unconvicted high offenders to have high accident rates, and second, that the disqualified were very like and no worse than the unconvicted with high offending scores. In our sample, therefore, the disqualified could not be said to represent a 'hard core' in relation either to offending or to accidents.

### **(iii) Four extreme types of driver**

As it is known that some high offenders have accidents but others do not, and that the same is true of low offenders, we explored these differences further. Two hundred and five drivers were selected from the main survey sample who fell into the extreme groups on offending score and accident rate. This produced four groups: high offenders/low accidents; high offenders/high accidents; low offenders/low accidents; and low offenders/high accidents. Comparisons on personal and driving variables showed that at both levels of offending (high and low) the accident-havers differed from the accident-free in being younger, less experienced, somewhat less likely to drive ordinary saloon cars, and driving rather less on motorways and rather more in built-up areas. Among the low offenders, accident-havers were more often female, but among high offenders accident status and gender were unrelated.

In view of the importance of age and gender, these 205 drivers were reclassified into males under 25, males 25+, females under 25, and females 25+, and again compared on personal and offending variables. As numbers were very small, any differences can only be suggestive. However, the main impression reinforced the conclusion from earlier analyses on the whole of the main sample: that the offending-accident link was slight once other factors (age and gender) were allowed for, and that it existed mainly among men.

Males and females also differed in their scores for 'driving internality' and 'driving externality' (adapted from Montag and Comrey 1982), which measured the extent to which they attributed accidents in general to causes outside the driver's control. Our findings suggested the following. Among men, older drivers, who have fewer accidents, are more likely than younger ones to feel that responsibility for avoiding accidents rests with their own control of the situation. For high offenders who are accident-free, their experience reinforces their belief that they can control their vehicle and break the rules with impunity. Young men, whose offending and accident rates are high, are inclined to feel that accidents are caused by external events. Among women, older drivers, who are mostly low offenders and have few accidents, feel more than young women that control rests with them, but at the same time they feel that if an accident did happen it would be because of circumstances beyond their control. (In other words, older women scored higher than younger women on both internality and externality). These findings need to be tested by further research.

No clear distinctions appeared between accident-havers and the accident-free in their attitudes to traffic rules or their ideas about deterrent measures. There were some differences in their self-assessments of confidence and safety, though not in their judgements of their own skill. More of the accident-free felt very confident and thought the roads would be safer if others drove like them, but even so nearly two-thirds of the accident-havers shared the latter view, which further underlines the bias mentioned earlier.

Altogether it seemed that most of the data we gathered from in-depth interviews with the four extreme types of driver tended to distinguish between offending levels but not much between levels of accident rate. This would suggest that habitual styles of driving tend to characterise drivers far more than do rare events like accidents, even though we were comparing extreme groups on the accident dimension.

#### **(iv) Some circumstances and consequences of accidents**

We analysed features of the most recent accidents in which our interviewees had been involved, numbering 115. In 18% of these the driver said that he/she had been breaking a law at the time, in 33% there was no clear breach but the driver admitted carelessness or inattention (but was not prosecuted), and in 49% the driver was apparently law-abiding. As expected, (formerly) disqualified drivers were more likely to mention that they had been breaking a law at the time of their accident(s), while other drivers were more likely to say they had been careless or inattentive.

Information on how the driver had been feeling just before the accident, and on the presence of passengers, helped to build up the following picture. An accident-involved driver who was breaking the law at the time was quite likely to have been a young man, speeding, and in a happy mood. When the driver was experiencing strong feelings, either positive or negative, just before the accident, such feelings probably contributed to it. While most female drivers were law-abiding at the time of the accident, females were more likely than males to have been in a negative mood, which was associated with carelessness and inattention. Simple tiredness seemed to play less part in accidents than distraction caused by the driver talking to passengers, when these were present. Overall, respondents admitted at least some responsibility for three-quarters of the accidents in which they had been involved.

When interviewees who had had accidents were asked whether the experience had affected their driving style or their self-image, the great majority said they had become more cautious. A fifth said they felt more confident (usually because they now drove more carefully) and nearly half felt themselves to be safer drivers. Only a quarter felt more vulnerable. These reported changes over time as the result of accidents did not seem to be at all related to drivers' levels of offending as measured by their current behaviour: high offenders were as likely as low offenders to say that they had changed for the better, or had not. This could imply that drivers perceived very little connection, generally speaking, between offending and accidents, and it is consistent with our evidence that such a connection is actually slight.

## **2. CONCLUSIONS**

We shall now draw the threads together by highlighting some of our findings in the context of the accident problem, and in so doing we shall outline areas which, in our estimation, are deserving of further attention. We emphasise again that our study was of an exploratory nature, some of our samples were not representative of the general population of drivers, some of our findings are impressionistic or qualitative rather than based on quantitative data, and so the extent to which they can be generalised is uncertain.

First, confirming the common impression of drivers' own experience, we discovered that nearly all drivers admit to breaking traffic laws on some occasions. Moreover, it is possible that those who denied this may break the law without being aware of it, as many of our low offenders affirmed that they did. Secondly, although there was a correlation between an individual's self-reported offending level and accident risk, this was very slight. Thirdly, we confirmed that the act of engaging in or refraining from a particular unlawful action is motivated by a wide range of reasons.

Underpinning the propensity to commit or not to commit an offence is the driver's personal code or set of standards which are shaped by less conscious considerations. This code produces an habitual style of driving, and is based on a broad range of factors including the driver's own traffic experience, the social influence of significant others, possibly stress manifested in certain ways on and off the road, the driver's underlying attitudes towards breaking traffic rules (for instance, the extent of moral commitment to the law), and the influence of the wider cultural context, such as the perceived social acceptability of different kinds of offending.

We concluded that a central feature of this personal code was the driver's need to feel in *control*, whatever action (whether lawful or unlawful) was contemplated or undertaken. Our impression from interviews was that for many drivers, the boundary between feeling in control and out of it was the benchmark for perceiving an unlawful action as moral or immoral, crime or not crime, and safe in the circumstances or not safe. Feeling in control signified that harm was unlikely to result, and that if it did occur it would anyway have been unintended. Thus, through feeling in control, many drivers could engage in any action morally and without feeling it was criminal. However, feeling in control was insufficient on its own to determine whether or not an unlawful action followed. Constraints in the form of the perceived risk of apprehension, the acceptable risk of apprehension, and the perceived severity and impact of the likely penalty, could interact to prevent the commission of an offence even though the driver felt in control.

These appeared to be the major elements in drivers' personal codes, yet the manner in which these manifested in practice would vary widely between individuals. Thus the perceived and acceptable levels of the risk of apprehension, and the cut-off point between feeling in and out of control, would be higher for one driver than for another. We gave the example of how some young men said they would feel in control and be prepared to accept the risk of apprehension at say, 60 mph in a 30 mph area, while other drivers set the limit nearer 40 mph. Some drivers, on the other hand, were prepared to accept no risk, and so attempted to keep within all speed limits even though they asserted that above the limits they would still feel in control and perceived a very low chance of being caught.

The reader will notice that in our description of drivers' personal codes we make no mention of the risk of accident. This is because drivers interviewed made fewer explicit references to accident risk than to the notion of control. It seems that by staying within their perceived boundaries of feeling in control they do not consciously consider the risk of accidents. This supports Rothengatter's (1988) conclusion that factors other than accident risk are more likely to influence motorists' choice of speed.

The focus on control may help to explain other findings from our study, such as the greater reluctance of speeding drivers to admit a link between their own behaviour and accident risk than to accept the existence of one between speeding and accidents in general. It may help to explain why even the majority of high offenders thought roads would be safer if everyone drove like them, and why a significant minority did not believe that reducing speed limits would considerably lessen the number of road fatalities. It might even figure in the finding that the more drivers engaged in an unlawful behaviour the more likely they were to discount the risk of an accident. All this does not mean that those who break traffic laws, especially high offenders and high speeders, are unconcerned about accidents; it is just that they do not believe their offending will lead to harm because they break the

law only when they perceive it safe to do so and provided they feel in control. Put simply, it appears that high offenders do not believe their accident risk is increased by their unlawful actions (cf. Vogel & Rothengatter 1984).<sup>1</sup>

A major difficulty is that, statistically speaking, the beliefs of most drivers will be proved correct. The chance of becoming involved in an injury accident as a driver has been estimated at around once in 57 years, and if an average driving career is 30 years, around one in 80 drivers will have the experience of being involved in a fatal accident (Forsyth and Silcock 1987). The other side of the coin, however, is that over a quarter of road accidents resulting in injury are linked with law-breaking and result in prosecution (e.g. Jones and Everest 1987; Forsyth and Silcock 1987; Storie 1977), speed choice is linked with accident probability and severity (Johnson et al 1981), and a reduction in average speed by even a small amount can reduce the number of injury accidents by up to 30% (European Conference of Ministers of Transport 1984). The need to continue the search for ways of reducing offending behaviour, especially amongst those most at risk of offending and accidents, is therefore vital.

Changes in police enforcement practices, penalty structures or other legislation may produce modifications in the perceived risk of enforcement (e.g. Cairney and Carseldine 1989), or in the wish to avoid the penalty, such that more potential or actual offenders are deterred. However, it is difficult to prove that any amelioration in behaviour is the direct result of external changes. Our study did not set out to focus specifically on deterrence, but the various impressions formed from our data suggest that more finely calibrated research could be worthwhile.

It seemed that for those who intended to drive with excess alcohol far more enforcement is needed, since the penalty is sufficient to deter the vast majority but the perceived risk of receiving it is very low. Some drink-drivers thought that more police activity outside pubs would deter them, while others suggested random breath testing.

With respect to high speeding drivers, penalties would need to be more severe to curb their habits, as several themselves mentioned. The introduction of fixed penalty notices for a wide range of offences, especially speeding, may have eased administration but at the cost of some inequity resulting in varying impact on offenders. Our impression was that some high mileage, high speeding professional drivers were prepared to accept (or could well afford) a fixed fine in the same way that, as one put it, they were prepared to pay for petrol and oil. Even disqualification for speeding tends to be shorter than the mandatory, one year minimum for drink-driving offences, and while most high speeders who had been disqualified found the ban inconvenient it could usually be managed, and one or two hinted that their company had contingency plans for such events.

External changes, perceived or actual, may inhibit the occurrence of unlawful behaviour, but they have not been found to alter underlying attitudes (e.g. Rothengatter et al 1985). Unless the external condition, e.g. the degree of enforcement, is maintained, offending may return to its former level (e.g. Ross 1977). More permanent change is likely to occur if internal conditions are modified: for instance, if the perceived social consensus for an

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1. The fact that half our depth interviewees (mainly high offenders) mentioned in free response that they usually drove more slowly or cautiously with passengers aboard does not necessarily contradict this conclusion. It could be that drivers are prepared to accept a higher risk of accident for themselves than for their passengers, in which case the question arises: do they drive well within their limits of control when accompanied, or outside it when on their own? Or, more cautious behaviour could result from respect for passengers, fear of reproach by them for offending actions, or to compensate for reduced attention to the road caused by their presence. The truth is likely to involve a number of these possibilities.



unlawful action is reduced, or if internal control mechanisms against offending are developed or strengthened.

It seems that some success has been attained in altering the perceived social acceptability of driving with excess alcohol, through highlighting the dangers and consequences of such action. The proportion of drivers killed in accidents with blood alcohol levels over the legal limit has been in decline since 1976, and attitudes against drink-driving have hardened in recent years, accompanied by a claimed reduction in its incidence (e.g. Sabey 1988). Certainly, among our interviewees who had been disqualified for drink-driving, the social stigma they had experienced or perceived was pronounced, and among those who admitted ever having driven with excess alcohol one in five claimed to have stopped primarily through becoming aware of the dangers associated with it. One in three interviewees who claimed that they no longer engaged in it gave similar reasons for refraining. Six per cent specifically mentioned the influence of media campaigns. Our impression, too, was that many younger drivers, though often high offenders in other ways, had been deterred from ever drink-driving by publicity campaigns, though they did not necessarily consume lower amounts of alcohol than other people.<sup>1</sup>

In a Dutch experiment (Rothengatter et al 1985), providing daily feedback to drivers on the proportion of them who complied with the speed limit on certain stretches of road contributed toward lowering their choice of speed. It seemed that those who preferred to drive at the 'average' speed adapted their speed to that of others as a result of such information being signposted, which suggests that among some drivers perceived social consensus can alter behaviour in the desired direction. However, high speeders may be less concerned to conform to the perceived consensus than other drivers.

Whatever the eventual success of such strategies designed to induce safer practices among drivers, it seems that a more immediate and resistant problem is how to deal with drivers' over-confident feelings of being in control which lead them to believe they can avoid accidents (and, among some of our interviewees, even detection by the police). Although it was relatively easy for some high speeders to pour scorn on drink-drivers on account of the latter not being in control (which they felt *they* were when driving fast), the majority of drink-drivers themselves explained their intended action in terms of feeling fit for it, that is, feeling in control of the situation. The need then is to develop internal control mechanisms by convincing drivers that there are limits to human performance, and that there may be a disjunction between perceived and actual states of being in control - even if some of them are better than average drivers.

Improved technology has not helped in this regard. Power-assisted braking systems, for instance, may instil greater confidence and feelings of control and invulnerability to accidents, and may encourage more risky actions and higher speeds (cf. Wilde's (1982) hypothesis of risk-homeostasis). Low perceived levels of police enforcement may be taken as corroboration that police think high speeds are safe, and indeed, the view held by the Association of Chief Police Officers until late 1990 that motorway speed limits should be raised to 80 mph,<sup>2</sup> may fuel this belief.

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1. For example, one remarked:

'I don't drink any alcohol when I'm driving - it's best to have none at all. When I go out to drink I don't go out for one or two. I prefer a skinful, and don't want the worry. It's bound to be at the back of your mind if you're driving drunk. But some of the older guys at work still do it.'

2. Since late 1990, ACPO is reconsidering its view on speed limits in the light of environmental and other concerns.

At present, there is much ambivalence in society's attitude toward traffic offending, especially with respect to exceeding speed limits. Most drivers speed, perhaps underlining our need for mobility and the fast pace of western life. Moreover, there is a relatively low rate of prosecution, and penalties seem insufficient to deter persistent speeders. Indeed, typical penalties for speeding serve less of a denunciatory function than do the long and mandatory disqualification orders for drink-driving. Yet high speeds are associated with involvement in accidents, and, as we discovered, choice of speed may be a critical determinant in the decision to commit other kinds of offence. Further exploration, we suggest, should be made of high speeding drivers' low perceived links between speeding and accident risk, of the measures that would deter different types of driver who exceed limits, and of the sub-cultures in which high speeding occurs.

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Our pub study could not have been undertaken without the access granted by four breweries whom we approached, and the co-operation of their respective licensees. Valuable research assistance was provided by Mr Geoffrey Hyde, especially in ably carrying out the bulk of the pub interviews.

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