

**'Safe' and
'unsafe' –
a comparative
study of
younger male
drivers**



**Foundation for Road
Safety Research**

'Safe' and 'unsafe' – a comparative study of younger male drivers

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Executive Summary

Introduction

It is well established that younger drivers, particularly 17-19 year olds, are over-represented in the casualty rates. However, there is still disagreement as to *why* this is the case.

An earlier study showed that a substantial minority (about 35%) of young male drivers can be categorised as 'unsafe' (Rolls, Hall, Ingham and McDonald, 1991). The present study, which was undertaken at the University of Southampton by the Department of Psychology and the Transportation Research Group, was a development from, and enhancement of, this earlier study. It sought to investigate, in more detail, a number of factors which might explain the differences evident in driver behaviour and performance within the younger male groups (17-25 year olds). The earlier study had *identified* within-group differences; this study sought to *explore* some of the more general lifestyle factors by giving young drivers the opportunity to provide their own accounts and explanations for their driving behaviour based on their own realities and experiences.

Method

The study involved in-depth interviews with 56 young drivers (29 classified in the earlier study as 'unsafe' and 27 'safe') aged between 17-25 years at the time of the earlier study. Interviews lasted between one to two hours and included, amongst others, descriptions and explanations of driving behaviour, assessment of risk, lifestyle, leisure activities, parental and peer group influences and possible social influences on driving. The use of in-depth, qualitative methods is relatively untried in driver research, but this study has demonstrated the value of such an approach. The main findings are summarised below (see Chapter 9 for more detail):

The main findings

Lifestyle

General lifestyle issues were shown to be important factors in car driver behaviour. More of the 'safe' drivers had regular girlfriends/partners, and in turn, spent more time with these partners than the 'unsafe' drivers who tended to spend more time with male friends. Drivers with regular partners or in long standing relationships felt they had matured or 'grown up' over the period since the initial survey. Drivers with debts or mortgages spent less money on cars and 'going out', and stated that such factors had affected their driving behaviour (Section 5.1).

'Unsafe' drivers were more influenced by, and more exposed to, unsafe driving by their parents and peers than were the 'safe' drivers (Section 5.2).

Hardly any of the drivers were deliberate drink drivers who went out with the intention to drink over the BAC (blood alcohol concentration) limit and then drive. Amongst all the drivers, drink driving behaviour was generally and genuinely portrayed as unacceptable even if some drivers had done so in the past. Many of those who had driven whilst over the BAC blamed lack of forward planning, an argument, or being let down by friends as the reason for their subsequent driving after consumption of alcohol. The majority of drivers stated that it was easier to refuse alcoholic drinks with peer support. A number of drivers mentioned the lack of adequate public transport as an alternative to driving (Section 5.3).

Perceived ability and risk

On average, the young male drivers rated their driving skills and driving safety considerably above 'an average driver their own age'. 'Unsafe' drivers rated their driving as slightly more *skilled* than *safe*, whereas 'safe' drivers rated their driving as slightly more *safe* than *skilled*. Many of the 'unsafe' drivers tended to 'test' their abilities and car capacities on or off-road to a much greater degree than did 'safe' drivers. This so-called skill, however, was illusory, since the 'unsafe' driver group had higher accident involvement (Section 6.1).

Generally, 'safe' and 'unsafe' drivers defined a 'good' driver in different ways. More of the 'safe' drivers took this to be a driver who was safe, considerate and courteous and did not get in the way of other drivers. On the other hand, more of the 'unsafe' drivers tended to define a 'good' driver as one who was highly skilled, who could handle the car well, was positive in their actions and had quick reactions. The majority of both groups thought they were 'good' drivers; due to differences in the interpretation of the term 'good', however, each group tended to describe their own driving style as representing 'good' driving (Section 6.1).

On average, 'unsafe' drivers rated their driving as considerably more risky than the 'safe' drivers assessed theirs to be. In addition, the 'unsafe' drivers reported a greater number of specific risky driving manoeuvres than did the 'safe' drivers. Many of these driving practices were intentional violations rather than errors, suggesting that such behaviour does not result directly from lack of driving skill, but from inappropriate driver attitudes (Section 6.2).

The vast majority of drivers stated that they did not deliberately drive 'unsafely'. Those drivers who did take risks felt they did so when it was 'safe' to do so, when the traffic situation allowed (eg. wide roads with little traffic, often late at night). For some drivers, but most often 'unsafe' drivers, peer pressure, the thrill of driving dangerously or employment related pressures also encouraged unsafe driving practices (Section 6.2).

Drivers had very little knowledge of accident numbers. On average, both groups of drivers grossly over-estimated the number of traffic deaths per year (Section 6.3).

Car culture

Many 'unsafe' drivers recognised the *practical* (ie functional) side of driving but also viewed driving as an *expressive* activity, to a larger extent

than did the 'safe' drivers. More of the 'unsafe' drivers had raced on the road than 'safe' drivers (Section 7.2).

More of the 'unsafe' drivers were enthusiastic about driving and cars (makes, models and car maintenance) and talked about such things more with their friends than the 'safe' drivers. More 'unsafe' drivers are involved in 'car cultures' (Section 7.3).

Social influences

Passenger presence had some effect on driving behaviour for 90% of the drivers. The vast majority of the drivers drove in a different style dependent on the type of passenger. Parents, adults and girlfriends/partners generally led to safer and/or slower driving, whereas a number of 'unsafe' drivers stated that they were often encouraged by their peer group to drive fast (Section 8.2).

Use of a radio cassette had some stated benefits but also some adverse effects. More 'safe' drivers mentioned the benefits, such as relieving boredom on long journeys and keeping them alert, whereas more of the 'unsafe' than 'safe' drivers stated they were adversely affected. Such effects included fast, up tempo, loud music leading to a more aggressive driving style (Section 8.3).

Music and driver mood were inextricably linked. 'Unsafe' drivers, more than the 'safe' drivers, admitted that their driving was affected by mood, in that a bad or angry mood led to aggressive, faster and less safe driving (Section 8.4). More of the 'unsafe' drivers also admitted that their driving was affected negatively by the actions of other drivers (Section 8.5).

93% of drivers felt that the portrayal of the car by the media was unrealistic. Media influence on car driver behaviour appeared to be small, but any influence, if it does exist, would appear to be adverse (Section 8.6).

The implications

Within-group differences among young male drivers do exist. It is therefore incorrect and unsatisfactory to label and stereotype all young male drivers as 'unsafe'. The use of traditional distinguishing variables such as age, sex and driving experience have been shown to be limited as explanatory factors for unsafe driving behaviour. Many other factors are implicated, indeed, driving behaviour is an extraordinarily complex phenomenon.

Method

The in-depth methodology used for this study has proved successful in helping to understand the detailed and complex issues involved. The approach adopted helps to achieve such goals by seeking to understand the individuals as a whole and giving them time and the opportunity to provide their own accounts and explanations for their driving behaviour based on their own realities and experiences.

Campaigns

As shown, the majority of young male drivers actually think they are 'safe' drivers. Media campaigns however, by their nature, are seen to be directed at 'unsafe' drivers. It follows that many of the young male drivers do not realise that the message applies to them. Media campaigns, if used, must therefore avoid the use of ambiguous terminology. However, the complex nature of these issues is not readily amenable to large scale media campaigns which are uni-directional in nature.

The majority of drivers (both 'safe' and 'unsafe') over-estimate their driving ability. This is because the definition of a 'good' driver is interpreted differently by different drivers. For on-road driving a good driver should be classified as a safe driver.

Increasing levels of factual knowledge of accident statistics may have an adverse effect on driver behaviour, since many of the young drivers believed that accidents were far more frequent events than they actually are. Constant media emphasis on accident numbers may inadvertently reinforce drivers' perceptions of their 'above average' driving ability, especially if they have not yet had an accident themselves.

It would seem that many young drivers do not recognise the 'warning signs' that they are close to having an accident. A near miss is not recognised as feedback that they were driving badly. This may be because it is easy to attribute a near miss to the environment or other drivers. The most obvious feedback of poor driving is accident involvement. However, even after an accident it is easy to find causes other than one's own driving for the accident. Young male drivers generally feel that accidents are chance events that occur at random. Obviously, accidents sometimes *do* occur at very *low* levels of risk and often they do *not* occur at very *high* levels of risk. This is a complication, but it must be emphasised that accidents are not chance or random events, and that inappropriate or incorrect driver behaviour does contribute to accident occurrence.

Pre-licence 'attitude' training

Traffic behaviour should be incorporated in health behaviour programmes. These should not just be restricted to schools but other organisations as well. Better teaching resources should be available for young people and also for parents who wish to help their children in this vital aspect of their life.

Pre-licence training on road safety should not solely concentrate on learning the skills to drive but incorporate some of the wider issues discussed below such as social, parental and peer influences, over-estimation of driving ability and the effects of drinking. These are important and often neglected issues which may be beyond the immediate control of many young drivers due to a lack of understanding. Recognition and awareness of these factors and ways of resisting such influences could be encouraged and explored.

Many parallels can be made with another health related issue – that of sex education. It is increasingly apparent that teaching the physical facts is not enough. The discussion of wider social issues such as relationships and

negotiation skills is becoming increasingly adopted. Similarly, young male drivers could be encouraged, perhaps through the use of role play in such discussions, to explore other perspectives whereby they can realise that their driving behaviour is viewed as risky by other drivers, and that their own 'skills' might not be sufficient to prevent accidents in all cases.

Driving should not be viewed as merely a physical skill. All too clearly, 'unsafe' drivers are aware of the risks they take but, because they believe themselves to be highly skilled, they regard themselves as 'safe' drivers. Concentrating greater resources and more emphasis on the physical skill aspects of driving whilst ignoring the attitudinal and social influences is likely to have minimal impact.

Social influences

The influence of peer and parents' car driving behaviour should be acknowledged. Parents, in particular, should recognise that their own poor driving habits may be imitated and learnt by their children prior to their learning to drive. The extent of the effect that peer pressure has on driver behaviour suggests that attention could be paid to influencing not merely drivers, but peer and passenger attitudes. Methods whereby peers and passengers might 'negotiate' expectations of the driver and their subsequent driving behaviour might prove fruitful.

The data show that those drivers who drive more safely in the presence of passengers do so because they do not wish to exhibit risky behaviour in the presence of someone they respect. It follows that drivers are less likely to be affected by publicity campaigns emphasising the dangers of risky driving than by campaigns which emphasise widespread social disapproval of risky driving behaviour.

Car radio cassettes should be designed to be as automatic as possible. Consideration should be given to an information leaflet pointing out the potential effects (both positive and negative) of listening to a radio cassette whilst driving.

Drinking behaviour

Young drivers seldom intend to drink and drive in advance and the activity was generally and genuinely portrayed as unacceptable. Many of those instances where a young male driver does drink and drive can be understood in terms of a 'rational' sequence of events ending in the need to get home, lack of alternative transport and the apprehension about parental reaction. Such topics need to be addressed. Improved public transport could help provide alternatives to car use. Parents could be encouraged to pay for taxis when necessary and to adopt a constructive rather than critical approach when discussing this issue with their children.

Car culture

Many young drivers, particularly the 'unsafe' drivers regard the car as an important element in their 'expressive' lives, and not just as a practical means of travelling from A to B. It is a difficult task to dissuade these youths from treating the car as such. Some of these aspects have been encouraged in certain supervised off-road probation schemes for young driving offenders, where harm is less likely to occur to either themselves or other

people. However, careful monitoring and evaluation is essential in order to ascertain the efficacy of such approaches.

Conclusion

Many of the issues identified in this study are not easy to address. Legislation and engineering improvements can go so far, but cannot, on their own, directly affect attitudes. Benefit will be gained from the opportunity for young people to explore and discuss these social aspects of driving in a constructive and encouraging environment through, for example, health education or personal development classes in schools and colleges, as well as during driver training. For persistent offenders or accident involved drivers, attention should be given to constructive rectification schemes, rather than merely to stiffer penalties and greater skills training and assessment. The aim must be to create a social environment whereby driving with responsibility and consideration becomes the norm, rather than the current situation in which many young drivers use risky driving as a way to acquire and enhance their reputations.

The AA Foundation for Road Safety Research

The AA Foundation for Road Safety Research was formed by The Automobile Association in December 1986 as part of its continuing efforts in the road safety field and as a major contribution to European Road Safety Year.

Registered as a charity, the objectives of the Foundation are:

To carry out, or procure, research into all factors affecting the safe use of public roads;

To promote and encourage the safe use of public roads by all classes of road users through the circulation of advice, information and knowledge gained from research; and

To conceive, develop and implement programmes and courses of action designed to improve road safety, these to include the carrying out of any projects or programmes intended to educate young children or others in the safe use of public roads.

Control of the Foundation is vested in a Council of Management under the Chairmanship of Sir Peter Baldwin.

Support for the Foundation in its sponsorship of research projects is encouraged from companies and other bodies that have a concern for and an interest in road safety. At the time this report was prepared, the Foundation was supported by:

The Caravan Club, Coopers & Lybrand Deloitte, Europcar (UK), ICL, The Society of Motor Manufacturers and Traders, and insurance companies Bishopsgate, City of Westminster, Commercial Union, Cornhill, Eagle Star, GRE, London & Edinburgh, Minster, Municipal Mutual, NEM, Norwich Union, Orion, Provincial, Rose Thomson Young Underwriting, Royal, Sphere Drake and Sun Alliance.

1 What is this study about?

1.1 Introduction

It is well established that younger drivers, particularly 17-19 year olds, are over-represented in the casualty rates. Indeed, Leonard Evans (1991) has gone so far as to state that the over-involvement of young male road users is 'so robust and repeatable that it is almost like a law of nature' (p.41).

Young drivers have been the focus of much research and many academic and journalistic articles. However, there is still disagreement as to why young drivers are over-represented in the accident statistics. Much of the research has concentrated on epidemiology and has involved relatively large scale, quantitative methods. Such methods require little input from the young drivers themselves except for supplying so-called 'hard' facts and figures on a number of different factors such as age, driving experience and exposure. In this way, young drivers are often 'passive' participants in the research process and are given little time to explain their own behaviour. Whilst age and driving experience are undoubtedly factors which play some role in young people's greater likelihood of accident involvement, there is a growing recognition that general lifestyle factors may also play an important part. Research which tends to ignore the needs and motives behind the participants' actions and everyday realities is likely to have a number of shortcomings. Inevitably, any method chosen to study young drivers has limitations, one of the problems being to define the appropriate data to collect and analyse. The worry is that researchers define the research questions which may not encompass the everyday reality for the participants themselves. No research perspective is right or wrong, the more perspectives brought to the study of a phenomenon the more researchers can begin to understand the phenomenon and overcome the limitations of any one perspective alone.

An earlier AA Foundation study (Rolls, Hall, Ingham and McDonald, 1991) identified aspects of driver performance, attitudes and behaviour that related to accident involvement of young drivers (17-25 years). Results showed that a substantial minority (around 35%) of young drivers, particularly in the 17-20 year old age group, could be classified as 'unsafe' drivers in a performance assessment made by a specially trained expert driving instructor (see Section 2 for method of categorising 'safe' and 'unsafe' drivers). Young drivers cannot be treated as they have so often in past research as one homogeneous group; not all young drivers drive unsafely or have accidents.

1.2 Aims

The main aim of the current study was to extend traditional approaches to driver behaviour and explore some of the more general lifestyle factors associated with two groups of young, male drivers previously identified as 'safe' and 'unsafe' drivers (Rolls, Hall, Ingham and McDonald, 1991). The young drivers were given the opportunity to provide their own accounts and explanations for their driving behaviour based on their own realities

and experiences. Factors which might influence their driving behaviour included their own interpretation and perception of risk, needs and motives for driving, attitudes to driving, meaning and purpose of the car, lifestyle patterns and social group influence amongst others. The use of in-depth, qualitative methods is relatively untried in driver research, but this study has intended to explore the efficacy of such an approach.

2 What is the rationale for the study?

2.1 Introduction

Knowledge of some selected results from the previous AA Foundation study (Rolls, Hall, Ingham and McDonald, 1991) are essential in order to understand the basis of the current work.

The earlier study showed that a substantial minority of the sample of younger drivers, particularly the 17-20 year old males, could be classified as unsafe drivers. Not *all* young drivers drove unsafely or reported accidents. Traditional research has tended to overlook such differences and treat young drivers as one homogeneous group defined prior to the start of the research using arbitrary categorisation indices like age. This is not surprising since a vast amount of work has to be done obtaining, defining, categorising and taking various measures from the sample merely to determine what sort of sample exists. For this follow up study however, this was not a problem since we already had a sample of drivers about which we had detailed information concerning driver performance, driving patterns and opinions and attitudes to various driving topics. In sum, prior to the start of the study we already had a sample of extremely well-defined drivers.

2.2 Previous study on younger drivers

The previous study involved 439 drivers including male and female drivers in three age groups: 17-20 years, 21-25 years and 31-40 years. The three main survey elements for each of the 439 subjects were:

- (i) an evaluation of the subject's driving on a selected 40 km urban and rural route. This involved in-car assessment by an expert driving instructor marking all UDA's (unsafe driver actions) as they occurred on the route. At the end of each drive there was an overall assessment of driving performance on a number of 7 point scale measures, one of which was safety.
- (ii) a one or two week diary/logsheets of all car journeys made by the subject
- (iii) interview/questionnaire on the subject's attitudes to driving

Use of such methods enabled inter-group variation between the different age and sex groups to be explored.

The main aim of the follow up study was to examine intra-group variation in younger male drivers. Why are some young male drivers 'safe' whilst others are 'unsafe'? In order to achieve this a group of 'safe' and 'unsafe' young male drivers had to be selected based on their driver performance on the route survey in the earlier study. Driver performance on the route surveys showed that males aged 17-20 years made the most UDA's (unsafe

driver actions) with 95 UDA's per driver on the 40 km route. An unsafe driver action was defined as 'any action or lack of action on the part of the driver that increased their risk or potential risk of an accident'. The average number of UDA's per driver group is shown in Table 2.1.

Table 2.1: UDA's (unsafe driver actions) by age and sex

UDA type	Male			Female		
	17-20 Average	21-25 Average	31-40 Average	17-20 Average	21-25 Average	31-40 Average
Speeding	22.0	18.2	11.4	19.9	16.0	13.7
Others	73.0	59.8	45.6	68.1	65.0	67.3
Total	95.0	78.0	57.0	88.0	81.0	81.0

An UDA was classified as dangerous or not dependent on the driver action in relation to the road environment at the time of the UDA. A dangerous UDA was 'any UDA which involved particular liability or exposure to harm'. The number of dangerous UDA's for each driver age and sex category again showed that males aged 17-20 years made the most such UDA's with an average of over 11 dangerous UDA's per driver. For the male groups, average number of dangerous UDA's was high both for the 17-20 year and 21-25 year age group. Across all the age and sex categories speeding UDA's comprised around 90% of all the dangerous types of UDA (Table 2.2).

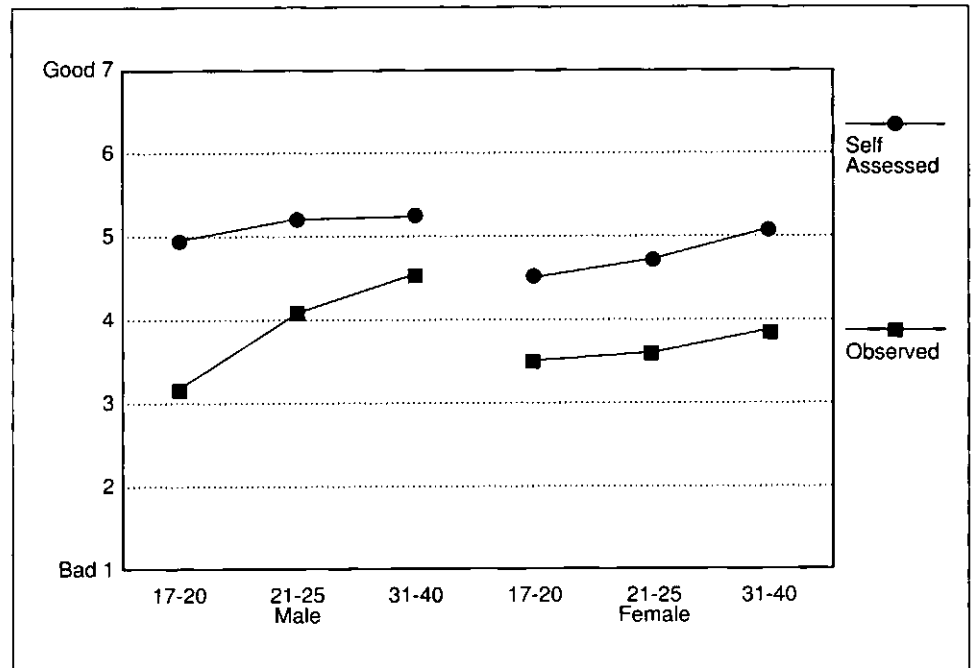
Table 2.2: Dangerous UDA's (unsafe driver actions) by age and sex

UDA type	Male			Female		
	17-20 Average	21-25 Average	31-40 Average	17-20 Average	21-25 Average	31-40 Average
Speeding	10.7	10.4	4.3	8.4	8.1	4.7
Others	0.9	0.6	0.3	1.1	0.8	0.5
Total	11.6	11.0	4.6	9.5	8.9	5.2

Self-assessed and observed scores (judged by expert driving instructors) for driving performance on the route survey were recorded across a number of measures, one of which was safety. All assessments were based on a 7 point continuous scaling procedure (1-7). The lowest possible rating was 1 = "very bad or unsafe" with the highest being 7 = "very good or safe" with a mid-point mark of 4.

The observed and self-assessed average scores for safety across age and sex are shown in Figure 2.1.

Figure 2.1: Assessments of safety (self-assessed and observed)



The least safe group of drivers was the 17-20 year old male group. However, this youngest male group (17-20 years) rated themselves almost as safe as other drivers, in contrast to their behaviour in terms of known accident rates and UDA scores on the drive. The observed safety ratings were used as the criterion for selecting the 'safe' and 'unsafe' driver groups in the current study (Section 4.1).

The total number of accidents and the total number of accidents reported to be the driver's own fault for each age and sex group were divided by the average number of years a full licence had been held. This enabled the average number of accidents and 'own fault' accidents per driver per year to be ascertained (Table 2.3).

Table 2.3: Number of accidents and 'own fault' accidents (average) per driver per year

	Male			Female		
	17-20	21-25	31-40	17-20	21-25	31-40
Number of accidents per driver per year	0.35	0.28	0.12	0.30	0.21	0.08
'Own fault' accidents per driver per year	0.22	0.18	0.06	0.18	0.14	0.03

This result indicates that 22 in every 100 17-20 year old male drivers would have had an 'own fault' accident per year compared to only 3 or 6 in every 100 drivers in the 31-40 year old female and male groups. It would appear that within the sample the male, 17-20 year old age group was around three times as likely to have an accident per year as the male, 31-40 year old age group.

The average number of convictions per driver per year showed a similar pattern to the 'own fault' accident average per year with the only exception being that the 17-20 year old females had a much lower average number of convictions.

One of the problems with using average scores is that certain high or low scores can have a disproportionate effect on the average. Therefore the distributions of the driver UDA's and driver ratings were examined.

The distributions of UDA scores across age and sex were examined. The percentages of drivers in each age and sex group by number of UDA's are shown (Table 2.4).

Table 2.4: Frequency distribution (%) of UDA scores

Number of UDAs	Male			Female		
	17-20	21-25	31-40	17-20	21-25	31-40
<20	1	18	24	7	2	6
20-59	32	29	41	38	42	28
60-99	25	20	18	23	28	32
100-139	23	13	9	15	16	27
140-179	14	16	8	10	8	6
180+	5	4	0	7	4	1

(percentage)

19% of the 17-20 year old male group made 140 or more UDA's per drive along with 20% of the 21-25 year old male group. In addition only 1% of the 17-20 year old male group scored less than 20 errors per drive compared to 18% in the 21-25 year old male group. Such results provide evidence that there are some 'safe' drivers and some 'unsafe' drivers in both these younger male groups.

The distributions of safety ratings by the assessors across age and sex were examined (Table 2.5).

Table 2.5: Distributions (%) of assessors' ratings of safety

Safety rating	Male			Female		
	17-20	21-25	31-40	17-20	21-25	31-40
1 (Bad)	19	5	3	13	2	5
2	15	13	8	16	17	11
3	30	12	19	16	19	29
4	15	27	16	18	39	15
5	14	29	25	27	17	23
6	7	13	19	7	6	16
7 (Good)	0	1	10	3	0	1

(percentage)

As many as 19% of the 17-20 male drivers scored the lowest possible observed safety rating.

What is the rationale for the study?

The presentation of data in averaged group format can disguise the variations between members of particular categories and may lead to a false impression of homogeneity. In other words, not all, but a substantial minority of young male drivers could be classified as 'unsafe' and not all, but a substantial minority of older drivers could be classified as 'safe'. Nevertheless, it must be noted that on a number of driving measures (above) a higher percentage of younger drivers, males in particular, could be said to be 'unsafe' compared to other age and sex groups.

2.3 Relationship to earlier study

This present study was a development from and enhancement of the earlier study in that it sought to investigate in more detail, a number of factors which might help to explain the differences evident in driver behaviour and performance within the younger male groups (17-25 year olds). The earlier study had *identified* intra-group differences, this study sought to *explore* them.

3 How was the study conducted?

3.1 The design of the study

This follow-up study was designed to explore in greater detail the perceptions of, and social influences on, young male drivers. Two sub-groups of drivers, previously identified as 'unsafe' or 'safe' were selected (Section 3.2). The study gave the drivers an opportunity to provide their own descriptions, assessments and interpretations of their driving in addition to providing their own explanations, motives and influences for such driving behaviour.

An intensive research method using semi-structured interviews was adopted, since it is preferred when exploring topics in such detail. This technique is not used very frequently in driver research since it is costly, difficult to conduct and time consuming. Intensive research is normally only used, as in this case, when there are a relatively small number of respondents and the information required is of a qualitative nature. Interviewers need to be careful to ask questions in such a way as to obtain answers which are free from bias (see also Appendix 12.2).

It must be noted that this follow up study took place up to two years later than the original study and therefore some of the drivers may have altered or changed their attitudes and behaviour in the intervening period. As the accident statistics emphasise, driving behaviour tends to change over time. Thus, in a small number of instances, drivers who had been classified 'unsafe' in the original study stated that they were now much 'safer' drivers. In such cases their explanations for the changes in attitude and/or behaviour were explored.

3.2 Sample selection

Two sub-groups of the younger male drivers from the previous research, one classified as 'unsafe' and one as 'safe' were selected. The two driver groups comprised those drivers who had previously scored the lowest and highest ratings on the overall safety ratings based on their assessed driving performance on the 40km route survey. The 'unsafe' driver group was those drivers who had scored one or two on the seven point safety scale with the 'safe' group being those drivers who scored 5 or more on the same scale (see Section 2). Initially the youngest drivers were contacted (17-20 years) but some drivers in the older age range (21-25 years) were included in order to reach the required sample numbers. Only young, male drivers were used in this study since they are the group most over-represented in accident statistics.

The 75 drivers from the original study who fell into either of the two groups were then contacted concerning their willingness to take part. 56 drivers agreed to take part, with 29 from the 'unsafe' driver group and 27 from the 'safe' driver group. Drivers were paid a small amount as an incentive to take part.

3.3 Interview content and procedure

Interviews lasted between one to two hours covering a number of topics including driving behaviour and practices, assessment of risk, driving history, attitudes to other drivers, lifestyle, leisure activities, peer group influences, explanations for their driving behaviour and their attitudes to cars and driving (see Appendix 12.2).

All interviews were conducted by the same researcher to ensure consistency. Prior to the interview the researcher did not know whether the driver had previously been assessed as an 'unsafe' or 'safe' driver. As far as possible, the interviewer followed the same topics for all subjects whilst at the same time allowing the subject to talk about other important areas that developed. A number of set questions were asked of all the drivers who had to rate the degree or extent of their answer on visual analogue rating scales which were provided. These questions were primarily used to initiate different topics and provided a useful tool for the interviewer to see immediately where the driver rated his behaviour or views on various topics and probe accordingly. It is recognised that a major problem with the use of such scales is that different people start from a different base level of assessment. For example, what one driver assesses as 'safe' driving another may assess as 'risky'. Due to these interpretive difficulties, it was the explanations and descriptions of behaviour that formed the basis for their ratings, rather than the ratings themselves, that were of paramount interest.

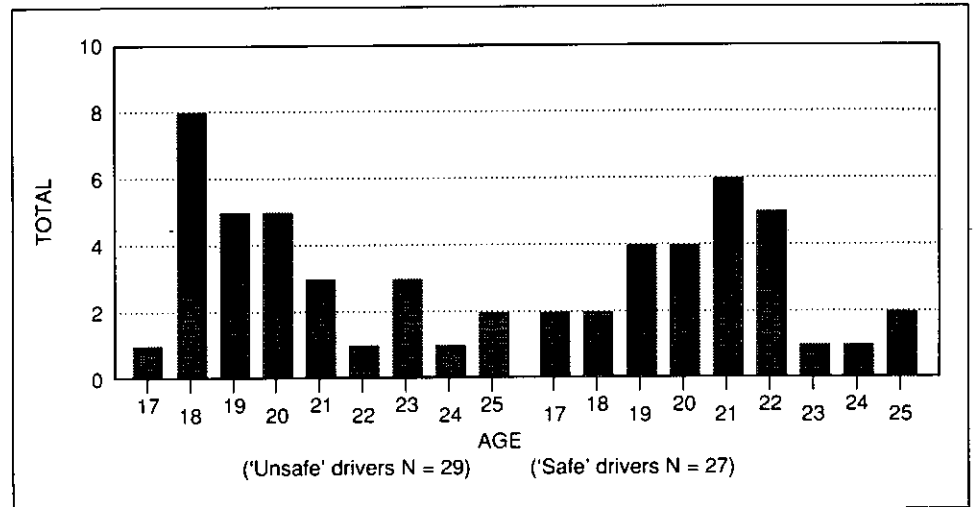
The interview was semi-structured and as informal and friendly as possible to help the subject to relax and give 'honest' answers. Specific evidence drawn from their own experiences was encouraged since it was felt this was likely to be more accurate than any sweeping generalisations that might be presented. All interviews were tape recorded for subsequent transcription and the majority took place at the respondents' homes. In order to ensure confidentiality, subjects were allocated numbers which appeared on the interview tapes and on all subsequent transcriptions and data provided by the drivers.

4 Who were the drivers we investigated?

4.1 Sample characteristics

All the data in this chapter were provided by the drivers at the time of the earlier study. The age distribution of the drivers at that time is shown in Figure 4.1.

Figure 4.1: Age distribution of the drivers



A breakdown by socio-economic grouping (S.E.G.) of the drivers is given (Table 4.1). All of the drivers were single with the exception of three ‘safe’ drivers who were married. None of the drivers had any children.

Table 4.1: Socio-economic grouping of the sample

Socio-economic grouping (*)	‘Unsafe’ drivers	‘Safe’ drivers
Non-manual (1-3)	34	19
Manual (4-6)	21	33
Students (7)	45	44
Unemployed (10)	–	4
Total	100	100

* The numbers in brackets refer to the Registrar General’s classification from 1-10 used for the General Household Survey.
 S.E.G.(8) = Housekeeper, of which there were none.
 S.E.G.(9) = Retired, of which there were none.

There were no statistically significant differences between the average age, average miles per year and average career miles of the ‘unsafe’ and ‘safe’ driver groups (Table 4.2). The ‘safe’ group of drivers had, on average, been driving slightly longer than the ‘unsafe’ drivers (about 6 months).

Table 4.2: Driver age, miles per year and career miles (averages)

	'Unsafe' drivers	'Safe' drivers
Age (years)	20.14	20.70
Miles per year	11,724	10,126
Career miles	24,330	28,288

In terms of education, more 'safe' drivers left school at 16 years of age (41% of 'safe' compared to 28% of 'unsafe' drivers) whilst more of the 'unsafe' drivers went on to further study beyond 18 years (51% of 'unsafe' drivers compared to 37% of 'safe' drivers). However, one of the purposes of the study is to look beyond such 'hard', external variables to explain behaviour and give the drivers themselves an opportunity to describe and explain their perceptions and behaviour. Before we turn to these accounts however, it is important to summarise how the 56 drivers performed in the earlier study (Rolls, Hall, Ingham and McDonald, 1991).

4.2 Previous information on the drivers

The aim of the earlier study was to identify those aspects of driver performance, attitudes and behaviour that related to accident involvement of different driver age groups (17-25 years and 31-40 years) with differing levels of driving experience (Rolls, Hall, Ingham and McDonald, 1991).

Although the 'unsafe' and 'safe' driver groups were selected for this study on the basis of the overall rating by the observer at the end of the route survey the number of UDA's (Unsafe Driver Actions) and dangerous UDA's made during the route surveys by these two driver groups also show considerable differences. The 'unsafe' drivers committed over twice as many UDA's and dangerous UDA's as the 'safe' drivers on the 40 km route. A similar pattern is evident with the reported numbers of accidents per year of driving and the numbers of 'own fault' accidents per year of driving (Table 4.3). These results confirm that the criteria chosen to select the 'unsafe' and 'safe' drivers groups were adequate.

Table 4.3: Driver performance and accident history (averages)

	'Unsafe' drivers	'Safe' drivers
UDA's	107	52
Dangerous UDA's	15	6 *
Number of accidents per year	0.64	0.30 **
Number of 'own fault' accidents per year	0.54	0.12 ***

* $t = 4.98$ $df 54$. $p < 0.01$

** $t = 2.35$ $df 54$. $p < 0.05$

*** $t = 3.50$ $df 54$. $p < 0.01$

Information obtained from the questionnaires on driver behaviour patterns showed little differences between the 'safe' and 'unsafe' male driver groups over the purpose for which they use their car, but some differences concerning passenger presence on journeys. The 'unsafe' driver group spent less time driving on their own and also less time with a partner/spouse only but spent more time driving with friends in the car than the 'safe' driver group (Table 4.4).

Table 4.4: Passenger occupancy (% of driving time)

	'Unsafe' drivers	'Safe' drivers
Alone	59	65
Partner/spouse	3	10
Friends	32	24
Other combinations	6	1
Total (%)	100	100

Car ownership details were slightly different between the groups in that more of the 'safe' drivers owned their own car than the 'unsafe' drivers. More 'unsafe' drivers borrowed their parents' car or had a company car than the 'safe' drivers (Table 4.5).

Table 4.5: Car ownership (%)

	'Unsafe' drivers	'Safe' drivers
Own car	62	82
Employer	14	7
Parents'	21	11
Other	3	0
Total (%)	100	100

The average age of car driven was older for the 'unsafe' drivers (average = 10 years old) compared to the 'safe' drivers (average = 8 years). The engine sizes were very similar (1400cc) with five of the 'safe' drivers and two of the 'unsafe' drivers driving a GTi/Turbo car.

Almost a quarter (24%) of the 'unsafe' drivers drove illegally prior to obtaining their provisional licence compared to just over one sixth (15%) of the 'safe' drivers. The average number of lessons ('unsafe' drivers = 17; 'safe' drivers = 15) and average number of tests ('unsafe' drivers = 1.57; 'safe' drivers = 1.50) it took for each group of drivers to obtain their full driving licence were not significantly different.

In terms of car choice, both driver groups rated 'safe' and 'practical' qualities of cars (reliability, safety and utility) as more important when buying a car than 'expressive' qualities (speed, acceleration, appearance and engine size). However, the 'unsafe' drivers rated safe and practical qualities of cars less important than did the 'safe' drivers and rated 'expressive' factors as more important than did the 'safe' drivers (Table 4.6).

Table 4.6: Rating of importance of car qualities

	'Unsafe' drivers	'Safe' drivers
Practical qualities	5.30	5.63
Expressive qualities	4.85	4.45

(Average rating score with 1 = Not at all . . . 7 = Extremely)

It can be seen that some differences emerge between the young driver groups when further classified into so-called 'safe' and 'unsafe' driver groups (for further information see Rolls, Hall, Ingham and McDonald, 1991).

Having briefly considered some of the information previously obtained from the samples, we now turn to consideration of their perceptions and attributions. The following chapters cover aspects of lifestyle, self assessments of driving, attitudes and reported social influences. Summaries of the key points to emerge are provided, together with some illustrative quotations from the drivers themselves.

5 How did the drivers live?

In the last few years, in common with a number of other research areas such as health, there has been a growing emphasis in traffic safety research on the importance of lifestyle issues on young car driver behaviour. It is becoming more frequent for driving behaviour to be examined in terms of the more general lifestyle choices made by an individual, rather than as a separable behaviour studied out of context.

5.1 Lifestyle characteristics

A fundamental part of any young person's lifestyle involves their leisure pursuits. Although it is customary to regard young people's leisure activities as identifiable within an age category it is evident that many different and contrasting leisure activities are covered by the drivers. The first analysis examined differences between participation in what we have termed primarily 'active' leisure (involving physical sports such as football, badminton, squash, running and so on) and participation primarily in 'passive' leisure activities (such as 'going out', music, cinema interests and so on). Whilst both 'safe' and 'unsafe' drivers participated a great deal in both 'active' and 'passive' leisure, a few recognisable patterns emerged. More of the 'safe' drivers participated in 'active' leisure involving traditional sports than the 'unsafe' drivers, but more of the 'unsafe' drivers (albeit a small number) either took part, or expressed a willingness to take part, in a number of activities involving arguably high risk-taking and thrill-seeking such as hang-gliding and off-road mountain biking. Many of the 'unsafe' drivers also mentioned the participation or desire to take part in off-road driving (Chapter 7).

#3: If I could afford to I'd do a lot. Bit of motorcycling and drinking a fair bit. I'd like to do some hang gliding, but it costs too much. (Unsafe driver, 18 years (age at time of earlier study))

#11: Basically I'm a boy who didn't grow up really! Abseiling, potholing, I do a lot of that sort of thing. (Unsafe driver, 19 years)

#13: I used to race mountain bikes, but I can't anymore, I'd be in a wheelchair if I carried on, both my knees are bugged up. When I had my bike I was extremely reckless . . . (Unsafe driver, 19 years)

#15: They were more the sort of dangerous sports, I used to do hang-gliding, caving, sub-aqua and mountain biking but I don't have time, recently I haven't taken any exercise . . . the only hobby I do is motorcycling for recreation because you can go damn fast. (Unsafe driver, 20 years)

The frequency of evening activities did not vary between the driver groups. The types of friends that the drivers associated with did reveal small differences. Slightly more of the 'safe' drivers (59%) had regular girlfriends/partners than the 'unsafe' drivers (48%). Inevitably the 'safe' drivers spent more of their evenings out in the company of their partner than male friends, whereas the 'unsafe' drivers tended to spend more evenings out with male friends than with partners.

Drivers with regular partners or in long standing relationships stated that they had matured or 'grown up'. Amongst those few drivers who were married or had fiancées there was a general acceptance of lifestyle changes which had affected much of their behaviour including car driving. In a similar way, drivers with financial burdens such as mortgages or debts tended to state that they had less money to spend on 'going out' or on cars and that such factors had, in turn, affected their driving behaviour. Changes refer to general lifestyle patterns and are to some extent distinct from immediate passenger/driving influences (Chapter 8).

#5: Maybe I've matured a lot in last 18 months, generally settled down. I've got a lot of responsibilities now with buying a place, I can't afford to be silly and smash up my car and pay for it . . . I go round with my girlfriend (fiancée) more, so I'm not out to impress my mates or anything . . . I don't (drive fast) because we have been going out a long time, so I don't need to show off so often. (Unsafe driver, 18 years)

#23: To begin with when you're young you want to enjoy life, it's finding fun, exhilaration, but as you get older especially when you get kids you start to get worried about safety and generally the enthusiasm dies off. (Unsafe driver, 23 years)

#45: I think I've taken a lot of big steps in my life, I've got quite a responsible job, in charge of a heck of a lot of money and a lot of responsibility with (company name) and generally we're expected to be one heck of an adult, it's hard to be an adult one minute and then get out and be a bloody young kid the next. (Safe driver, 21 years)

#49: Used to not bother, used to get maximum revs, but now I'm unemployed I am a fuel saving driver. (Safe driver, 22 years)

5.2 Peer and parental influences

Drivers were asked to rate how much they were influenced in general by their peer group and by their parents and how safely they rated the driving of their peer group and parents. Although differences were not statistically significant on the four measures, a consistent pattern emerged; namely that the 'unsafe' drivers were *more* influenced by their peers' and their parents' behaviour than the 'safe' drivers, and that the 'unsafe' drivers estimated their peers' and parents' driving as *less* safe than did the 'safe' drivers. In sum, the 'unsafe' drivers are more influenced by, and more exposed to, 'unsafe' driving than the 'safe' drivers.

#6: Dad's driving wasn't really very good, after he taught me to drive he did the advanced driving . . . but before then he didn't really know the rules of the road. (Unsafe driver, 18 years)

#27: My Dad's driving was so different from what I was getting taught that in the end he couldn't sit in with me when I was practising. He has poor anticipation and doesn't concentrate as much as he should. (Unsafe driver, 25 years)

Many of the drivers confirmed findings from the earlier study that it is only a minority of young male drivers that can be termed 'unsafe'. The effects of peer influence will be examined in greater detail on specific topics later (see Sections 5.3, 6.2, 7.3 and 8.2).

#9: (– a driver highly influenced by his peers described their driving as) Crazy! But then they'd say the same about me. It's awful. I'm stamping my foot on the ground going 'slow down'.

#13: Some of them drive terribly . . . But the majority of my friends drive pretty safely. I know some people who come to school and say 'Oh I jumped a red light, screeched round a roundabout and wheel spinned away' . . . (Unsafe driver, 19 years)

#15: The majority are quite safe, but it's just the odd one or two . . . they think they're rally boys . . . they drive it like a lunatic. (Unsafe driver, 19 years)

#32: Most are quite safe, but there are one or two, one in particular, he's had God knows how many accidents . . . Nobody wants to go with him 'cos he's a liability; he definitely does it on purpose. He enjoys seeing us fret and tell him to stop. (Safe driver, 18 years)

5.3 Drinking behaviour

Drivers were asked about their drinking habits when they were and were not driving. 43% of all the drivers thought that they had driven whilst over the blood alcohol limit (BAC) *at least once* in their driving career. Although there were no marked differences between the 'unsafe' and 'safe' drivers, many of the explanations for their drinking and driving were revealing and reflect and support other areas of their driving behaviour. For example, some drivers with regular partners claimed it was easier to organise their drinking because they could now share the driving responsibility with their partner. Very few of the drivers were deliberate drink-drivers who went out with the intention to drink over the BAC and then drive. Many of those who had driven when over the BAC blamed lack of forward planning, an argument or being let down by friends as the reason for their subsequent driving after consumption of alcohol.

#2: Once I was going to stay at a friend's house and he didn't turn up at the party . . . (Unsafe driver, 18 years)

#7: Those circumstances when there is a mix-up and I'd go to the pub with my brother and I'd think he was driving and he'd think I was driving. (Unsafe driver, 18 years)

#20: Once, we went to a party, I was engaged; we had a big argument and I just left and got straight in the car. (Unsafe driver, 21 years)

#33: I've thought 'Oh shit!' I can't leave the car in this sort of area – about 2am so I thought I'll chance it . . . I thought I was going to get a lift with my mate and he left early. It's always been through lack of planning or someone getting a 'strop' and walking out early. (Safe driver, 19 years)

#43: Three of us went to a nightclub on a regular basis. One person got into a fight and the person that was sober steamed off and we were in a predicament, we were inebriated . . . (Safe driver, 21 years)

One of the problems expressed by the drivers was their lack of knowledge of the BAC limit in practical terms such as pints, glasses of wine and so on. Their confusion over the limit created circumstances when they may have inadvertently driven over the limit. It has to be remembered that for many of the drivers they are inexperienced drinkers as well as inexperienced drivers.

#27: Sometimes it's difficult to refuse drinks, also you think I'm going to be up and about till 2am and so by the time 2 o'clock comes some of its worn off but then you think 'No it hasn't worn off'. (Unsafe driver, 25 years)

#39: (at a function/party) You kind of lose track, I don't know what the limit is with wine – it's quite alcoholic and it's difficult to keep track, it fills up and you sit there all evening . . . (Safe driver, 20 years)

#45: I was just 18, we'd had a few Stellas (strong lagers) and when I got out into the fresh air it hit me a lot more than I thought. (Safe driver, 21 years)

#53: I try to keep it well under (the BAC limit), I work it out, how much time I'm going to spend there – I'd be happy if they brought out a new law which said anybody who drives can't drink anything. It would be a lot easier. (Safe driver, 25 years)

The amount of alcohol reportedly consumed by the two groups of drivers in a typical evening did not vary significantly between group. Slightly higher levels of drinking were reported by the 'safe' drivers than the 'unsafe' drivers both when they were driving and on the occasions when they were not. 65% of all the drivers consumed less than three units of alcohol (1½ pints of ordinary beer) on a 'typical' evening if they were driving. Generally, drivers reported fairly sensible attitudes to drinking. Three-quarters of all the drivers were non-smokers with little difference between the groups.

#11: One's the limit and we're quite happy with that, you can enjoy yourself without it. (Unsafe driver, 19 years)

#17: I don't drink and drive at all. I have on occasions bent cars and having proved I can do it totally sober I can feel it as soon as I have a drink, if I did anything to anybody else it might be at the back of my mind that maybe if I'd been sober . . . (Unsafe driver, 20 years)

#32: If I'm driving I generally don't drink anything but if I do then it's never more than one pint. (Safe driver, 18 years)

#55: If I'm driving I'd limit myself to one pint maximum and usually that's only something like a very low alcohol cider. (Safe driver, 17 years)

Peer support seemed to be a major factor influencing whether the drivers drove over the BAC limit. Drivers recognised that it was easier to refuse alcoholic drinks with peer support. The favourite strategy for avoiding drink driving was to take it in turns with friends to drive and not drink. Friends would therefore support each other's efforts knowing that next week it would be their turn.

#6: I think I've got my friends well trained – I'm normally the chauffeur so they don't like me to get too drunk! (Unsafe driver, 18 years)

#8: We usually try and take it in turns to drive so the next night they'll be doing the same. (Unsafe driver, 18 years)

#13: Yes, we often take it in turns so responsibility shifts to other people. I know people who've been too pissed, what they decide to do is drive into town and leave their car there and they've tried to get in their car . . . I've stopped quite a few people like that. (Unsafe driver, 19 years)

#34: It's normally accepted that one person is going to drive and he's going to stay sober, so there's no real pressure. (Safe driver, 19 years)

#39: They don't encourage me not to drink 'cos if you're driving they just take it for granted. (Safe driver, 20 years)

#46: Friends think 'yeah OK you're driving'. I don't feel any pressure like that (to drink). (Safe driver, 22 years)

Those few drivers whose friends did not support them stated how difficult it was to resist. Although the drivers recognised the help they received from friends, they did not always openly express their disapproval to friends who did drink and drive and seemed to think their disapproval would be ignored.

#10: I know people who drink 8 pints of lager and drive still, but that's up to them isn't it? I can't do anything to stop them, I would if I could. (Unsafe driver, 19 years)

#31: There was a couple of boys who used to make a thing about getting pretty drunk and then going out. It was laughed at and we're not coming in your car . . . we wouldn't have a go and tell them not to do it, but secretly we'd say 'Oh God, they're being stupid'. (Safe driver, 18 years)

#33: Like me, they (friends) don't approve of it (drink driving) when they're sober, but when you're drunk your perspective changes a bit. (Safe driver, 19 years)

Another problem that the drivers mentioned was the lack of adequate public transport as an alternative to driving. This factor had led many of the drivers, if not to actually drink and drive themselves, to accept lifts off friends who they knew to be intoxicated arguing that they had very little choice.

#5: I had to drive home; I could've caught a taxi but it wouldn't have been convenient to get to work the next morning. (Unsafe driver, 18 years)

#10: I intended to leave my car and get a taxi . . . it was raining and there were no taxis so I thought I would drive . . . I knew I had done wrong . . . (Unsafe driver, 19 years)

#37: I've been driven to a pub by someone else and they decide to drink, there's not a lot you can do about it, you've got to get home. (Safe driver, 20 years)

#53: Once my mate said he wouldn't drink, I got myself 'steamed' and I was more worried about walking home than getting in the car with him, but I wasn't too chuffed when I realised he was quite heavily 'pissed' up. (Safe driver, 25 years)

Some of the drivers who were near, or over, the BAC limit tried to justify or limit the effects of their actions. The drivers forwarded some methods or techniques both to avoid being apprehended and to lessen the likelihood

of causing an accident. The most common of these was to wait until it was extremely late at night and then drive home on very quiet backroads, often in the country.

#21: . . . I were smashed but it were dead late at night. . . . (my mate) he knew he were over limit but it was a dead sleepy town. (Unsafe driver, 21 years)

#43: We went for a walk to get rid of some of the alcohol and wait for the roads to become more quiet, the chances of hitting a small child at 4 am is very rare indeed. (Safe driver, 21 years)

#53: I lived in the country and there was nothing between me and the pub except two miles of road and on a bad night a couple of cows . . . I pushed my luck a bit. (Safe driver, 25 years)

Although some of the drivers had driven whilst intoxicated in the past many of the drivers felt that the situation was improving and that their age group was considerably better than older groups. Some of the drivers stated that the importance of the car in their lives ensured that they did not want to risk losing their licence.

#20: (Just after changing job) Now I think if I haven't got my car it's going to affect me quite a bit . . . it's a responsibility, I've gone through the phase now when it's just drink, drink, drink. (Unsafe driver, 21 years)

#32: People of our age have been brought up with drink driving, with your parents' age, when they were younger drink driving didn't come into it so they find it harder to turn a glass of wine down than we do. (Safe driver, 18 years)

#36: When I was 17, I was driving my father's car and he heavily pressured me to drive even though I had had a drink – I was under the limit but I recognised a different personality. My friends have a genuine responsibility because they see their cars mean a lot to them, they've spent a reasonable amount of their income or effort in their cars . . . I wouldn't think other road users would figure first in their minds. (Safe driver, 20 years)

#54: I went to see my Dad in his office and he gave me a large whisky, about two doubles! I hadn't eaten all day and the police caught me and by that time I was just on the limit. (Safe driver, 19 years)

6 What did the drivers think of their own driving?

Earlier studies have shown that drivers tend to over-estimate their driving ability. It has been suggested that over-estimation of ability may be a determining factor in accident involvement.

6.1 Perceived ability

Drivers were asked to rate their driving performance in terms of both driver skills (handling and car control) and driver safety compared to (a) male drivers their own age and (b) more experienced drivers (30-40 years).

As a whole, the young male drivers rated their driving skills and driving safety considerably above an average driver their own age. This result would be expected according to the hypothesis of the superior conformity of the self behaviour (Codol, 1975). However, overall, the same drivers rated their skills and safety only just above an 'average', more experienced driver (30 years and above). This finding appears to show that generally young drivers recognise that more experienced, older drivers are more highly skilled and safer drivers than young males (17-25 years) but that this does *not* apply to their *own* driving performance, which they rate as far better than their peer group and a little better than older, more experienced drivers.

'Unsafe' drivers rated their driving skills (handling, car control) slightly higher than the 'safe' drivers. 'Unsafe' drivers, although still rating their safety level considerably above that of the average driver, rated their safety level below the level rated by the 'safe' drivers. 'Unsafe' drivers rated their driving as slightly more skilled than safe, whereas 'safe' drivers rated their driving as slightly more safe than skilled. There would appear to be a number of explanations for this.

Some of the 'unsafe' drivers believe their driving is highly skilled (and it may indeed be so) because they 'test' their abilities and car capacities either on or off-road to a much greater degree than 'safe' drivers. If such a hypothesis is correct, it provides further evidence that driving skill (car control and handling) is not of over-riding importance to accident avoidance (since this group had higher accident involvement).

#2: They (friends) probably don't test the cars out so much so I think I could go faster and keep control better. (Unsafe driver, 18 years (age at time of earlier study))

#5: I had a fast car once so I learnt to drive. The first time I really had to open her up and see how fast it would go, I did 120, that's all it says on the clock, it used to sit there on 120 so if we were doing more I don't know . . . I used to like it when it was wet when I had my old car because I would mess around making it slide everywhere. There is a sharp corner on the way to work and every car I've had I have seen how fast I can go round without coming off the corner. (Unsafe driver, 18 years)

#15: I'd say it's a lot better, there's a lot of people who will drive as fast as me but they might be going faster than they can safely do so, the lines they take on corners, I've been up at Brands Hatch and it was very beneficial. (Unsafe driver, 20 years)

#17: Somewhat better, I drive the car nearer to the limits than other people and I know where the limits are. I can cope with situations, reflexes are a little bit finer tuned. I rolled my parent's car trying to see what the car would do and it wouldn't quite do it. (Unsafe driver, 20 years)

#24: Perhaps driving quite fast on a quiet road to see how the car will cope . . . (Unsafe driver, 24 years)

#43: Once, I did, when it was snowing and even if I had spun I could have stopped in the 400 yards before I hit anything. (Safe driver, 21 years)

#51: I tried a handbrake turn in a field, just once with a mate, to see what happened; never on road. (Safe driver, 23 years)

It is obviously extremely difficult to judge one's driving performance *per se* or in relation to other drivers. There are relatively few objective criteria for measuring driver ability. As one driver commented: *#30: I suppose everyone says quite good, it's difficult to know because I've never sat in the passenger seat. (Safe driver, 17 years)* Accident involvement might suffice as a measure, but accidents are actually fairly rare events and often it is easy to blame external circumstances rather than one's own mistakes for any accident occurrence.

However, one possible way of assessing driver ability is to take additional driving courses or extra tuition. Drivers were asked if they had participated in any such courses. A larger percentage of the 'safe' drivers (37%) than the 'unsafe' drivers (14%) were either advanced drivers (IAM or ROSPA members) or had taken courses run by the local police forces. Therefore the 'safe' drivers might have had a firmer 'objective' basis for assessing their driving as better than the 'average' driver. It is not possible to conclude that the courses that the 'safe' drivers completed helped them subsequently to be categorised as 'safe' drivers since it may be that those 'safe' drivers are the ones most likely to actively seek out safer driving courses. One police officer who runs safer driving courses confided that it sometimes appeared that 'they were preaching to the converted'.

A major difference between the 'safe' and 'unsafe' drivers emerged when the drivers were asked how they would define a 'good' driver. 'Safe' drivers generally took this to be a driver who was safe, considerate and courteous and did not get in the way of other drivers. However, 'unsafe' drivers tended to define a 'good' driver as one who could handle the car well, was positive in their actions, had quick reactions and so forth. It would appear that, in general, 'safe' and 'unsafe' drivers look for different qualities of drivers in a similar way that they look for different qualities of cars when it comes to car choice (Section 4.2).

'Unsafe' drivers defined a 'good' driver as follows:

#2: Someone who doesn't panic in a situation, is alert, can drive fast on a bendy road without holding up traffic. (Unsafe driver, 18 years)

#4: Someone who can control a car, any car and control it well. In an emergency, can stop suddenly, corner suddenly . . . someone who's confident, knows what spaces they can get through and knows how to reverse it just as well as they know how to drive it forwards. (Unsafe driver, 18 years)

#10: Quick reactions, good anticipation, I reckon . . . (Unsafe driver, 20 years)

#15: . . . the ability to read the road and know the performance and handling of the car, you've got to know the limitations . . . (Unsafe driver, 20 years)

'Safe' drivers defined a 'good' driver as follows:

#31: Anyone who gets from A to B without endangering himself or anyone else on the road . . . (Safe driver, 18 years)

#39: A good driver is one who goes from A to B and no-one's noticed he's been on the road. (Safe driver, 20 years)

#41: Someone who's completely aware of what's going on around him and acts accordingly and has consideration for others . . . (Safe driver, 18 years)

#42: One who drives in a way that doesn't affect anyone around him, he drives safely of course; mainly to think of others rather than yourself. (Safe driver, 21 years)

NB: It is unclear whether subjects who refer to drivers as male were deliberately doing so because they felt that 'good' drivers were usually male or whether they always refer to a third person as male.

It is evident that, in general, both groups of drivers felt they were 'good' drivers but that the 'safe' and 'unsafe' drivers differed in their interpretation and definition of a 'good' driver. These two findings may be related. It is arguable, since all the drivers feel they are better drivers than average, that when they are asked to define a 'good' driver the drivers define and describe their own driving. Thus the 'safe' drivers put the emphasis on good driving as safety related whereas the 'unsafe' drivers put the emphasis on driving skill. One way of exploring this is to examine the drivers' rating of their own risk taking behaviour whilst driving. For example, do 'unsafe' drivers choose not to emphasise the importance of safety for good driving because they are aware that they take considerable risks whilst driving and therefore, using that criterion for a definition of a 'good' driver, they would have to rate themselves as 'poor' drivers?

6.2 Perceived risk taking

Drivers were asked to assess their own level of risk-taking compared to (a) other male drivers their own age and (b) older, more experienced drivers (30-40 years).

Taking the average of their ratings, 'unsafe' drivers rated their driving equally as risky as an average driver of the same age but more risky than an average driver in the 30-40 year old age group. 'Safe' drivers rated their driving less risky than an average driver the same age and as risky as a 30-40 year old driver.

On average, the 'unsafe' drivers rated their driving considerably more risky than the 'safe' drivers assessed theirs to be. Obviously it is difficult to compare 'safe' and 'unsafe' driver ratings since what is assessed as risky for one driver may be assessed as safe by another driver. As one driver, whose route survey was, in the earlier study, terminated on safety grounds,

commented: #17: *I've got my own idea of what's safe and I tend to drive at that (Unsafe driver, 20 years).* Another 'unsafe' driver who had four convictions for various driving offences (including excessive reversing for over 5 miles!) claimed: #22: *I'm quite a bit safer than most. I haven't had any accidents, well I've had two but most people I know seem to be doing things like driving into the back of lorries (Unsafe driver, 20 years).*

Different interpretations of behaviour are inevitable. Therefore, drivers were asked what type of risky manoeuvres they performed. Differences between the two driver groups emerged with the 'unsafe' drivers listing a greater variety of risky manoeuvres. The 'safe' drivers also admitted performing risky manoeuvres but they were generally less extreme in their undertaking than the 'unsafe' drivers. 'Safe' drivers' risky manoeuvres were most commonly speeding over the limit, just *'going with the flow of the traffic'* (#32). In addition, the 'safe' drivers tended to perform them on a less frequent basis than the 'unsafe' drivers. Some of the actions described as risky by the 'safe' driver group such as exceeding the speed limits by small amounts might not have been categorised as risky by the 'unsafe' drivers. Speeding was an ubiquitous behaviour performed by almost all drivers. It is noticeable that most of the risky driving behaviour was intentional and violational in nature as opposed to being caused by driver errors or mistakes. This suggests that this type of risky behaviour is not the result of lack of driver skill but due to other factors such as inappropriate attitudes or social influences.

#2: . . . *I've gone the wrong way round roundabouts to get to exits . . . I see my mate drive his car half on the road and half on the kerb . . . there's a jump on the road that if you go fast enough you take off, we'd go up there and try to take off. It's a talking point. If we're going from one person's house to another we'll just keep trying to overtake, nearly every time we'd do that. (Unsafe driver, 18 years)*

#4: *I do power turns, I spin it and bring on the opposite lock, bring the power on and power out of it. (Unsafe driver, 18 years)*

#5: *In the VW Golf, in Cornwall, me and my girlfriend and two mates, we were driving along a road about 110 m/hour, just overtaking and we came to a bridge and I didn't know what was going to be on the other side and we just carried on over it – that was pretty risky . . . (Unsafe driver, 18 years)*

#21: *I never do 30 mile/h in a 30 limit because that's like walking pace ain't it? (Unsafe driver, 21 years)*

#22: *I'll overtake when I can see I've got 6 inches to spare or when I consider the road wide enough for 3 lanes. I go round corners on the limits of the friction of the tyres. (Unsafe driver, 22 years)*

#32: *A risk is putting yourself and other people in danger, I wouldn't have said I did . . . but if there's not much traffic around perhaps you'll go a bit faster. (Safe driver, 18 years)*

#38: *I have done handbrake turns in the middle of the night in gravel car parks when no-one's around. I wouldn't do it on the road because you never know what someone else is going to do. (Safe driver, 20 years)*

#54: *The only ones I would do is speeding along a particular by-pass. Everyone drives 50 on the Southampton by-pass; you've more chance of an accident if you go 30 (the legal limit). Generally I try to keep to limits but sometimes you can't go at the speed limit. (Safe driver, 19 years)*

*#56: Obviously there is a grey area, but I take less risks than my peers.
(Safe driver, 25 years)*

From their subjective ratings and verbal accounts it would appear that the drivers are well aware that they are taking risks whilst driving and that it is a deliberate policy. As one driver summed it up: *#11: You do know, you know that they're risky and you shouldn't do it, but I'm not sure you fully understand why. I mean you know it's bad and accidents happen but you don't fully understand. I think in a way you might actually not even bother to question yourself on it, you know it's bad but you don't want to question yourself on it because you want to do it. (Unsafe driver, 19 years)*

So, if risk taking is largely a matter of conscious decision making, what kind of explanations and justifications do the drivers give for performing risky manoeuvres?

As already mentioned some of the risky driving behaviour can be due to the desire for drivers to test out their own driving capabilities and that of their car (Section 6.1). In addition, many of the drivers, but most particularly, the 'unsafe' drivers felt that it was acceptable to take certain risks whilst driving. They argued that it was acceptable because either most drivers do it (for example, speed on motorways) or that all of their friends do it as well. Although the drivers admitted taking risks, when they were asked whether they deliberately drove unsafely the vast majority denied doing so. This seeming contradiction depended on the interpretation of 'unsafe'. Drivers felt that they took risks but only when it was 'safe' to, when no harm would come of it (their driving ability could cope with the risk) or that any risks experienced were placed on themselves and not other people. The extent of the risk was dependent on the situation at the time. Many of the drivers stressed that they took greater risks on roads that were quiet, wide and lacking traffic. Often drivers would take risks on country roads, late at night when pedestrian numbers were likely to be few and therefore they would still feel they were driving 'safely'. Such explanations clearly go some way to explaining the relatively high number of SVA's (single vehicle accidents) amongst the young male age group during the evening or night time periods.

#3: I don't deliberately go out and do 70 m/hour in a 30 limit, but then if I do 70 in a 30 limit, it doesn't bother me. I just try not to do it in areas where I think I might be risking something like running over babies or something. I go as fast as it seems safe to do so in the conditions. (Unsafe driver, 18 years)

#4: It was with a friend, late at night, no traffic about and I knew the roads and I suppose we were just mucking around. I wouldn't do it if I thought it was unsafe, but you can do things that you think are safe and they're not; if I thought it was unsafe I wouldn't do it. (Unsafe driver, 18 years)

#6: I do take notice of speed limits but not a great deal. If it's safe to go faster I don't see why you can't . . . (Unsafe driver, 18 years)

#15: I continually break the speed limit. I basically drive how I feel confident, if I feel confident driving 100 m/hour on a certain road then I will . . . (Unsafe driver, 20 years)

#46: I do speed a bit now and again but it's that calculated risk speeding, as in OK I'm doing 37 in a 30 m/hour limit . . . when there's nothing much

about I do it all the time but if there's a lot of kids running around a park then obviously not. (Safe driver, 22 years)

Many drivers gave explanations as to why the young male drivers are over-represented in SVA's. The general consensus was that young male drivers go out into the country to try out risky driving behaviours often with their male friends to show off to each other. The combination of a competitive atmosphere allied to their inexperience on the road often lead the drivers to overstretch their driving abilities. Many drivers admitted to having been involved in similar situations in the past and confessed that they had been lucky to avoid an accident or that any accident usually resulted in driving into a ditch or going through a hedge without causing any injuries. However these drivers admitted that many of their actions could have easily led to more serious consequences. Many of the drivers who had had minor SVA's had got their friends to come and help tow their car back onto the road and thus a considerable number of such accidents would not be recorded by the police.

#33: Because it's dark, no-one around, the road's empty, you think you can do what you want and get away with it; I've done it a couple of times and spun my cars but luckily no-one's been around. (Safe driver, 19 years)

#46: They're just prating around in their cars, messing about, deserted roads, let's skid it round a few corners and off they go. It's boy racers. I've done it a couple of times and got away with it, my extreme might be very moderate for someone else, if I thought there was any severe danger of putting the car in the ditch I wouldn't have done it. Bombing along country roads in the New Forest when you think there is nothing about. (Safe driver, 22 years)

For some drivers the risks were due, in part, to peer pressure or encouragement. Some drivers felt that friends had encouraged them to take the risks either directly as passengers (Section 8.1) or indirectly by recounting their own exploits which then had to be tried or bettered. For some of the 'unsafe' drivers the taking of risks whilst driving appeared to achieve status amongst their peer group. Some comments from the 'unsafe' drivers were as follows:

#2: If you go into an empty car park, you don't just park you'll go round in circles and spin and be a bit silly. It's something all my friends do, it makes driving more enjoyable and interesting if you've got something to talk about afterwards. We'd say 'Oh on the way here I almost hit this car' – it would be something to talk about. (Unsafe driver, 18 years)

#3: I'm a bit less risky (than my friends) but I don't let them think that, I enjoy being thought of as a bit wild. (Unsafe driver, 18 years)

#4: I'm kind of recognised for my driving so it probably gives me a good feeling, it's hard to say. (Unsafe driver, 18 years)

#11: Friends would say going up a hill just wait till you've gone over the brow and then go for it, that sort of thing which you're maybe better off not knowing . . . they'd sort of teach you bad ways without knowing it . . . I wanted to show them (friends) that I wasn't any worse than they were, well 'worse' in brackets; that you could do everything that they could do, there was no difference, you were now a driver. (Unsafe driver, 19 years)

Two of the 'safe' drivers commented:

#31: It depends on your personality and the type of company you're in. My group of friends aren't too bad, none of them are troublemakers. Other groups of lads have the music blaring and they screech around everywhere trying to impress people. My group didn't bother, we laughed at that sort of people, it might have been the school we went to but we laughed at that sort of idea. (Safe driver, 18 years)

#42: I've always been made fun of because I always drive slower or never take risks like they do – they say 'Go on, go a bit faster, go on, go on.' I've always been told 'Oh you couldn't scare me with your driving, you're too slow' and it's always stayed that way even though they've tried to egg me on. (Safe driver, 21 years)

At no time during the interviews did anyone express embarrassment at being either involved in an accident or admitting to dangerous driving behaviour or driving convictions. The general attitude, particularly amongst the 'unsafe' drivers, was that every male driver at some stage in their driving career would try out risky manoeuvres; if they had a crash or were convicted for a motoring offence it was unlucky. However, this attitude did not seem to apply to drink driving behaviour which was generally and genuinely portrayed as unacceptable, even if some drivers had done so in the past.

Some drivers performed risky manoeuvres for the sheer fun of driving dangerously. Some of the drivers stated that taking risks helped to relieve boredom and made driving a more exciting activity (Section 7.2). Furthermore a few drivers claimed that taking risks helped them to drive better because it ensured that they had to concentrate. It was reported by one driver that if on a long journey he felt he was getting tired, he would start to take more risks and drive faster in order to ensure that, due to the extra adrenalin, he would not fall asleep! Some descriptions from the 'unsafe' drivers were as follows:

#3: If you feel you're too safe, you don't concentrate as much. (Unsafe driver, 18 years)

#5: Yes I enjoy it, but every now and again it is a lot of risk. I love it but it's dangerous, that's the trouble. (Unsafe driver, 18 years)

#17: Partly for a buzz and partly for knowing what's happening and being able to do it and control it. It's satisfying to get these things right. It's a standard thing to do amongst my friends. (Unsafe driver, 20 years)

#23: . . . to keep a bit more interest sometimes I feel like flooring it . . . I get a bit carried away . . . you get the feeling of enjoyment of going round corners, the unpredictability it's a lot more exhilarating, it's a bit more exhilarating when you do it a bit faster, it increases it, I mean you can make it swing from side to side . . . (Unsafe driver, 23 years)

#28: Overtaking, it's exciting, I don't do it to the extent that it's stupid, but yes, it's a nice feeling, it gets the adrenalin flowing a bit anyway. (Unsafe driver, 18 years)

#34: I have taken risks because I'm in a rush or a bad temper or if I get frustrated but not really for the hell of it. (Safe driver, 19 years)

#40: No, I don't (take risks for fun), I'm really terrified of crashing. (Safe driver, 21 years)

#54: . . . it doesn't really appeal to me (risky manoeuvres), it's like an ego trip for them (his friends), but it does nothing for me. (Safe driver, 19 years)

Some of the drivers felt that they might as well take risks out on the road because not only was it fun but they had nothing to lose by doing so. Some of the drivers drove or had driven old cars ('bangers') which cost about £200 and were not bothered if the car got wrecked or damaged. Other drivers had improved their driving and become safer because they now owned more expensive cars. The type of car that the person was driving seemed to have some effect on the driving behaviour exhibited. Drivers were confused as to whether it was safer or less safe to drive in a more risky manner in a faster or newer car. It would appear that in a more powerful car drivers would drive in a more risky manner but that they would believe this was actually safer. Whether they took into account in this assessment their own well-being only or those of others as well it is not clear.

#2: I'm not as risky as before because I've got my own car now and I've only got third party if I write it off it would be really bad because it's worth £1400. I suppose I would be more risky if I had fully comprehensive. (Unsafe driver, 18 years)

#5: When I first passed we used to have a laugh because I had a really old banger . . . (Unsafe driver, 18 years)

#29: I might have done in the past (taken more risks), but not now probably because I've got a nicer car . . . (Unsafe driver, 23 years)

#34: People buy a wreck and don't mind wrecking it. Funnily enough none of them would drink and drive or not wear a seat belt, it's funny how they take risks in different areas. (Safe driver, 19 years)

#41: In my sports car I'll take more risks because it's straight out and straight back in and it's safe. (Safe driver, 21 years)

#43: If I'm driving my mother's car, she's got a big Volvo, sometimes I overtake and zoom past. (Safe driver, 21 years)

#53: . . . my friends were boy racerish . . . they'd burn lots of rubber on the road but it didn't appeal to me because I had to pay for it and my car was in fairly good condition and I wanted it to stay that way. (Safe driver, 25 years)

Although very few of the drivers were company drivers, a small number stated that they took risks whilst driving due to the external pressures placed on them by their companies or that they drove differently in a company car.

#14: The company do not take travelling into account, they do not expect you to speed but if you did 50 mile/h all the way they'd be upset. I'm so used to doing ridiculous speeds that it's second nature now. I have to drive to Liverpool and I'm expected on-site at 9 am and they won't put you up in a hotel and if you finish that day at 2pm they'd expect you to drive home. (Unsafe driver, 20 years)

#33: I'm always thinking they're sat back in the office thinking 'Christ where has he got to?' And it puts you on edge so I always drive faster in a company car because time is against me. (Safe driver, 19 years)

#41: If it's some complete dickhead up my backside then I'll slam on my

brakes, especially in the company car, because it's going to be his fault. (Safe driver, 21 years)

One driver claimed that a local company keeps an up to date list of all unmarked police patrol cars and their number plates and faxes them to other companies to help drivers avoid prosecution. The emphasis would seem to be on avoiding detection rather than altering behaviour. It is probable that this situation is not unique and with increasing traffic congestion and growing demands for work performance it is possible that the demands and subsequent risks that have to be taken by company drivers will increase in the future.

In addition to company expectations, some of the young drivers stated that they felt they were almost expected to drive recklessly. Most of the drivers stated that they felt young drivers were unfairly categorised as 'boy racer' types and a small minority stated that if that's what people expected that is what they would get. It is worth noting that our earlier study categorised a *substantial minority* (about 35%) of young male drivers as 'unsafe'. A very small number of the drivers felt that they were unfairly victimised by the police, although the majority felt that the police were reasonable and only took action when they had little choice and it was justified. At least one driver stated that since the insurance companies labelled him as a high risk and he had to pay such large amounts for his insurance he might as well get his money's worth! It would seem that some of these examples were leading to an unfortunate self-fulfilling prophecy whereby some of the young drivers drove in a risky manner because that was what was expected of them by friends, the public, the police and insurance companies alike.

#3: The police are fairly good, if you're doing something mind boggling stupid then you'll get pulled. If you're doing something sensibly, they know the speed limits are just a guide and they ought to let you off and generally do. (Unsafe driver, 18 years)

#5: Someone like me as a youngster they will probably think bloody hell, I mean if I overtake someone, look, another youngster off to kill himself, expecting every youngster to drive mad. It doesn't bother me, that's why the insurance is so high because everyone expects us to drive mad and 90% of us do. So I feel sorry for the 10% that don't. (Unsafe driver, 18 years)

#25: It annoys me that the companies that do give discounts, their premiums are higher anyway. What more can you do? You haven't had an accident for 5 years, you go along to driving courses to learn a better way of doing it and it doesn't make a blind bit of difference. What are they actively doing to encourage people to drive safer? (Unsafe driver, 24 years)

#30: You tend to get categorised . . . it doesn't bother me; sometimes it makes you want to live up to your image; why shouldn't you? it just makes you laugh, just for a giggle. You sit at the lights and wind up the older people and then pull away slowly. (Safe driver, 17 years)

#33: . . . older people look on us as speed freaks and young whipper snappers, we're viewed as high insurance risks and basically seen as driving around in cars that are unsafe because they're older. If people didn't give the 'youngeys' such a lot of 'jip' then they wouldn't feel they've got something to prove and teach people a lesson. If everyone was viewed equally then I don't think there would be half the problem. (Safe driver, 19 years)

6.3 Perceptions of accident probability

Drivers were asked to estimate how many traffic casualties (all severities which included those who were killed) and how many traffic deaths there were in Great Britain in 1989. The average estimates along with the actual figures (Department of Transport, 1990) are shown in Table 6.1.

N.B. The 1990 Department of Transport traffic casualties statistics were not available at the time the survey was undertaken.

Table 6.1: Estimated and actual traffic casualties and deaths in G.B. (1989)

	Traffic Casualties (all severities)	Traffic Deaths
'Unsafe' drivers (average)	548,034	36,394
'Safe' drivers (average)	184,000	15,848
Actual figures	341,592	5,373

The 'unsafe' driver group grossly overestimated the number of traffic injuries whilst the 'safe' driver group grossly underestimated. However, both groups of drivers overestimated the number of traffic deaths to a marked degree, with the 'unsafe' drivers being the least accurate. Such results suggest that drivers have very little knowledge of the actual accident figures on the road; many of the drivers admitted that their answers were complete guesses. Notwithstanding these problems it appears that increasing knowledge of accident figures is unlikely to have any benefit for safety since young, male drivers generally believe the 'objective' risks of having an accident to be higher than they actually appear to be. Styles of sensationalist media coverage of traffic accidents may play a part in this. Increasing knowledge in this area may therefore lead to drivers having a lower perceived 'objective' risk of an accident. What is of greater interest, however, is the driver's perceived risks of themselves having an accident.

Drivers were asked what they thought the chances were of them either being involved in, or causing, a slight or serious injury accident in the next ten years. The 'unsafe' drivers assessed themselves as more likely to be involved in, or cause, a slight or serious injury accident than the 'safe' drivers assessed themselves to be. Despite this higher likelihood the 'unsafe' drivers assessed themselves to be less worried about an accident than the 'safe' drivers. Drivers in both groups expressed a fatalist view of accidents stating that there was no point in worrying about accidents because they were, to a large extent, random events which can happen to anyone. This argument may be proposed by the 'unsafe' drivers because they have actually had a number of accidents and it thus helps to exonerate their driving. Alternatively, the 'unsafe' drivers may worry less because they have had an accident or two and know they have survived and assume they would again. The other approach was that they did not want to think about having an accident for fear of it affecting their confidence.

What did the drivers think of their own driving?

#17: I've been in a few accidents and I haven't been injured at all; you know what the car is capable of and how it's going to protect you. (Unsafe driver, 20 years)

#18: You don't think it will happen to you, it's like something else, you know a lot of people die of cancer. What is the point of worrying? I could drive incredibly safely and get hit by an HGV (Heavy Goods Vehicle) so all the time being safe has been pointless, you could have been reckless and have a good, fun and exciting time. (Unsafe driver, 20 years)

#24: I don't worry much at all because I don't want to think about it. (Unsafe driver, 23 years)

#38: If it happens, it happens, there's not a lot you can do about it. (Safe driver, 20 years)

#52: If fate's going to cause you an injury then it is going to cause you an injury. (Safe driver, 22 years)

7 What were the drivers' attitudes to cars and driving behaviour?

7.1 Introduction

Car driving is a multi-faceted activity. The act of driving can be viewed as an activity that can fulfil a variety of functions. A distinction can be made between an activity that is directed to functional, material and/or biological ends (the practical aspects of activity) and those activities directed to ends such as the presentation of the self (the expressive aspects of the activity) (Harre, Clarke and De Carlo, 1985). Presentation of the self behaviour can be summarised as action directed to the formation of an impression of oneself in the eyes of others. Encompassed in this are actions directed to social ends such as creation and reinforcement of attitudes and expectations in other members of the group and the gaining of social worth, reputation and respect.

Car driving can be viewed as either, or both, a practical and/or expressive activity. The identical activity may be the result of either practical or expressive motives which may differ for different occasions. Thus, driving fast may be based on a practical motive (desire to catch a train) or an expressive motive (showing off to friends to gain peer approval). Practical activities can operate on a journey level as well as a task level. The expressive aspects of an activity appear in the style or manner with which way the practical side of the activity is carried out (for example, 'the driver drove recklessly'). Sometimes the expressive activity can dominate the practical aspects involved. A classic example of this can be seen in the 1963 film 'American Graffiti' where car driving behaviour is taken to the heights of expressive activity but nevertheless many practical tasks underpin the success of the expressive actions achieved.

As well as the same action having differing motives, so the same action can be interpreted by others in different ways. Different groups of people have different judgements upon which activities demand respect or contempt. A speeding driver can be viewed with respect or contempt. Respect or contempt are vital to the continuation or cessation of a particular activity. It is also important to remember that one individual can (and most probably does) engage in many different over-lapping social groups and may occupy different positions, characters or reputations within each group. Thus, an individual may act differently at home with their family, at work with colleagues or at leisure with their friends. The group, position in the group, activities and performance of these activities which are associated with respect or contempt determine to a large extent the behaviour of the individual.

Such concepts are relevant to the driving behaviour of young male drivers. Drivers vary to the extent in which they interpret driving behaviour as a practical and/or expressive activity. Such an interpretation is often influenced and shaped by numerous influences, an important element of which is the peer group to which they belong. Other possible influences are discussed below (Chapter 8).

7.2 Driving as an expressive and/or practical activity

Considerable differences emerged between the 'safe' and 'unsafe' drivers' general approach to cars and driving. Such differences were evident in the approach adopted by drivers before learning to drive (for example, the greater percentage of 'unsafe' drivers who drove illegally prior to obtaining their provisional licence). More of the 'unsafe' drivers were desperately keen to drive and could hardly wait till their 17th birthdays to learn to drive and pass their test as soon as possible, the 'safe' drivers however, although keen, were generally less enthusiastic.

#5: My first lesson was on my 17th birthday. A lot more freedom but I just wanted to drive though. (Unsafe driver, 18 years (age at time of earlier study))

#11: All my friends, as soon as we turned 17, had lessons and it was a great thing; all of us passed first time and there was a lot of pressure to get your licence as soon as possible . . . you had to pass or else you could never forget it. I bought my car a couple of weeks before I passed my test . . . ever since I was 6 I'd always wanted my own car. (Unsafe driver, 19 years)

#21: . . . you've got to learn to drive it's like not being able to walk. (Unsafe driver, 21 years)

#29: I couldn't wait to pass, I had a lesson on my 17th birthday. (Unsafe driver, 23 years)

#30: Independence, not having to rely on other people so much and being able to give back a little of what you've taken away for 18 years; it's nice to drive the rest of the family if they want a drink. (Safe driver, 17 years)

#38: Freedom . . . earning potential, a lot of jobs involve you having to drive sometime . . . (Safe driver, 20 years)

#54: My home address is very rural, the only transport is cars, no buses or trains . . . so you've got to have a car. (Safe driver, 19 years)

#55: . . . it meant not having to take the bus into town anymore. (Safe driver, 17 years)

A subtle, but important, difference emerged between the 'safe' and 'unsafe' drivers as to the purpose of driving. Whilst both groups of drivers mentioned the considerable practical benefits of driving ensuring individual mobility, independence and freedom of movement, for the 'unsafe' drivers car driving also meant much more. Driving was often viewed as an end in itself, rather than a means to an end. Driving was seen as a method of enjoyment. In sum, many 'unsafe' drivers recognised the practical side of driving but also enjoyed and viewed driving, to a considerable extent, as an expressive activity. 'Safe' drivers acknowledged driving as an extremely useful practical skill but they did not attach the same over-riding importance to it that 'unsafe' drivers did, and did not view driving as an expressive activity to the same degree.

More of the 'unsafe' drivers emphasised the feeling of enjoyment that they got from driving; the feeling of freedom, power, satisfaction and their sheer love of driving. More of the 'unsafe' drivers often used to go out in the car for a drive for no reason beyond the fact that they wanted to go out for the joy of driving around. Most frequently such journeys would involve drives out to the country where there was less traffic where they could undertake risky and illegal driving practices. Often drivers stated that they loved driving but found it difficult to express what it was that they loved about it. More of the 'safe' drivers emphasised the practical benefits of driving rather

than the act itself and those that did enjoy driving tended to enjoy 'everyday', 'safe' driving rather than risky driving practices.

#2: I used to just go out for a drive. I like going down country roads to see how fast I could go. Down country roads or town centres late at night.

You'd have the windows down and the music on loud, it's who you're looking at. You might see people you know. (Unsafe driver, 18 years)

#4: I love driving, driving is what I do. I've been into it ever since I inherited it from my Dad. My Dad and Mum love driving, I've always loved it, loved being in a car. I don't know why. I like the feeling of it. (Unsafe driver, 18 years)

#5: I love it, one of the best things that has ever happened to me. The feeling of overtaking someone and you can look at them in the mirror as you've shot past them – I found it fun, a bit scary I suppose to shoot along the road real fast, not knowing whether if someone came along you'd stop or anything; it was a thrill I suppose. (Unsafe driver, 18 years)

#9: I love it, it's great, one of the best sort of fun things to do. I love it more than doing anything. It's a toy, you know, it's everything. I'd be lost without it. If I lost my licence I don't know what I'd do. There's not a day goes by that we're not in it . . . You're driving around, you're in control on your own, you do what you want. (Unsafe driver, 19 years)

#48: I've always enjoyed it looking out for anything and everything, little clues on the road, maybe find something round the corner, I'm proud of my qualifications. (Safe driver, 22 years)

#49: I get a sense of fulfillment because I take an extra bit of effort and I've done a little bit more driving skills I'm more confident than other drivers and I can point out situations to passengers and then it happens and I can say I told you so, it's nice to be in that position. (Safe driver, 21 years)

#56: I enjoy feeling that I'm driving the car confidently. (Safe driver, 25 years)

Drivers were asked if the car was more than just a means of transport. Both groups of drivers stated that, in general, the car was most often viewed as a status symbol. More of the 'safe' drivers stated that the car was also a means of transport to get from A to B. Some of the 'unsafe' drivers also forwarded this argument but more frequently came up with ways in which the car was more than merely a method of transport.

#4: It's my piece of artwork, it echoes me, well it hasn't yet but I'm working on it at the moment, building it up, I've got a goal and a list of things that need to be done, it's going to be the machine it should be. At the moment it doesn't look how it will when it's finished at all – the wheels will be different, I'll have a respray, I always look forward to that. I've put a lot of work into it. It's great to drive, it's like a creation of mine. It's so incredibly sentimental and I've done so much to it that if somebody insults it, it's like insulting a person and I'm going to prove them wrong about that . . . (Unsafe driver, 18 years)

#6: It's a friend really. You'd feel guilty if you sold it, when you took it to a scrap yard – it's part of you isn't it? You get attached to them . . . (Unsafe driver, 18 years)

#8: Yes, I think the Beetle has got a certain character of its own and when you see other Beetle drivers everyone waves. My Dad has got a Rover and even though it's nicer inside and stuff, it's more just a kind of car. (Unsafe driver, 18 years)

#15: Definitely if it was just a means of transport we'd all be driving Skodas or Ladas. (Unsafe driver, 20 years)

#32: Principally it's a means of transport but then it might come in as slightly a status symbol, it has prestige to have one at a young age (Safe driver, 18 years)

#49: The car is a murder weapon. Just shut your eyes for three minutes and you stand a chance of killing someone. (Safe driver, 21 years)

#52: My attitude to my car is that it is a work-horse . . . (Safe driver, 24 years)

#53: It's all to get from A to B. When I was younger my car wasn't all that good looking but it could have been a bit of a 'girlie attracter'. (Safe driver, 25 years)

As many as three quarters of all the drivers interviewed admitted that they had raced on the road. However, more of the 'unsafe' drivers (86%) had participated in races on public roads than 'safe' drivers (63%). The forms of racing varied from the taking of an alternative route to get to a destination quicker to competitive racing one against another.

#9: I've done it a few times on the motorway, they'll overtake you and you think I'm not having this and you'll overtake them and they'll do the same. I hate losing, that's why I want a bigger car, I'll have them easy then! (Unsafe driver, 19 years)

#14: (Raced) quite a few times, normally work colleagues, you meet on the motorway, you just push it up a little bit, they push it up and you see who's got the most bottle . . . (Unsafe driver, 20 years)

#15: Sometimes (race) if the guy is driving something that looks stupid. If it's something like a guy in a boy racer, in a done up Escort 1.3, Mark II series, I'll blow him out, yeah I'll take him out. (Unsafe driver, 20 years)

#29: . . . it took me an hour and a half to get there and I was really determined to get back in one hour 15 minutes and I really went for it. (Unsafe driver, 23 years)

#34: There have been times when there's two of you driving, one's following the other and you'll go a bit faster to see if they keep up, but not side by side racing. (Safe driver, 19 years)

#36: Maybe a couple of times from the traffic lights, but only from – I was going to say childish – an amateur point of view . . . just for the first, say 30 or 40 feet. (Safe driver, 20 years)

#43: I've had a couple of 'Jack-the-lads' in their XR3i and in the Volvo I leave them standing for 100 yards and then if they want to go past me they can. (Safe driver, 21 years)

#46: As far as a race, one on one is concerned, it's just too bloody dangerous. There have been times when people have gone different routes, it's not a race but you hope to get there before them. (Safe driver, 22 years)

There were no clear differences between the different groups of drivers in relation to their interest in motor sport. Some drivers in both the 'unsafe' and 'safe' groups loved to watch motor sport and go to 'meets', whilst others hated it. Some drivers who liked to watch motor sport wanted to have a 'go' at it as did some of the drivers who hated it! As one driver stated: *#3: It's as boring as hell to watch, but I'd love to do it.*

I occasionally watch it, it's fun watching the crashes! (Unsafe driver, 18 years). From the limited data available there would appear to be no clear

link between interest in motor sport and particular driving practices, although this topic requires further detailed investigation in a separate study before conclusions can be drawn.

A similar study by Visser (1983) examined the possible effects of auto races and motor races on the driving behaviour of visitors to such events with particular emphasis on their return journeys. No *significant* modification of behaviour was shown although it was demonstrated that younger drivers were comparatively more influenced than older drivers.

7.3 Car culture

More of the 'unsafe' drivers were enthusiastic about driving, more knowledgeable about car types, makes and models, about how cars work and were more likely to be able to fix them on their own than 'safe' drivers. Many more of the 'unsafe' drivers maintained their own cars, not just because it was cost effective but because they enjoyed it and treated car maintenance as a hobby. More of the 'safe' drivers seemed to be less interested and many of those who had once been very involved in a car culture expressed less and less interest.

#3: I've had the engine out once. I'd like to re-build one and do whatever to . . . (Unsafe driver, 18 years)

#6: A lot of the time. I rebuilt the engine two months ago because I blew that one up. (Unsafe driver, 18 years)

#9: I always want the quickest one, adding bits to it; stereo, tyres, wheels, changing bits on it, getting it tuned up, I enjoyed doing it up in the evenings, I can do most things. It may take five times longer than a garage but I enjoy it. (Unsafe driver, 19 years)

#14: My favourite car was a complete wreck, but it was so brilliant, so much fun, if it broke down, I'd fix it; if someone crashed into it I'd say don't worry mate, I'll pull the dent out you just give me a tenner for a can of spray paint – Brilliant! (Unsafe driver, 20 years)

#31: Not really, I can probably change a wheel. (Safe driver, 18 years)

#32: I don't know anything about cars, I take it to the garage. (Safe driver, 18 years)

#36: I do the necessities like checking the oil, it isn't an area that particularly interests me. (Safe driver, 20 years)

#45: I haven't got a clue. (Safe driver, 21 years)

More of the 'unsafe' drivers tended to talk to friends more about cars and driving in general than 'safe' drivers. This finding is perhaps predictable since viewing a car simply as a method of transport with practical aspects paramount is likely to provoke less discussion than when cars and driving are treated as a hobby or form of entertainment. Some of the 'safe' drivers did talk about cars and driving, but not to the same extent as 'unsafe' drivers.

#3: Yes, generally own driving, different techniques and stuff, 'toe-heeling' etc, we used to have loads of discussions about, different ways of accelerating very, very fast indeed. (Unsafe driver, 18 years)

#5: A lot, what we'd like, what they're getting – I saw a 'blah, blah' car the other day; I like looking at cars of different sorts and dreaming what I could have. (Unsafe driver, 18 years)

#8: Probably about the cars themselves and other cars, I've got a Beetle and my girlfriend's got one and her brother has one and he's really into it, I talk about it with him a lot. (Unsafe driver, 18 years)

#9: Down the pub, at work, like 'oh I saw a great car today' and you get magazines and read them and talk about your own car and 'oh I put this on it and it goes much quicker or I changed these bits . . . it's much better having a conversation about a car! (Unsafe driver, 19 years)

#15: It's more 'Oh shit my car' and 'yeah I went so fast today' and 'Oh you wouldn't believe this asshole, I took out this guy in a Mercedes or something like that' . . . and also 'Oh I want to get this car' or 'I like this car . . . ' (Unsafe driver, 20 years)

#30: Not too much, we talk about it sometimes if someone is buying a car, but only if there is something specific to talk about. (Safe driver, 17 years)

#32: It's gone down, it used to be quite high when you were taking your test it was quite a topic; pass, fail; ha, ha, but at the moment you still talk about it, but not in such great detail . . . (Safe driver, 18 years)

#52: Hardly (talk about cars) at all, only when they go wrong. (Safe driver, 24 years)

As the drivers felt they had become safer their attitudes to cars and driving had changed, and some of the drivers (both 'safe' and 'unsafe') volunteered that the car now meant less to them than it formerly did.

#21: When I first started driving I were a bit of a boy racer, a bit of a 'twat'. Just you're King of the Road, when you first drive aren't you? It's like a new toy, you want to see how fast you can go . . . see how far you can take yourself before you bottle out . . . (Unsafe driver, 21 years)

#28: . . . I've got used to it, it's worn off and use the car as a convenience. (Unsafe driver, 18 years)

#29: I think everyone goes through a stage when they've got wheels and they go a bit mad. (Unsafe driver, 23 years)

#33: I had a lot to prove, I had no self-confidence, I couldn't go out and chat girls up if you will and I always thought I had to get a flashy car . . . A car, it's an ego boost really, but now I'm thinking of getting a car to get me from A to B . . . I've learnt from experience and mistakes, until it happens you don't know what it's going to be like, I don't want to go through the hassle of climbing out of a wrecked car and thinking about telling my parents. (Safe driver, 19 years)

#36: I try to think of the car as a means of getting from A to B rather than a means of entertainment and social status which sadly, I think, is not what everyone does these days. (Safe driver, 20 years)

#41: A couple of years ago it would have been an aid to being successful with the opposite sex. (Safe driver, 21 years)

In sum, cars and driving appear to play a more important and prominent part in the 'expressive' lives of 'unsafe' drivers than they do for 'safe' drivers.

8 What are some of the social influences on driving?

8.1 Introduction

The study of the social context of driving is essential in order for a more comprehensive understanding of car driver behaviour. There are a number of influences which may have an effect on car driving behaviour. The effects of passenger presence are becoming increasingly recognised and documented (Rolls, Hall, Ingham and McDonald, 1991; Ingham, 1991a; Kruger, 1990). There are also a number of other social influences which, as yet, have not been the topic of much traffic research but which may be important factors in car driving behaviour (Reason *et al*, 1991).

Listening to music whilst driving may have some effect on subsequent driver behaviour. It is self-evident that music can have effects on mood in a wider domain so it remains a possibility that these effects could occur in the more specific domain of car driving. The effects of music and mood would appear to be inter-linked and often it is unclear as to which precedes the other.

An individual performing any task will do so best under intermediate levels of stress. Stress here will be loosely defined as the result of the demands that the environment places on the individual. Remove all input and the person becomes bored, increase the level too much and the person finds it hard to cope. Thus, there is an optimal level of stress or arousal. For an easy task the optimal level of irrelevant stimulation (stress) will be much higher than it is for a simple task. Such an hypothesis may be applicable to car driving behaviour. For example, on a deserted motorway it may be advantageous to have the radio on, but in busy town traffic it is possible that concentration will be adversely affected by extraneous stimulation, such as the radio. It is known that some lorry drivers turn off motorways and go on 'A' roads because they are more stimulating, whilst others vary the pace of their journeys. Is it possible that in a similar way, the radio cassette, or talking to passengers, may help car driving behaviour in certain circumstances and hinder in others?

Related to a possible effect in terms of stress levels is an alternative influence of extraneous stimulation which may be linked to an individual's limited 'channel capacity'. Concentration is affected when too many demands are placed on an individual (Ingham 1991b).

8.2 Passengers

Drivers were asked if the presence of passengers in the car had any effect on their driving behaviour. As many as 90% of the drivers stated that passenger presence did indeed have some effect.

The extent to which passenger presence affected driver behaviour varied considerably. Most of the drivers recognised that they drove differently on their own from when they were accompanied by passengers. However,

more of the 'safe' drivers stated that these effects were quite small and insignificant in that they tried to drive in the same way regardless of passenger presence.

#34: Slightly, if you're with your Granny or parents you drive slower, not that much though . . . but I don't think I drive that differently, I drive safely enough on my own – I drive the same all the time. (Safe driver, 19 years (age at time of earlier study))

#37: With a parent or older person I might slow down a bit . . . but with my friends I just drive the way I want to and that's it. (Safe driver, 20 years)

#52: I'm a little more conscious with my Dad in the car . . . but the rest about the same. (Safe driver, 24 years)

Some of the drivers drove fastest and riskiest when they were on their own since they felt that they were only responsible for their own well being. The majority of drivers did not mention the fact that they could injure other road users.

#3: I think I drive fastest of all on my own because I haven't got people screaming and distracting me. (Unsafe driver, 18 years)

#7: Usually I drive fastest on my own because it's just me. (Added as an afterthought) I suppose I shouldn't really do that because when I'm driving on my own I'm still putting other people on the road at risk. (Unsafe driver, 18 years)

#11: If there's nobody in the car you are going to do one of two things: you either just take it easy and you drive and you don't care how fast you're going or you think 'Oh go on, let's open it up a bit' and go down the road because you're not worried about crashing because if you crash it's only you in the car . . . (Unsafe driver, 19 years)

#31: I think I tend to be a bit more risky when I'm on my own because I don't feel responsible for others. (Safe driver, 18 years)

#33: When I haven't got someone next to me I'm prepared to take a slightly greater risk . . . because it is only me I'm worried about. (Safe driver, 19 years)

#47: If I was on my own and I could see it was safe, I do like to go round corners fast . . . (Safe driver, 22 years)

The two main reasons why drivers changed their driving when accompanied by passengers were (a) that they felt that passengers expected them to drive in a certain way, or (b) that they themselves felt a greater responsibility when driving passengers, and thus modified their driving accordingly. Many of the drivers stated that they took into account passenger needs or expectations when driving, recognising that passengers may gain an impression of them through their approach to driving. However, this could either have a positive or negative effect on driving.

#3: Some people like to be scared, so you scare them and some people like to be pampered so you drive gently. Generally my male friends like to be scared, I want them to enjoy being driven. . . . I drive to keep passengers happy. (Unsafe driver, 18 years)

#19: It all depends, all my friends are different characters; there's a couple who would love to see me go a lot faster, I'd probably go a bit faster but I wouldn't let them actually influence me into taking a risk. (Unsafe driver, 21 years)

#41: *I'm quite considerate, I know what it's like to be a passenger . . . so I tend to drive sort of 'chauffeur-like' when passengers are in the car . . . I tend to adapt dependent on the passenger. (Safe driver, 21 years)*

#42: *With my fiancée's Mum and Dad, I tend to drive as though I've got to please them, try and make them feel comfortable, a lot more conscious, a lot slower definitely . . . I drive to keep them happy. (Safe driver, 21 years)*

#43: *My mother expects me to drive like she does . . . (Safe driver, 21 years)*

#45: *When I've got older people in the car who I know obviously gain an impression of me by the way I drive, I do drive very sensibly. (Safe driver, 21 years)*

The vast majority of the drivers drove in a different style dependent on the type of passenger. Being accompanied by parents generally led to more careful driving behaviour for a variety of reasons. The most common was that the young drivers wished to present a good impression of themselves to their parents. For some of the drivers creating a good impression was essential to enable future access to the family car. Other drivers stated that they thought their parents felt they drove badly (like all young men), and therefore they were determined to show they could drive well. There were subtle differences mentioned between driving with one's father and with one's mother. With their father in the car the drivers stated that it was often very off-putting and that they wanted to impress him with their driving skills, but that his presence made them nervous and forced them into unnecessary errors. However, with their mother in the car drivers stated that they drove in a particular fashion in order not to worry her.

#1: *The obvious one is you slow down with your parents . . . (Unsafe driver, 17 years)*

#4: *My parents have heard stories about my friends and maybe of me, so when they come with me I've got to show them that it isn't true, I'm not stupid I'm not irresponsible . . . (Unsafe driver, 18 years)*

#6: *With my Mother and Father I generally try and slow down, mainly because it's your family, if something did happen, you're going to feel a lot more guilty – I know it's terrible saying that if you had friends in the car, but with family it's different really . . . (Unsafe driver, 18 years)*

#28: *With relatives you don't want them to think of you as a bad driver so you deliberately go out of your way to show them that you are a good driver. (Unsafe driver, 18 years)*

#33: *I drive a lot more slowly and lose confidence when Dad is in the car, when my Mum's in the car it's not so bad. I'm expected to drive sensibly when Dad is in the car with me, it does have an effect who's in the car with you. (Safe driver, 19 years)*

#40: *With parents I'm more conscious of speed limits because up till now my motoring was virtually sponsored by them, so they've always had a comeback on me in the use of their cars. (Safe driver, 21 years)*

#45: *Especially if it's the girlfriend's parents, I've got to give a good impression! When they're in the car with me I like to set an example. (Safe driver, 21 years)*

#48: *If my Dad is in the car I feel I should look for everything and anything – if it's my mate I'll be driving sensibly but not half as 'on-aware' as if Dad is in the car . . . (Safe driver, 22 years)*

There were further differences between the 'unsafe' and 'safe' driver groups in their regard to type of passenger presence. By and large, the 'safe' drivers were fastest and least 'safe' on their own with no passengers. These drivers did not distinguish between the type of passenger to as great an extent as the 'unsafe' drivers. More of the 'safe' drivers tended to treat all passenger types as the same, that is people who want a slower, more comfortable drive. Some of the 'unsafe' drivers, however, did distinguish between passenger type to a greater degree. These 'unsafe' drivers, although still driving fast when alone, also tended to drive fast with their male 'mates' in the car. The reason most commonly given was that these 'mates' expected or liked them to drive in this particular manner. For example, more of the 'unsafe' drivers admitted that there had been times when their male passengers had encouraged them to race on the road.

Nevertheless, many of the 'safe' drivers were exposed to peer pressures encouraging unsafe driving practices but more frequently they were able to ignore it. However, this was not a blanket distinction.

#5: Suppose you've got a nice young girl next to you, you tend to pose a bit or your mates sitting next to you. . . . they'd say 'Go on, try and get past that one' things like that and 'beat him, beat her, fly round this corner, skid it on this', you'd put your foot down on a wet roundabout and go flying everywhere for a laugh, not anymore, we've normally got music blaring. (Unsafe driver, 18 years)

#10: I tend to drive faster when I have my other mates in the car with me. (Unsafe driver, 19 years)

#11: When you've got friends in the car it creates an atmosphere and whatever atmosphere that is I think it goes into your driving . . . They say 'Go for it', it might be a dodgy road, they say 'Go on, get around this' and you do it because you're already pissed off with the car in front and you think 'Oh for God's sake go for it' and you do; it's just like the last straw . . . (Unsafe driver, 19 years)

#12: A few friends say 'How about slowing down?' and some say 'How about speeding up?' The girls mostly say slow down and the guys say speed up. (Unsafe driver, 19 years)

#18: (With male friends) I'll drive faster than what I should, do silly things with the wheel, it would be more than showing off, it would be funny-ish, hopefully they'd laugh unless they got scared and then they'd leave the car, you get them jovial . . . we all play football and it's jovial spirit, wind down the windows and shout at people in the road. (Unsafe driver, 20 years)

#27: Particularly if it was just friends then I'd say my driving was quite erratic, because I'm not concentrating, I'm chatting and perhaps an element of sort of looking confident, showing off and looking as though this is real easy . . . (Unsafe driver, 25 years)

#39: I've had it from people who don't drive. Things like 'Come on, cut across there' or 'What did you stop there for, you could've got through those lights', I take it with a pinch of salt and treat them as ignorant. (Safe driver, 20 years)

#43: I'd drive slower with my friends (than alone) and my mother I'd take no risk at all with. (Safe driver, 21 years)

#46: If there are passengers there, I treat them all the same . . . (Safe driver, 22 years)

#55: I drive exactly how I drive on my own with my friends in my car. (Safe driver, 17 years)

Driving with a girlfriend in the car led to a number of different approaches. A few drivers stated that they were more likely to show off with their girlfriend in the car and thus drive less safely, whilst others claimed that their girlfriend would encourage them to drive slower and more safely.

#5: She'll moan, she'll moan, but because we have been going out a long time I don't show off anymore, it's like anyone else sitting next to me, so I don't need to show off so often. (Unsafe driver, 18 years)

#11: If you've got your girlfriend in the car you're going to be more caring and again if you've got children in the car you're going to be more careful. (Unsafe driver, 19 years)

#15: I'm affected by my girlfriend because she gives me loads of shit if I go over 120 or whatever, she's saying 'slow down, slow down,' she doesn't like going that fast. (Unsafe driver, 20 years)

#18: My girlfriend doesn't like it so she tells me off but I'd probably drive the same because she doesn't like it, to wind her up. It's all logical and rational. She'd tell me I'm showing off and not very clever and I know she's right but I ignore her. (Unsafe driver, 20 years)

#31: My girlfriend nags a lot about my driving, she gets a bit scared in the car . . . she points everything out as though she was driving, it's quite good because there have been occasions when I haven't seen cars that've stopped. She points out if I'm doing something stupid, I'm pretty good with her in the car. (Safe driver, 18 years)

#42: Take my fiancée, definitely more safer because I know she's a nervous passenger. (Safe driver, 21 years)

#45: When my girlfriend is in the car with me, I drive quite sensibly, I don't do anything stupid, I spend most of my time with her so very safe. (Safe driver, 21 years)

#48: If my girlfriend is in the car, I'll be driving safely. (Safe driver, 22 years)

Many of the drivers also mentioned that they had had difficulties with drunk passengers whilst driving. Some of these drivers had had passengers grab the steering wheel or pull on the handbrake and generally mess about in the car which, in turn, had a detrimental effect on driver performance. In addition, drunk passengers were more likely to encourage unsafe driving practices. The drivers had different ways of coping with such situations, some choosing to ignore them whilst others stopped their cars and let their friends walk home.

With over 90% of all the drivers admitting that passengers have some effect on their driving behaviour, it is interesting to ponder to what extent, if any, passengers should be responsible for a driver's behaviour. One driver, who was ridiculed by his male peers for not driving how they do illustrated this problem stating that it is often difficult to resist such pressures: *#43: It is hard, but then I've always been like that, it's a licence, you only get it once and to do it and lose it through them would be silly. (Safe driver, 21 years)*

8.3 Radio cassette use

The reported effects of radio cassette use are likely to be significant since young male drivers (17-25 years) listen to radio cassettes for about 70% of the time that they are driving (Rolls, Hall, Ingham and McDonald, 1991).

Drivers were asked if they thought that listening to a radio/cassette affected their driving behaviour. Some of the drivers mentioned the obvious distracting effects of the mechanical aspects of operating the radio/cassette including retuning the radio and turning the cassette over. However, with more modern up-to-date models these adverse effects are being surmounted.

#11: I bought it separately from the car, auto reverse because you don't want to be fiddling with your cassette player all the time . . . (Unsafe driver, 19 years)

#22: a slight distraction when the tape comes to an end . . . (Unsafe driver, 22 years)

#40: A friend had a new radio in his car . . . he was fiddling with his radio, hit a kerb, did two and a half rolls down a bank and was slightly injured . . . (Safe driver, 21 years)

Some of the drivers, but more in the 'safe' driver group, mentioned the beneficial effects of listening to the radio cassette late at night in order to keep them alert. The suggestion was that the extra stimulation of music or talk helped them to stay awake and concentrate. Other drivers (more of the 'safe' drivers) also regarded the radio cassette as beneficial on long journeys, again citing the extra stimulation provided by the radio cassette as an aide to safer driving through keeping boredom at bay.

#7: If I'm out late at night I have to put loud music on to wake me up a bit. (Unsafe driver, 18 years)

#30: Keeps me awake driving home late at night, probably keeps me alert . . . (Safe driver, 17 years)

#34: Sometimes you want music to relax you on a long journey. (Safe driver, 19 years)

#38: It wouldn't distract me from the driving but it would distract me from the boredom of driving, it's sort of fatigue preventing. (Safe driver, 20 years)

As expected, many drivers stated that music and mood were inextricably linked. Some drivers stated that the music dictated their mood, whilst others stated that their mood dictated their choice of music. For those latter drivers, their driving behaviour was more affected by their mood than the music, which merely reflected their mood.

#1: Not just the music but your mood and therefore you choose the music. If I'm really hyped up I'll put on some really fast music and I'll probably drive faster; it's partly to do with the music but a lot to do with how I'm feeling at the time. (Unsafe driver, 17 years)

#16: If I'm in a good mood I'll play something a bit louder and I drive a bit faster . . . (Unsafe driver, 20 years)

#50: You select the music for what mood you are in . . . (Safe driver, 22 years)

Some drivers stated that what music they listened to did affect their subsequent driving behaviour. Slightly more of the 'unsafe' drivers (65%) than 'safe' drivers (52%) stated that they were adversely affected by having

the radio cassette on. In addition, these effects were noticeably more pronounced amongst the 'unsafe' drivers. The effects of music obviously varied between people although there were a few patterns which seemed to emerge. Generally, fast, up tempo, loud music was associated with a more aggressive driving style. Many drivers stated that this was not necessarily linked to an increase in speed, but faster gear changes, more abrupt braking and acceleration. In contrast, slower, more peaceful music was associated with a calmer driving style.

#3: I mean there are different effects of music, something like 'Bat out of Hell' (a fast rock track) is lethal to drive to 'cos you just get faster and faster and you don't realise it. (Unsafe driver, 18 years)

#4: Listening to Heavy Music affects things like gear changes and stuff like that; you slam your foot on the clutch and knock it into gear, but if I'm listening to Simon and Garfunkel, it's peaceful, it's smooth, it sort of relaxes me. (Unsafe driver, 18 years)

#5: if it's a really good song on loud that makes you put your foot down . . . it does affect me sometimes when the music is on loud it makes your mind wander. I find it dangerous sometimes. I might even just turn it down a little because I know it does affect me . . . (Unsafe driver, 18 years)

#6: If you have a fast beat; it does sort of, you try to keep up with that beat, all my music is on the same sort of lines, Eric Clapton or Madonna. (Unsafe driver, 18 years)

#14: . . . on Capital Radio there is a programme called 'Drivetime' which plays, fast, beaty music and I think it is a bad idea because it puts you in the mood, you feel happy and become more aggressive in the car. (Unsafe driver, 20 years)

#33: There's definitely some music you want to put your foot down to, something with a beat to it; although I'm ashamed to admit it because it shouldn't really. (Safe driver, 19 years)

#48: I think I feel a more aggressive driver with a louder heavier beat type of music, with a slower classical music it makes you feel more relaxed. (Safe driver, 22 years)

More of the 'safe' drivers recognised the dangers of having music on too loud in the car and had thus adapted their behaviour accordingly. Some of the drivers spoke of the danger of becoming too isolated from the driving situation, getting lost in their own thoughts and a general 'dulling of the senses', whilst others mentioned the practical problems of not hearing other cars, their own engine noise and even, in one case, a fire engine!

#20: I had it on loud and didn't hear the fire engine . . . I remember driving along, singing and you think 'I haven't looked in the mirror for a while.' (Unsafe driver, 21 years)

#31: I feel a lot more in touch when I can hear rather than when I've got the music on and the windows up, I feel a bit out of touch with everything, I'm just my own little self, I lose what everyone else is doing around me. (Safe driver, 18 years)

#46: Maybe it would start to but then you'd think 'hang on a minute this music is starting to get to me' . . . (Safe driver, 22 years)

#54: Some good music if turned up loud that has an effect, but I keep it down deliberately for that reason. I found when I started driving at 17 or 18 I put my best tapes in the car turned them up and I was going round

roundabouts too fast, that sort of thing, I realised and I never turn it up now. (Safe driver, 19 years)

#56: I'm aware of the effect and so if I've noticed it happening I try and ignore it. (Safe driver, 25 years)

8.4 Mood

There was a significant difference between the reported effects of mood on driving behaviour between the two driver groups. A greater number of 'unsafe' drivers were affected by their mood to a much larger extent than the 'safe' drivers. This may be due to the fact that, for many of the 'unsafe' drivers, the act of car driving is regarded more as an expressive (than practical) activity and, as such, is perhaps more likely to reflect one's mood (Section 7.2).

Generally, the drivers stated that their driving behaviour roughly reflected their mood. Thus, being in a bad or angry mood led to more aggressive, faster and less safe driving. For many of the 'safe' drivers, being in a good mood most often resulted in 'normal' or 'average' driving. For a number of the 'unsafe' drivers, however, it occasionally led to more expansive, carefree and 'enjoyable' driving. The effects of good mood are reported to be less marked than bad mood and not necessarily detrimental to driver behaviour.

Being in a bad mood would appear to have an adverse effect on driving behaviour and this effect appears to be most pronounced amongst some in the 'unsafe' driver group.

#5: If I'm angry, I'll go a bit faster and take my anger out on that. (Unsafe driver, 18 years)

#9: If I'm in a good mood you're content to drive at 70 or drive as fast as you can, enjoying it; but if I'm in a bad mood, oh dear me, I'm cutting them up, driving terrible, driving as fast as you can, not worrying . . . (Unsafe driver, 19 years)

#14: If I'm depressed I drive quite gently, if I'm pissed off I drive like a lunatic. (Unsafe driver, 20 years)

#16: If I'm in a good mood, I drive more aggressively and if I'm in a bad mood I drive more aggressively but if I'm in a middle mood I don't! (Unsafe driver, 20 years)

#20: If I'm wound up I do tend to drive a bit faster . . . actually when I'm in a mood I'm a more aggressive driver, if there's a gap I'll go through it and I tend not to give way . . . (Unsafe driver, 21 years)

#23: Angry tends to be the worst, I take it out on the car, when I'm most risky . . . if I'm happy things vary, sometimes I'm relaxed; it does affect me. (Unsafe driver, 23 years)

#33: Not at all, me and my girlfriend have had major rows and I've carried on driving normally. (Safe driver, 19 years)

#41: If I'm in a really bad mood I get very reactive to what people do on the road. (Safe driver, 21 years)

#43: Not really at all, I suppose it might do subconsciously but I don't notice it. (Safe driver, 21 years)

#48: A lot more aggressive, not dangerous; going through the gears quicker if I've had bad news or a bad day. (Safe driver, 22 years)

8.5 Other drivers

Drivers were also asked to what extent other drivers' actions on the road affected their mood and/or subsequent driving behaviour. Again, more of the 'unsafe' drivers were affected by the actions of other drivers. It would appear that more of the 'unsafe' drivers were more likely to get in a bad mood due to (what they see as) the inappropriate or 'stupid' actions of other road users. The bad moods of these drivers were likely to be exacerbated by other driver actions. A possible reason for this may be that the majority of other road users do not follow the same norms as to appropriate driving behaviour that these 'unsafe' drivers hold.

#9: I hate it on the motorway when there's someone sitting in front of you doing 70 even in the middle lane, I'd overtake them on the inside to prove a point . . . (Unsafe driver, 19 years)

#24: It affects me quite a lot, you might come up behind an old couple and they're just driving stupidly . . . (Unsafe driver, 23 years)

#28: If I see someone doing a silly thing that will make me angry. (Unsafe driver, 18 years)

#31: If I was angry already it might make it worse and I wouldn't concentrate as much. Only a bit for the short term. (Safe driver, 18 years)

#30: They (other drivers) annoy me, but I don't get in the car in a good mood and get out in a bad mood just because people have been driving badly . . . (Safe driver, 17 years)

#34: Other drivers compound whatever mood you are in to start with. (Safe driver, 19 years)

8.6 Media

The effects of the media on many types of behaviour have been the subject of much psychological study. Most commonly, the effects of sex and violence portrayed on television have been examined. More recently, attention has begun to be paid to the possible effects that the media (films, television and newspaper coverage) have on car driving behaviour in general, or in more specific instances like the recent media attention paid to so-called 'TWOCers' (Taking Without Owners Consent). For a number of years RoSPA (Royal Society for the Prevention of Accidents) has led a campaign to ban car advertisements which emphasise excessive speed, or use other invitations to transgress the Highway Code, in order to boost sales. Despite such attempts, many advertisers continue to emphasise speed at the expense of safety. One of the problems is that very little is known as to the effects, if any, of such a portrayal.

Evans (1990), reviewing some potential gains in traffic safety, stated that the largest potential gain can be achieved by encouraging and stimulating changes in the social norms relating to driving in directions more conducive to safety, and away from directions which are inimical to safety. To this end, Evans stated that some research should examine the 'the effect of fictional television and movie portrayals of the life-threatening use of motor vehicles as heroic or humorous' (pp.58-59).

A small part of this present research examined the reported ways in which media representations are or are not linked to young drivers' perceptions of, and actual, driving behaviour.

A range of topics concerned with the media was discussed including how the car is portrayed generally, whether this portrayal affects behaviour in general and/or in their own case, what the drivers thought of car advertisements and to what extent these determined the status of particular cars. Some of the more revealing findings are outlined below.

Both groups of drivers felt that the car was portrayed in a very unrealistic light by the media. The car was portrayed as more than just a practical means of transport. The vast majority of the drivers stated that the portrayal was often ridiculous, exaggerated and far fetched. Indeed, only 7% of the drivers felt that media coverage of the car and driving was realistic and reasonable. Some of the drivers emphasised the portrayal of fast driving as a male orientated, somehow heroic activity in certain films and television programmes.

#7: The hero drives a fast car in films so it is a boyhood dream to have a 'posh' car and drive really fast. (Unsafe driver, 18 years)

#9: The films we watch, it's great; racing films or police films, they're sort of driving along nice and fast. (Unsafe driver, 19 years)

#18: Pop songs and women encourage you to buy it like any other product. (Unsafe driver, 20 years)

#27: Far too idealistic, it's ridiculous . . . it makes people think they're invincible, they can put a seat belt on and they'll be alright. When you see a car roll over in a film and people get up and walk away, I was surprised because people I know who have rolled cars have broken arms and legs and that. (Unsafe driver, 25 years)

#31: They're made out to be really glamorous, on the telly they're not really used as a means of transport, a lot of the time they're made out to be more than that, a status symbol or something. (Safe driver, 18 years)

#43: They portray it as a racing object more than as a safe and sensible thing. (Safe driver, 21 years)

#46: I guess a lot of the films don't help much as far as safe driving is concerned with the car crashes, people getting away with it without much difficulty. (Safe driver, 22 years)

#49: All they're worried about is the top speed. If car manufacturers were worried about people breaking the law they'd invent an engine where the top speed would be 70 mile/h and if they were worried about fuel economy they'd invent an engine that could run for 100 miles per gallon. (Safe driver, 21 years)

#51: Generally shows people hacking back and forth not setting a very good example. (Safe driver, 23 years)

Most drivers stated that the media presentation of the car may have some effect on driving behaviour in general, but only a very small influence, if any, on their own driving behaviour. Some drivers felt that media presentation of the car and driving was no different to any other aspect portrayed as fiction by the media and that it therefore did not, and should not, influence them. A few other drivers stated that they thought there was inevitably some subtle influence which was possibly subconscious.

#2: There's quite a few films with car action chases . . . there is a certain appeal and you do emulate it in a way, but not directly. (Unsafe driver, 18 years)

What are some of the social influences on driving?

#7: You can't help being influenced by it everything in life influences you whether it's subconscious or not . . . (Unsafe driver, 18 years)

#9: When I'm watching races and that, you think 'Oh I'd love to do that' and you've got to get out even if it's just on a roundabout here. (Unsafe driver, 19 years)

#34: I make a conscious effort not to be affected by it but I don't think you can help it to a small extent. (Safe driver, 19 years)

#46: I'm hopefully old enough to know it's bollocks but even so where do you get your idea to do your first handbrake turn? (Safe driver, 22 years)

#52: The media probably had some effect on the fact that I always wanted a car as soon as I could . . . (Safe driver, 24 years)

#54: If someone thinks they've got a car with a good 0-60 time then they're going to want to try it out aren't they? (Safe driver, 19 years)

A few respondents recognised recent efforts to stress environmental considerations.

#11: When I was younger it used to be geared to fast cars, the image of the nice girl next to the bloke, I think within the last two years the ads have gone 'green' . . . Overall it's important for the world to have nice, 'green' cars but unfortunately I'd rather go for something with a big engine . . . (Unsafe driver, 19 years)

Although it is extremely difficult to gauge directly what influence media coverage may have on young car driver behaviour, it would appear that any influence, if it does exist, is likely to be an adverse effect.

9 What are the main findings and implications?

The earlier study showed that a substantial minority (about 35%) of young male drivers can be categorised as 'unsafe' (Rolls, Hall, Ingham and McDonald, 1991). The present study was a development from, and enhancement of, the earlier study in that it sought to investigate, in more detail, a number of factors which might explain the differences evident in driver behaviour and performance within the younger male groups (17-25 year olds). The earlier study had *identified* within-group differences, this study sought to *explore* some of the more general lifestyle factors by giving young drivers the opportunity to provide their own accounts and explanations for their driving behaviour based on their own realities and experiences (Section 1.2).

The study involved in-depth interviews with 56 young drivers (29 previously classified as 'unsafe' and 27 'safe') aged between 17-25 years at the time of the earlier study. Interviews covered a number of topics, including descriptions and explanations of driving behaviour and practices, assessment of risk, driving history, attitudes to the car, lifestyle, leisure activities, parental and peer group influences and possible social influences on driving (Section 3). The main findings are discussed below:

9.1 The main findings

9.1.1 Lifestyle

General lifestyle issues were shown to be important factors in car driver behaviour. More of the 'safe' drivers had regular girlfriends/partners, and in turn, spent more time with these partners than the 'unsafe' drivers who tended to spend more time with male friends. Drivers with regular partners or in long standing relationships felt they had matured or 'grown up' over the period since the initial survey. Drivers with debts or mortgages spent less money on cars and 'going out', and stated that such factors had affected their driving behaviour (Section 5.1).

'Unsafe' drivers were more influenced by, and more exposed to, unsafe driving by their parents and peers than were the 'safe' drivers (Section 5.2).

Hardly any of the drivers were deliberate drink drivers who went out with the intention to drink over the BAC (blood alcohol concentration) and then drive. Many of those who had driven whilst over the BAC blamed lack of forward planning, an argument, or being let down by friends as the reason for their subsequent driving after consumption of alcohol. The majority of drivers stated that it was easier to refuse alcoholic drinks with peer support. A number of drivers mentioned the lack of adequate public transport as an alternative to driving (Section 5.3).

9.1.2 Perceived ability and risk

On average, the young male drivers rated their driving skills and driving safety considerably above 'an average driver their own age'. 'Unsafe'

drivers rated their driving as slightly more *skilled* than *safe*, whereas 'safe' drivers rated their driving as slightly more *safe* than *skilled*. Many of the 'unsafe' drivers tend to 'test' their abilities and car capacities on or off-road to a much greater degree than did 'safe' drivers. This so-called skill, however, was illusory, since the 'unsafe' driver group had higher accident involvement (Section 6.1).

Generally, 'safe' and 'unsafe' drivers defined a 'good' driver in different ways. More of the 'safe' drivers took this to be a driver who was safe, considerate and courteous and did not get in the way of other drivers. On the other hand, more of the 'unsafe' drivers tended to define a 'good' driver as one who was highly skilled, who could handle the car well, was positive in their actions and had quick reactions. The majority of both groups think they are 'good' drivers; due to differences in the interpretation of the term 'good', however, each group tended to describe their own driving style as representing 'good' driving (Section 6.1).

On average, 'unsafe' drivers rated their driving as considerably more risky than the 'safe' drivers assessed theirs to be. In addition, the 'unsafe' drivers reported a greater number of specific risky driving manoeuvres than did the 'safe' drivers. Many of these driving practices were intentional violations rather than errors, suggesting that such behaviour does not result directly from lack of driving skill, but from inappropriate driver attitudes (Section 6.2).

The vast majority of drivers stated that they did not deliberately drive 'unsafely'. Those drivers who did take risks felt they did so when it was 'safe' to do so, when the traffic situation allowed. Such situations were most commonly quiet wide roads with little traffic, late at night. For some drivers, but most often 'unsafe' drivers, peer pressure, the thrill of driving dangerously or employment related pressures also encouraged unsafe driving practices (Section 6.2).

Drivers had very little knowledge of accident numbers. On average, both groups of drivers grossly over-estimated the number of traffic deaths per year (Section 6.3).

9.1.3 Car culture

Many 'unsafe' drivers recognised the *practical* (ie functional) side of driving but also viewed driving as an *expressive* activity, to a larger extent than did the 'safe' drivers. More of the 'unsafe' drivers had raced on the road than 'safe' drivers (Section 7.2).

More of the 'unsafe' drivers were enthusiastic about driving and cars (makes, models and car maintenance) and talked about such things more with their friends than the 'safe' drivers. More 'unsafe' drivers were involved in 'car cultures' (Section 7.3).

9.1.4 Social influences

Passenger presence had some effect on driving behaviour for 90% of the drivers. The vast majority of the drivers drove in a different style dependent on the type of passenger. Parents, adults and girlfriends/partners generally led to safer and/or slower driving, whereas a number of 'unsafe' drivers

stated that they were often encouraged by their peer group to drive fast (Section 8.2).

Use of a radio cassette had some stated benefits but also some adverse effects. More 'safe' drivers mentioned the benefits, such as relieving boredom on long journeys and keeping them alert, whereas more of the 'unsafe' than 'safe' drivers stated they were adversely affected. Such effects included fast, up tempo, loud music leading to a more aggressive driving style (Section 8.3).

Music and driver mood were inextricably linked. 'Unsafe' drivers, more than the 'safe' drivers, admitted that their driving was affected by mood, in that a bad or angry mood led to aggressive, faster and less safe driving (Section 8.4). More of the 'unsafe' drivers also admitted that their driving was affected negatively by the actions of other drivers (Section 8.5).

93% of drivers felt that the portrayal of the car by the media was unrealistic. Media influence on car driver behaviour appeared to be small, but any influence, if it does exist, would appear to be negative (Section 8.6).

9.2 The implications

9.2.1 The young male driver

Within-group differences among young male drivers do exist. It is therefore incorrect to label and stereotype all young male drivers as 'unsafe'. There is a danger that stereotyping of individuals may lead to self-stereotyping whereby individuals fulfil the roles expected of them. The use of traditional distinguishing variables such as age, sex and driving experience have been shown to be limited as explanatory factors for unsafe driving behaviour. Many other factors are implicated which help to explain why some drivers are 'safe' and others 'unsafe'. Indeed, driving behaviour is an extraordinarily complex phenomenon.

9.2.2 Method

The in-depth methodology used for this study has proved successful in helping to understand the detailed and complex issues involved. The approach adopted helps to achieve such goals by seeking to understand the individuals as a whole and giving them time and the opportunity to provide their own accounts and explanations for their driving behaviour based on their own realities and experiences. Young drivers are, perhaps, best placed to explain the reasons why they drive the way they do. Practitioners have to recognise they do not know all the questions, let alone all the answers.

The results obtained here have implications for future campaigns and educative measures suggesting that detailed group discussion programmes may prove to be effective in influencing driver behaviour. Young drivers should be actively encouraged to participate and make suggestions for these traffic safety initiatives. The complex nature of these issues is not readily amenable to large scale media campaigns which are uni-directional in nature.

9.2.3 Campaigns

An understanding of people's perception of their own driving ability is essential since drivers are unlikely to pay attention to traffic safety campaigns if they consider that such campaigns are directed to *other* drivers in the population. As shown, the majority of young male drivers actually think they are 'safe' drivers. Media campaigns however, by their nature, are seen to be directed at 'unsafe' drivers. It follows that many of the young male drivers do not realise that the message applies to them. Media campaigns must therefore avoid ambiguous terminology. Examples where this was not done include the 'Stay low' drink driving message and the 'Take care' campaign.

Drivers should realise that the majority of people over-estimate their driving ability. Even those drivers who admit to performing risky driving manoeuvres believe they are good drivers. This is because the definition of a 'good' driver is interpreted differently by different drivers. For 'safe' drivers, a 'good' driver is a safe driver; on the other hand, for 'unsafe' drivers a 'good' driver is a highly skilled driver. The difficulties with terminology in these areas should be addressed. For on-road driving a good driver should be classified as a safe driver.

Increasing levels of factual knowledge of accident statistics may have an adverse effect on driver behaviour, since many of the young drivers believed that accidents were far more frequent events than they actually are. Constant media emphasis on accident numbers may inadvertently reinforce drivers' perceptions of their 'above average' driving ability, especially if they have not yet had an accident themselves.

It would seem that many young drivers do not recognise the 'warning signs' that they were close to having an accident. A near miss is not recognised as feedback that they were driving badly. This may be because it is easy to attribute a near miss to the environment or other drivers. The most obvious feedback of poor driving is accident involvement. However, even after an accident it is easy to find causes other than one's own driving for the accident. Young male drivers generally feel that accidents are chance events that occur at random. Obviously, accidents sometimes *do* occur at very *low* levels of risk and often they do *not* occur at very *high* levels of risk. This is a complication, but it must be emphasised that accidents are not chance or random events, and that inappropriate or incorrect driver behaviour does contribute to accident occurrence.

9.2.4 Pre-licence 'attitude' training

Young people do not plan to have accidents, they do not want to have accidents and they do try to avoid them. Nevertheless, traffic accidents are by far the most common cause of accidental death for ages 5-34 years inclusive. Traffic behaviour should be incorporated in health behaviour programmes. These should not just be restricted to schools but other organisations as well. Better teaching resources should be available for young people and also for parents who wish to help their children in this vital aspect of their life.

Pre-licence training on road safety should not solely concentrate on learning the skills to drive but incorporate much wider issues such as

parental and peer influences, over-estimation of driving ability, the effects of drinking and social influences such as passenger, music and mood effects. These are important and often neglected issues which may be beyond the immediate control of many young drivers due to a lack of understanding. Recognition and awareness of these factors and ways of resisting such influences could be encouraged and explored.

Driving should not be viewed as merely a physical skill. It is arguable that the young may be the most physically skilled drivers in terms of better reactions, eyesight and so on, but these possible physical advantages are not reflected in their accident records. All too clearly, 'unsafe' drivers are aware of the risks they take but, because they believe themselves to be highly skilled, they regard themselves as 'safe' drivers. Concentrating greater resources and more emphasis on the physical skill aspects of driving whilst ignoring the attitudinal and social influences is likely to have minimal impact.

Many parallels can be made with another health related issue – that of sex education. It is increasingly apparent that teaching the physical facts is not enough. The discussion of wider social issues such as relationships and negotiation skills is becoming increasingly adopted. Similarly, young male drivers could be encouraged, perhaps through the use of role play in such discussions, to explore other perspectives whereby they can realise that their driving behaviour is viewed as risky by other drivers, and that their own 'skills' might not be sufficient to prevent accidents in all cases.

9.2.5 Social influences

The influence of peer and parents' car driving behaviour should be acknowledged. Parents, in particular, should recognise that their own poor driving habits may be imitated and learnt by their children prior to their learning to drive. Parents should be encouraged to get involved in road safety projects. The extent of the effect that peer pressure has on driver behaviour suggests that attention could be paid to influencing not merely drivers, but peer and passenger attitudes. Methods whereby peers and passengers might 'negotiate' expectations of the driver and their subsequent driving behaviour might prove fruitful.

The data show that those drivers who drive more safely in the presence of passengers do so because they do not wish to exhibit risky behaviour in the presence of someone they respect. It follows that drivers are less likely to be affected by publicity campaigns emphasising the dangers of risky driving than by campaigns which emphasise widespread social disapproval of risky driving behaviour.

Car radio cassettes should be as automatic as possible requiring little manual effort. If possible they should be mounted high on the dashboard, level with the drivers hand position on the steering wheel. Some new cars have radio cassette operations built into the steering wheel. Consideration should be given to an information leaflet pointing out the potential effects (both positive and negative) of listening to a radio cassette whilst driving supplied with each new car or radio cassette operating instructions. This could include some discussion of the potentially distracting effects of loud music.

9.2.6 Drinking behaviour

Young drivers seldom intend to drink and drive in advance. Many of those instances where a young male driver does drink and drive can be understood in terms of a 'rational' sequence of events. Often there are reasons which can be forwarded for drink driving such as the need to get home, lack of alternative transport and the apprehension about parental reaction. Such topics need to be addressed. Improved public transport could help provide alternatives to car use. Parents could be encouraged to pay for taxis when necessary and encourage their children in a number of ways. For example, a young driver who goes out for the evening with the intention to drive but not drink over the BAC limit, may, by mistake, end up drinking too much. The two options available to that driver are (a) risk driving home or (b) leave the car at the pub/party and get home some other way. Option (a) is the most convenient assuming that the journey is completed safely and the parents are less likely to realise anything wrong since next morning the car will be outside the home. Option (b) however is obviously the one that should be encouraged. Therefore, parents who encounter situation (b) should not simply criticise their child since this is likely to reinforce the attractiveness of option (a) if/when the situation re-occurs. Instead, possibly parental encouragement that the correct option (b) was chosen may be the best strategy with little criticism attached. A constructive rather than critical approach is essential.

9.2.7 Car culture

Many young drivers, particularly the 'unsafe' drivers regard the car as an important element in their 'expressive' lives, and not just as a practical means of travelling from A to B. It is a difficult task to dissuade these youths from treating the car as such. Some of these aspects have been encouraged in certain supervised off-road probation schemes for young driving offenders, where harm is less likely to occur to either themselves or other people. However, careful monitoring and evaluation is essential in order to ascertain the efficacy of such approaches.

9.2.8 Media

Media portrayal of the car is recognised as unrealistic by virtually all young male drivers. Media portrayal often emphasises speed and risk-taking as glamorous. The 'expressive' nature of cars is emphasised in advertisements beyond the 'practical' activity. Whilst the content of fictional material is difficult to control, greater attention needs to be given to the possibly negative effects of car advertising which emphasises performance above safety and reliability.

9.3 Conclusion

Many of the issues identified in this study are not easy to address. Legislation and engineering improvements can go so far but cannot, on their own, directly affect attitudes. Benefit will be gained from the opportunity for young people to explore and discuss these social aspects of driving in a constructive and encouraging environment through, for example, health education or personal development classes in schools and

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colleges, as well as during driver training. For persistent offenders or accident involved drivers, attention should be given to constructive rectification schemes, rather than merely to stiffer penalties and greater skills training and assessment. The aim must be to create a social environment whereby driving with responsibility and consideration becomes the norm, rather than the current situation in which many young drivers use risky driving as a way to acquire and enhance their reputations.

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12 Appendices

12.1 Prior research on younger drivers

12.1.1 Introduction

In 1990 in Great Britain, there were 258,441 reported personal injury accidents with 5,217 fatalities, 60,441 serious injuries, and 275,483 slight injuries, making a total of 341,141 casualties. For ages 15-19 years, road accident deaths accounted for as many as 40% of all male deaths and 25% of all female deaths and remain by far the main cause of accidental death for people aged between 5 and 34 years inclusive (Department of Transport, 1991).

With around 90% of traffic injury accidents occurring as a result of some element of driver error (Clayton and Mackay, 1972; Jenkins, 1978; Sabey and Taylor, 1980) it is imperative to gain as great an insight into driver behaviour as possible.

Given such figures, it is not surprising that a considerable amount of research has focussed on the young car driver behaviour. In many studies influential variables on the accident rate are taken to be age, sex, driver experience and exposure. It is generally agreed that male drivers are more likely to be involved in an accident per mile than female drivers (Broughton, 1988). Where there is less agreement however, is how such patterns can be explained.

Some research indicates that age or youth *per se* is the dominant factor in accident involvement (Pelz and Schuman, 1971; Levy, 1990) and some that low experience, accompanied by a general lack of driving skills, has more effect (Michels and Schneider, 1984). Many studies appear to show that age, experience and exposure are somehow linked to accident involvement, but often age and experience variables are confounded.

One of the major problems with much previous research is that these variables (with the exception of sex) have never been clearly defined and used consistently. Thus, we have the definition of 'young' drivers varying from any range between 16 to 25 years, driving experience and/or exposure measured in terms of time licence held, time started driving or number of miles driven, sometimes incorporating amount or type of driving experience, but more frequently not. It is little wonder that researchers do not agree on the individual importance of each of these variables when they cannot agree on the usage of the terms.

Another limitation of some of the research in the area of accident causation is that it often attempts to analyse possible contributory factors in isolation. Although more difficult to achieve, studies must attempt to examine multivariate factors (Rolls, Hall, Ingham and McDonald, 1991). These problems in research do not mean that all such studies into the young driver problem have so many limitations that they are worthless. Indeed, a considerable amount of knowledge has been amassed (see Mayhew, Simpson and Donelson, 1985; Benjamin, 1987, 1990).

The presentation of accident probability (whether controlled for exposure or not), or the presentation of average scores on particular measures, may

provide a deceptive impression that *all* young drivers differ from other drivers in one sense or another. Not all young drivers are 'unsafe' drivers involved in traffic injury accidents nor receive convictions for traffic offences. The need is to go beyond the traditional demographic or experience dimensions and explore variations *within* members of particular driver categories. More recent approaches in the psychological study of other 'risky' behaviours such as smoking, drinking and sexual behaviour have begun to emphasise the importance of the social influences and demands placed on young people and their own motives and interpretations for their behaviour.

12.1.2 Risk perception and perceived ability

There would appear to be no general agreement on a technical definition of the term 'risk'. However, taking the definition of risk adopted by Brown and Groeger (1988) that risk is 'the ratio between some measure of adverse consequences of events and some measure of exposure to conditions under which those consequences are possible', it will be evident that in practice risk is a quantity (except in trivial cases) that has to be estimated rather than deduced. In the traffic domain, this is because no method for recording accident incidents, and more particularly exposure data, will ever be entirely accurate.

The main theories of risk (Wilde, 1982; Naatanen and Summala, 1976; Fuller, 1984) are, in essence, *perceived* risk models. These models deal mainly with cognitive and conscious levels of risk perception and it would seem that the young driver is only partly aware of these aspects of their vulnerability. Perception of 'objective risk' in a situation, and perception of 'subjective risk' to oneself, in that situation, should be a straightforward relationship, but it has been shown how difficult it is for an individual to assimilate the one with the other. In short, the management of risk by an individual assumes a complex implementation of cognitive and affective skills which differ according to the extent of the risk under consideration. The relationship between 'objective' and 'subjective' risk will vary between driver, type of journey, time available for journey and numerous other factors. It can be seen that the risk picture becomes extremely complex and it may be that other ways of tackling the problem of risky driving behaviour will prove to be more fruitful.

Inadequate driver risk perception can result from three different causes: (a) a person can over-estimate their own driving ability to cope with risk, (b) they can make a conscious decision to accept a particular level of risk or (c) they may be deficient in their perception of risk. Questionnaire studies on risk perception and behaviour are difficult to interpret because each individual has their own interpretation of what constitutes risky behaviour. It is thus difficult to measure the influence of risk on different road user populations. For example, if it is accepted that non-perceived risk is greater in childhood than adolescence, then adolescents have a higher perceived risk, and yet the risk taken during adolescence is higher than during childhood (Assailly, 1991). With this interpretation, the crucial factor is the significance of risk, and thus preventative measures should concentrate on reducing the relevance of risk for young people on the road possibly through the introduction of other forms of 'sensation seeking' behaviour which do not involve anti-social behaviour.

Younger drivers have a particularly high risk of being involved in a casualty accident even when the quantity and quality of their exposure to such risk is controlled. It might be expected that younger drivers are more likely to misperceive and misjudge traffic situations due to their limited traffic experience. Zuckerman (1979) outlined the way that younger people are more likely to take risk as part of the reported connection between youthfulness and sensation seeking and it is easy to see how this could be appropriate to car driving behaviour. Jessor (1987) argued that risky driving was just one part of a larger 'developmental behavioural health syndrome'.

Finn and Bragg (1986) suggested that young drivers have higher accident rates because they are either more willing than older drivers to take risks, or fail to see hazardous situations as dangerous, or a combination of these two factors. Appropriate countermeasures would vary dependent on whether young drivers choose to take higher risks or simply do not recognise their actions as risky. Results showed that young drivers recognised that their age group is more likely to be involved in an accident than older male drivers, but they perceived their *own* risk to be significantly lower than their peers. Older drivers estimated their own chances of being involved in an accident as comparable to those of their peers.

Anderson (1978) provided evidence that factually based traffic materials did not reduce drivers' accident involvement levels within the six months after study. It is possible that this is because such materials are inevitably based on past risks and people may feel that these have little bearing on present and future events. It is argued that many of the measures of 'objective risk' are often at variance with the real risks experienced by road users. There is also the possibility that informing drivers of the statistical accident risks or overall number of accidents may confirm a belief that accidents happen to other people and not to themselves. There is some debate as to whether people find it too difficult to estimate the frequency of low probability events, although Cousins (1980) indicated that subjects can make worthwhile and meaningful estimates of that kind.

One problem with driver risk assessment is that accidents do occur at very low levels of risk. Indeed, it is possible for a driver to eliminate as much risk as possible from the driving situation by driving safely and carefully at selected times of day on selected routes and still not save themselves from being involved in a fatal accident. The realisation of the possibility of having an accident purely as a result of chance or bad luck might have some effect on subsequent driving behaviour. It was generally thought that drivers tended to underestimate the risks of having an accident, but this research questions this view.

It is not clear why younger drivers believe they are less likely to have an accident than their peers. This could be due to an unrealistic optimistic bias or due to believing themselves as more skilled or more cautious or safer than their peers. Dependent on the answer to this question is the design of future countermeasures.

Misperception of driver ability or unrealistic skill evaluation may be an important factor in accident involvement. Believing oneself as a more skilful and safer driver than others may lead to risktaking beyond the capabilities of the individual driver. Furthermore, such risktaking, if it does

not result in any accidents or near accidents over a period of time, is likely to be reinforced by the individual drawing on such experiences as evidence of their (mistaken) perception of their own driving abilities.

It has long been held that drivers tend to believe themselves to be better drivers than the average driver (Naatanen and Summala, 1976). Drivers in these studies have most commonly been asked to judge their driving ability, safety levels and so on, in comparison to the average driver, defined in terms of the general driving population, and results have shown that the majority of people (70% to 80%) assess themselves to be in the safer half of the distribution (Svenson, 1981; Matthews and Moran, 1986). These results may be explained as a result of subjects lacking information about the others in the group and/or having a low memory availability for negative events (Svenson, 1978; McKormick, Walkey and Green, 1986). Other studies (Slovic *et al*, 1978; Preston and Harris, 1965) have provided evidence of the greater generality of such findings. Past research confirms that people accept more responsibility for a success than for a failure (Luginbuhl, Crowe and Kahan, 1975). Some authors (Storms, 1973; Taylor and Fiske, 1975) have argued that this egocentric bias is due to the fact that individuals locate the cause of their behaviour in the environment whereas the same behaviour in others is attributed to traits possessed by the individual. McKenna, Stanier and Lewis (1991) show that drivers have a 'positive self' view of their driving behaviour rather than a 'negative view' of others.

A commonly claimed notion in psychology is that people need high self-esteem (Dittes, 1959). An implication is that this need may lead a person to have an inflated view of their own ability at any number of tasks. Gergen (1971) emphasised this by stating 'to feel esteem for self is akin to one's most basic experience of well-being' (p.69). In order for this over-estimation of ability to occur, the self-esteem need must be aroused in a situation in which over-estimation of ability is possible and where the ability in question is valued enough in order to produce the effect of self-esteem. It is suggested that car driving is one such activity in that driving ability and safety are likely to be valued abilities. In addition, unlike many other skilled activities, there are few 'objective' criteria to measure driver performance.

It is important to note that risk assessment is just one factor affecting driving style. Additional factors examined include passengers, driving image, attitudes to cars and so forth. It must be noted, as Haight (1986) stated, that 'conscious evaluation of risk is normally a quite insignificant factor, particularly when we bear in mind that the risk (either as probability or as expectation) is itself normally extremely small' (p.363). The idea that there may be some social factors that determine assessment of risk – a sort of 'social assessment' of risk – needs to be fully explored.

12.1.3 Lifestyles and social influences

The idea that driving may be viewed as a social activity which involves social interactions in traffic has been around for the last 30 or 40 years (Stewart, 1958). Some writers have called for increased emphasis on social and psychological factors across the entire transportation and traffic sphere (Michon 1976). McClintock (1972), whilst not writing specifically about driving, argued that research should recognise that 'a significant portion of

human behavior occurs in social matrices where an individual's outcomes are determined not only by his [sic] behavior but by that of one or more other persons in the matrix and vice versa' (p.441). However, it is only comparatively recently that research has begun to investigate the nature of social influences on driving and the possibility that general lifestyle factors may be implicated in young driver behaviour.

Behaviour can be seen either as the product of intra individual structures such as needs, cognitive structures, personality traits ('the person') or as a reflection of the situation they are in at the moment ('the situation'). Heider (1958) stated that the lay view is that people are the origins of their actions since it is more difficult to understand the situational and circumstantial factors that led to the particular behaviour. Social psychologists tend to favour the latter view emphasising the social forces that are inherent in any given situation, whilst recognising the part that learning through previous experiences plays in affecting behaviour in particular circumstances. This view takes into account the great diversity in people's behaviour in various situations during the day from interactions with their families, fellow workers, their superiors and their friends.

However, people do not always follow a consistent pattern of behaviour dependent purely on the situational demands at the time. It is probably more accurate to state that virtually all behaviour is shaped partly by individual characteristics and partly by the situation. This can be termed 'individual-in-situation' behaviour. If a certain kind of individual and a certain kind of behaviour is accurately assessed then it should be possible to predict and understand subsequent behaviour. If every individual and situation is assessed as unique there would be an infinite number of 'individual-in-situation' behaviours. Therefore it is probably best to view individuals in categories or small groups (eg young, male, 'unsafe' drivers) and certain categories of situations (eg car driving). Another influence on behaviour related to the situation is the person or group with whom the individual is interacting (eg parents, friends and so on).

Situational influences on driver behaviour can be viewed as forms of 'environmental proneness', covering such diverse aspects as a family's acceptance or non-acceptance of deviance, the education of, and exposure to, risk and, in a similar way, the influence and exposure to particular forms of the media and peer groups which might encourage or glamourise the expression of deviant behaviour. Driving can thus be viewed as an activity whereby individuals are likely to respond in much the same way as they would in any other social situation.

In order for 'social influences' on driving to have some meaning it is necessary to distinguish two broad levels of operation. First is the individual's position in society and/or group and the interaction between the individual and group and/or society in terms of lifestyle or general patterns of behaviour. Malik (1968) believed that individuals adopt attitudes to a driving situation which they use in their larger social system and thus the social context may be a crucial factor in determining whether or not an accident actually takes place. Then there is the interaction between the individual and other road users, including passengers, which may influence specific patterns of behaviour. Both levels of operation have

been examined in this study although, in practice, the boundaries between them are often difficult to distinguish.

In the car driving domain, it seems possible to use expressive activity whilst not necessarily sacrificing practical gains. It is often difficult to distinguish between expressive and practical activities since they are often not strictly separable. For example, driving fast may be a practical activity to travel quickly from A to B and an expressive activity demonstrating prowess and expertise at the wheel. This example shows that the same activity may be the result of either a practical or expressive motive which may differ for different occasions.

It is important to emphasise that human life is complex enough for one individual to engage in many different non-overlapping social groups and to occupy a different position, character or reputation within each group. The group, position in the group, activities and performance of these activities which are associated with respect or contempt determine to a large extent the behaviour of the individual. Any individual can choose not to follow the rule-system that the group or collective of which they are a part adhere to, but at the possible social cost of loss of reputation and alienation.

Evidence of different effects on driver behaviour dependent on different passenger type has been presented (Baxter *et al*, 1989; Rolls, Hall, Ingham and McDonald, 1991; Ingham, 1991a, 1991b).

Theories of self development emphasise people's perception of how other people see them. The self develops through social interaction by the individual's enactment of a series of social roles which is assigned to them by society such as baby, small boy/girl, smart pupil and so on. As they perform these assigned roles, their self concept is influenced by the ways in which their role partners view them and by the way in which these partners perform their roles. Role portrayals are influenced by how the individual likes to think of themselves in that role. Goffman (1959) suggested that in everyday interaction, people present themselves and their activities to guide and control the impressions they give of themselves. Put simply, people try to manage the impression they present to other people, although individuals may not be explicitly aware that they are doing so. 'Impression management' is a term used to describe the way people act to create a favourable image of themselves, particularly likely to occur in situations where the individual is expected to behave to a certain image. One motive for managing the impression that is presented is to seek support and approval of other people. Encompassed in this are actions directed to social ends such as creation and reinforcement of attitudes and expectations in other members of the group and gaining of worth, reputation and respect. Role identity and formation are not determined solely by others and the prevailing situation; rather, the individual is an active agent in maintaining a stable interpersonal environment. Thus, individuals actively enter into the creation and maintenance of the self.

As an individual moves through the social structure, systematic changes occur in the way the individual is labelled and the ways that other people behave towards the individual. Life cycle changes ensure a series of different role categories for each individual during their lives. The self-fulfilling prophecy illustrates the force that expectations of other persons

may have for shaping an individual's behaviour in a new direction.

Clark (1976) investigated the way driving is affected by social roles and peer pressures. He argued that formal rules of driving have less of an immediate influence on young people's driving behaviour than the social norms adopted by their peers concerning appropriate driving behaviour. Furthermore, this influence may be exaggerated by the young driver's dependence on his/her peer group for social status.

Results indicated that drivers who are open to influence from peers who encourage risk taking will be more likely to be involved in an accident. Clark (1976) concluded that 'safety campaigns should focus on the driver's peer group rather than the driver himself [sic] as the target of change'.

Modern social psychology emphasises the notion of 'agency', recognising that people interpret and act on the world in a personal way, and ascribe meaning to the various components of the social world. Driving behaviour may be determined by the desire of drivers in specific social groups to behave in ways that they consider would meet with the approval of others whose esteem they value. Driving is only one particular social activity that is influenced by prevailing social mores and norms which may be contradictory to safety and thus limit the effectiveness of planned engineering or legislative changes. For example, some drivers may even be willing to risk having an accident and possible public failure for the chance to gain respect and admiration from important peer group members. The norms of driving may also mature in a fashion somewhat similar to the way individuals mature, with consequent declines in fatality risk (Evans, 1990).

Research in other areas has shown that adolescent 'problem' behaviours are interrelated, that there is a 'syndrome' of adolescent problem behaviour, and that it may be useful to deal with such behaviour as part of a lifestyle rather than as separate behaviours. Jessor (1987) has provided some evidence, albeit using only four items on a risky driving scale, that risky driving (such as speeding, following too closely and drink-driving) can be considered a behaviour that is part of this general syndrome. For example, he found a significant relationship for sexually active males (but not for females) between the risk-taking in traffic and infrequent use of contraceptives during intercourse. A recent longitudinal study reported that accident-involved young drivers could be distinguished by variables such as sensation seeking, attachment to traditional values, alcohol use and risky driving (Bierness and Simpson, 1990). These conceptualisations of risky driving and accident involvement as part of a general high risk lifestyle have important implications for preventative programmes. Similarly, Barjonet (1990) showed that belonging to a particular lifestyle implies the avoidance of risk whilst at other times it implies risk seeking.

Grayson and Noordzij (1990), reviewing the traffic safety literature for the last twenty years, concluded that 'it was the biographical and social factors that proved to be the ones that showed the most consistent (though small) relationships with accidents' (p.638).

12.1.4 Methodological considerations

The planning of any research is based on theoretical and practical considerations, which include the purpose of the study, the required

accuracy of results as well as the cost, time and labour involved. The general choice is between intensive or extensive design.

Intensive design normally involves studying individuals or small groups of people in great detail whereas extensive design techniques tend to study many members of a group in less detail. Intensive design tends to use more 'qualitative' research methods whilst extensive design favours statistical, 'quantitative' methods. In much traffic safety research, the extensive design seems to be favoured and thought of as somehow more 'scientific' than intensive design.

The chosen design approach clearly has to be that most suited to the topic under investigation. The methods used are important only in terms of how well they enable the goal of the research to be reached, and are not ends in themselves. Many different methods have been used in driver research including accident statistical studies, driving simulator studies, real life driving observational studies and questionnaire or interview studies (see Ingham, 1991a, 1991b for review). Often an eclectic methodological approach is to be preferred; ' . . . The extensive design provides one with samples worth studying by intensive methods' (Harre *et al*, p. 116, 1985). The intensive design chosen in this study was a natural development from the more extensive design adopted earlier (Rolls, Hall, Ingham and McDonald, 1991).

The dominant emphasis on statistical data in traffic safety is based on the assumption that the production of an effect is the result of a number of contributing factors. These factors can be separated and varied independently of one another to see their individual contribution to the overall effect. This assumption is only correct if the variable or factor when isolated is identical with the corresponding factor when all the conditions are varying at once. These assumptions are often followed in driver research when the independent variables are taken to be age, sex, experience and exposure. However, human behaviour is not comprised merely of discrete variables logically interrelated and rationally classified; a more comprehensive structure is required. Even if it is accepted that the determinants of social action are a structure of internally related variables then the extraction of each variable would change the overall nature of the effect.

Statistical method should be stringently examined and treated with caution. Statistical jargon must not be mistaken as a substitute for scientific proof. Lang (1844-1912) stated that some researchers use 'statistics as a drunken man uses lamp posts – for support rather than illumination.'

Grayson and Noordzij (1990) examined differences between German and English traffic safety research and found the main difference to be in the methodology used. The most important component in the German literature is the in-depth personal interview whereas interviews in the English literature are more commonly used, if at all, to supplement the 'objective' test data. Grayson and Noordzij suggested that this is because English researchers believe the interview to be a 'subjective' and uncontrolled technique. In the German studies, the goal is to understand the person as a whole, not as a unit in a sample.

Leisure

What do you do in your spare time? Hobbies?

What kind of leisure activities do you participate in? Regular exercise? Sports?

How often do you go out per week? Who with?

What would you say is a typical evening or weekend?

Do you smoke? When did you start? (age)

Frequency per week and quantity per occasion (units)

Do you drink?

Have you ever driven after drinking alcohol? In what circumstances? Is it easy to refuse a drink from friends? Do you drink non-alcoholic drinks?

What about your friends? Have you ever been a passenger with a drunk driver? Why?

Who taught you to drive? Were they any good? Did you learn to drive or pass the test? Any changes in driving now?

How many and who paid for lessons?

What did getting a licence mean to you? Why?

Was there a gap between training and getting own car/driving regularly?

Any additional driving courses taken? Any you want to take? Under what conditions? How much would you pay? How would you find out about them?

How did you go about getting insurance? Was price the only/main criteria?

What type of insurance policy do you have?

If car owner: How long owned car? How bought? HP? Cash? Loan?

Do you have access to another car?

Parental/friend influence

3. How much do your friends influence you and your behaviour?

4. How much do your parents influence you and your behaviour?

5. What is your parents' driving like?

6. What is the majority of your friends' driving like?

How many are there in your circle of friends?

How do you rate the seriousness (in terms of danger) of the following offences? :-

7. Parking where it is prohibited (ie on double yellow lines)

8. Driving whilst slightly over the blood alcohol limit (BAC)

9. Not complying with traffic light signals (ie a red light)

10. Driving whilst excessively tired

11. Overtaking when it is prohibited by signs or road markings

12. Driving in dark with inadequate lights

13. Exceeding the speed limit by 10 to 20 mph in a 30 mph limit?
14. Driving when the vehicle is overloaded by more than 50%
15. Exceeding the speed limit by more than 20 mph in a 30 mph limit?
16. Driving whilst uninsured

Have you ever been stopped by the police whilst driving? What for? Why?

Risktaking

Estimation of driving ability

17. What are your driving skills of handling and car control compared to other males your own age? Why do you say that?
18. What is your driving safety level compared to other males your own age?
19. What are your driving skills of handling and car control compared to older, more experienced drivers (30+ years)? Why?
20. What is your driving safety level compared to older, more experienced drivers (30+ years)? Why?

What is a good driver? Define a good driver?

Decision to take risk

17. What are your driving skills of handling and car control compared to other males your own age? Why?
18. What is your driving safety level compared to other males your own age?
19. What are your driving skills of handling and car control compared to older, more experienced drivers (30+ years)? Why?
20. What is your driving safety level compared to older, more experienced drivers (30+ years)? Why?
21. What is your level of risktaking compared to males your own age? Why?
22. What is your level of risktaking compared to older, more experienced drivers (30+ years)? Why?

Have you ever been tempted to try out different risky manoeuvres in car? When? What type of things? (handbrake turns, rubber burns, etc?) Do you talk to friends about these?

Do you sometimes deliberately take risks for fun or excitement?

Do you ever deliberately break the traffic laws? How often? Why?

Risk perception

23. What do you think are the chances of you being *involved* in a slight injury accident in the next ten years?
24. What are the chances of you *causing* a slight injury accident in the next ten years?
25. What are the chances of you being *involved* in a fatal or serious injury accident in the next ten years?
26. What are the chances of you *causing* a fatal or serious injury accident in the next ten years?
27. To what extent do you think you can drive fast quite safely?
28. How likely are you to be stopped and charged if you were speeding? If they have been stopped: How effective is a verbal warning? How effective are points on your licence? Why?

Passengers and other drivers

Do you drive differently with different passengers? In what ways? Who with?

Girlfriend? Why? What do they say? Pressure to drive in a certain way?

Do you prefer to drive than be driven? Why? Who with?

Do you ever have problems with drunk passengers?

29. To what extent are you affected by other driver actions on the road? In what ways? Ever raced? Circumstances? What would have made you? Have you ever tried to beat a time to get to a particular place?

Effect of radio?

What type of stereo? Output?

Precise type of music in different circumstances? How do you choose the music? Any effect?

Effect of mood?

30. To what extent does mood affect your driving? In what ways?

31. To what extent do other drivers affect your mood? Ever made signs? Often?

Interest in cars?

Are you a fuel saving driver? Do you maintain a regular speed or put strain on the engine?

Are you a competitive driver?

Do you own your car? Do you spend much money on cars? (eg petrol, repairs)

Does it bother you?

Do you spend much time working on your car? In what ways? Bodywork? Engine? Cleaning?

If fanbelt broke could you fix it? Change a wheel? How often do you check the tyre pressure and oil? How often do you get the car serviced?

32. How much do you talk with friends about cars and driving?
Are you interested in motor sport? What sort? In what ways?

Car choices

Is the car more than a means of transport? Why?
Why your present car? After price . . .? How much did it cost? How long owned?
If we gave you another car would you drive differently?
Is the image important? Where does a car get an image? Is the car a status symbol?

Media, film, adverts

How do you think the media (film, TV) portray the car? Good, bad, realistic light?
Do you think the portrayal of the car in the media ever affects driver behaviour? Do you think you are affected?
What do you think of car adverts? Any you remember? Why? Which are effective?
Do adverts/ media determine the status/image of a car?
Are there any cars you wouldn't want to drive? Why? Other than utility?
Name a car that you think is particularly safe?

Knowledge

How much information on road/driver safety have you ever been given?
Who by?
Did you read it?

33. How much do you worry about having a traffic injury accident?
Why?
How many traffic injuries per year do you estimate there are in GB?
How many deaths per year?

34a. What percentage of these traffic injuries per year in G.B. involve:-
car drivers/passengers?
pedestrians?
cyclists?
motor cyclists?
HGV/bus drivers or passengers?

34b. What percentage of accidents do you estimate are the fault of the driver, the vehicle or the road environment or some interaction/combination of these?

One of the more common accidents for young male drivers is a SVA (single vehicle accident) with no other car involved often on a rural road in the evening and yet this is one of the less common types of accident for other age and sex groups. Any ideas why this is so?
Have you been involved in any accidents? What were the details? Were they your fault?

Assessment of own driving and possible measures

Do you think your driving is a reflection of your personality?

eg. Are you a patient or impatient person/driver?

Do you deliberately drive unsafely? . . . but you break the traffic law?

Isn't that a contradiction? Why?/Why not?

Do you feel comfortable driving a car? Why? When don't you?

Any suggestions that would make people drive more safely?

Would it work for you? Would you welcome such measures?

Would it bother you if someone told you you were a bad driver? Who would it bother you the most? Friends? Parents? Police?

How do you feel young male drivers are viewed as drivers by other 'groups' of people/drivers? Does it bother you? How do you react?

Anything else you would like to add, that we haven't covered?

Thank you for all your help.

£100.00

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