

Development Department Research Programme

The Speeding Driver: Who, How And Why?

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The Scottish Executive and the Scottish Road Safety Campaign commissioned research to follow up previous studies in 1991, 1994 and 1996 on the causes and consequences of speeding. The study consisted of: a review of national and international literature; focus groups with drivers of different types of speeding driver; interviews with crash-involved drivers; a review of recent anti-speeding campaigns and initiatives in Scotland; an analysis of a sample of police records of speeding offences; and an extensive household survey of over 1,000 Scottish car drivers. Results were compared with previous studies. A comprehensive picture of the attitudes and behaviours of speeding drivers in Scotland and of the association between their speeding behaviours and their recent crash-history was compiled.

Main findings

Speeding Behaviour and Attitudes

- Over the last decade in Scotland excessive speed in town has fallen. However, in 70 mph zones there have been increases in the percentage of drivers reporting excess speed (driving at 80 mph) and excessive speed (driving at 90 mph).
- Scottish drivers' attitudes to speed limits have remained largely unchanged. At the same time there has been a substantial rise in support for engineering measures to reduce speed in residential areas – support for vertical 'speed bumps' rose from 53% to 76% and support for 20 mph limits from 22% to 86%.
- The number of Scottish motorists who have seen speed cameras while driving in Scotland rose from 54% to 96%, with support for camera enforcement falling slightly from 80% to 75%.
- A sample of Police records for 2001 showed that most speeding offences occurred on built-up roads and that offending levels were highest during the weekday inter-peak period.
- Young males aged 16-25 were the most likely to offend seriously and be the subject of Police Reports for excessive speed.
- Comparison with the 1996 study suggested that the percentage of non-manual occupation drivers caught speeding has almost halved, while the percentage of manual unskilled drivers caught speeding has increased. There has also been an increase in the percentage of speeding offenders who are unemployed.
- For male drivers, the more likely they were to speed on different types of road, the more likely they were to have recently been involved in a crash whilst driving.

Focus Groups

Findings from eight focus groups covering a wide range of drivers including young, old, high mileage, rural and inexperienced, and mothers with young children illustrated some of the current common beliefs that inform Scottish drivers' conduct on the roads.

- Most focus group participants liked driving and could not imagine life without a car.
- All groups were agreed that, these days, women drive just as fast as men.
- Almost all agreed that most people drive at around 10 mph above the speed limit.
- Asked what was the fastest speed at which they would drive on the motorway and still feel safe, all groups gave speeds above the current motorway speed limit, ranging from 80 to 100 mph.
- Most thought that speed cameras are set to flash at 10 mph or more above the speed limit.
- Most agreed that it was difficult to drive modern cars at below 35 mph.
- Most were agreed that sometimes they were not sure about the speed limit of a road they were driving on, many complaining that the 'national speed limit applies' sign left them no wiser.
- They had mixed feelings about television anti-speeding advertisements, some admiring recent campaigns such as Foolsspeed and others believing that only hard-hitting, gruesome crash scenes would change speeding behaviour.

Speeding on Different Types of Road

Survey respondents were shown photographs of seven typical road types about which they answered a range of questions. The road types were: a 3-lane motorway; a 2-lane urban dual carriageway with central barrier; a wide

suburban road with a central reservation but with crossing points for right turns; a main road in town with shops, residences, bus stops and parked vehicles; a wide residential street with parked vehicles; a narrow residential road with many parked cars on both sides; and an empty rural single-carriageway A road. All seven scenes pictured light or zero traffic flow under clear daylight and dry weather conditions such that exceeding the speed limit would be feasible and not constrained by traffic density or inclement conditions.

Males reported driving significantly more often on motorways and country roads than females, but were better at correctly identifying the speed limit only for the motorway, with 92% of males and 85% of females selecting 70 mph. Between 80% and 88% of drivers gave the correct answer of 30 mph for the three town scenes but only half were correct for the other three road types (70 mph 53%; 40 mph 49%; 60 mph 53%) The suburban dual carriageway, was the least 'self-explaining' of the roads in making its speed limit immediately apparent from its geometry.

The proportion of males whose normal speed exceeds the speed limit for a road was greater than that for females on roads with higher limits, but not on slower roads.

Across all seven road types, drivers in the 21-29 age group were generally the highest proportion whose normal speed exceeded the speed limit. For example, 63% of 21-29 year old males and 44% of 21-29 year old females reported normal speeds above the speed limit on motorways.

Not all drivers wanted to drive fast or exceed the speed limit: 1 in 5 (22%) indicated preferred speeds below the 70 mph speed limit on the motorway and half (54%) said they preferred to drive at speeds below the 60 mph limit on the rural road .

Crash Involvement

17% of the male and 14% of the female survey respondents reported having 'been involved in a road traffic accident as a driver in the past 3 years'. Table 1 shows these figures and also lists the speed related road behaviours that differentiated between those with recent RTA involvement and those without.

Table 1: Factors elevating level of recent RTA involvement in male and female car drivers

	Male Drivers	Female Drivers
Overall % RTA involved in the last 3 years	17%	14%
Age Mileage	Aged 20-24: 33% > 12,000 miles pa: 25%	- > 12,000 miles pa: 25%
Normal speed > limit Been detected speeding	on 5-7 road types: 26% 21%	- 21%
More frequently:	Drive at 90 in a 70 zone Drive at 80 in a 70 zone Drive at 40 in a 70 zone Amber gambling	Drive at 40 in a 30 zone Drive at 50 in a 30 zone
Drive faster when:	Late for appointment Running behind schedule In fast moving traffic Feeling stressed	Listening to music
Not drive slower when:		Older passengers in car

128 drivers (12.1%) reported one crash; 20 drivers (1.9%) reported two crashes during that period, and 6 drivers (0.6%) three crashes. 41% were active crashes ('I hit another vehicle or obstacle or lost control of the car') and 53% were passive crashes ('I was hit by another vehicle'). The proportions of male and female drivers reporting all, active, passive and injury accidents did not differ statistically. Accident involvement varied with age for male drivers, reaching one third (33%) for male 20-24 year olds but did not vary significantly with age amongst female drivers. For both, however, the proportions that had been crash involved in the previous three years rose with increasing mileage from 1 in 10 for low mileage drivers (<5,000 miles pa) to 1 in 4 for high mileage drivers (>12,000 miles pa).

Two-thirds (65%) of the reported crashes happened in dry conditions; three-quarters (74%) between 09:00 and 19:00; 3 in 5 (62%) on roads with a speed limit of 30 mph or below, with 18% on 60 mph roads and 5% on 70 mph roads. Of the 47 accidents reported as one in which someone was injured, respondents indicated that the police had come to know of only 78% (37) of these, and of 35% of the non-injury accidents.

For male drivers, the more of the seven road types for which their normal speed exceeded the speed limit, the more likely they were to have recently been in a crash while driving. Of those male drivers whose normal speed exceeded the speed limit on none or just one of the seven pictured road types, 11% had been accident-involved in

the past three years, for two to four road types 20%, and for five to all seven road types 26% (Table 1). No such elevation was apparent for female speeders.

Interviews with eight crash-involved drivers found that all had suffered some degree of trauma as a direct result of their accident. For some it was physical trauma and for many, their involvement in a crash also brought psychological trauma. For all of them it made an immediate difference to their driving. But these changes to driving style were typically transient and most reported being 'back to normal' and driving fast again a few months later.

Speed Choices

Compared to 'how you would normally drive on your own ..', over half the survey respondents said they would drive faster when running behind schedule (58%) or when late for an appointment (57%). Males and females differed and there were large age differences, from 35% of females aged 70 and over to 80% of 17-20 year old males saying they would drive faster if running behind schedule.

One third (33%) of drivers would speed up if 'the traffic ahead is moving faster than you normally drive', 1 in 5 (22%) if 'feeling stressed', and 1 in 7 (14%) if 'someone is driving close behind you', though over one third (35%) say

they would slow down if being tailgated. 1 in 10 would drive faster if 'listening to music' while driving. 36% of 17-20 year old males and 18% of 17-20 year old females would drive faster 'with people your own age in the car', but hardly any drivers said they would drive faster with children or older people as passengers.

Drivers drive more slowly in inclement weather (fog, heavy rain), on unfamiliar roads, in slow moving traffic, and in the dark. No drivers said they would drive faster in fog or when they spot a speed camera. Those concerned with restraining drivers from speeding have little direct influence over many of the scenarios – weather, traffic flow, trip agenda, type of passengers, or choice of in-car entertainment – which may affect drivers' in-vehicle speed choices.

Males who reported having been accident-involved in the last three years were more likely to indicate that they drove faster when running behind schedule, when late for an appointment, when in fast moving traffic and when feeling stressed (Table 1). Females who had crashed in the past three years were more likely to drive faster when listening to music and to not drive more slowly with older people in the car (Table 1). For males, but not for females, those who had crashed indicated, on average, a significantly higher number of scenarios in which they would drive faster.

Only 1 in 20 drivers (5%) said they were likely 'in general, over the next 12 months', to drive slower. 1 in 11 (9%) 'would like to' drive slower. 1 in 8 (12%) thought their passengers would like them to drive slower. 1 in 5 (22%) of those with partners thought their partner would like them to. More than a third (36%) thought the police would like them to drive slower.

Speeding Infringements

Amongst the survey respondents, the most frequently performed of a set of 14 driving infringements were 'driving at 40 in a 30' with only 1 in 5 (21%) saying they 'Never' did it, and 'driving at 80 in a 70', with 31% saying 'Never'. Drivers also rated these two infringements as the least serious.

Four aberrant driving behaviours differentiated those male drivers with a recent crash-history and those without. Those who had been accident-involved in the past three years reported more frequently driving at 90 in

a 70, driving at 80 in a 70, driving at 40 in a 30 and amber gambling – 'speeding up to get through traffic lights that were changing to red' (Table 1). Two driving behaviours distinguished female drivers who had crashed in the past three years from those who had not. They reported a higher frequency of driving at 40 in a 30 and at 50 in a 30 (Table 1).

Females rated driving at 80 in a 70 and at 40 in a 30 as more serious than did males. For 12 of the 14 infringements those who rated them as more serious were less likely to report doing them. But despite a statistically significant relation between seriousness and self-restraint, 1 in 10 (9%) of those drivers who rated driving at 40 in a 30 as serious said they did it 'Often' or 'Very often'; as did 6% of those rating driving at 80 in a 70 as serious.

Asked to rate the likelihood of getting caught if speeding, a broad spread of responses was obtained across all of the seven road types with 14% to 18% rating the chances as 'Very likely' for six of the roads, but only 1 in 20 (4%) for the rural single carriageway road. On only two of the roads (motorway and wide residential) did the ratings for speeders (defined as those whose 'normal' speed for the road exceeded their own estimate of the speed limit for that road) and non-speeders differ significantly. This suggests that background judgements of likelihood of detection may play little part in drivers' habitual on-road speed choice.

Attitudes to Speed Limits

Male and female survey respondents differed in their opinions of whether speed limits were too fast or too slow on the faster roads but not on the slower roads. 38% of males compared to 17% of females thought the motorway limit of 70 mph too slow. 34% of females against 26% of males thought the 60 mph limit on the rural road too fast. One third of both (35% of males, 33% of females) thought the 30 mph limit on the narrow residential road too fast

Male and female drivers differed significantly in their attitude to speed limits on both motorways and 'other roads'. On motorways, more females (45%) than males (30%) thought 'Speed limits should not be broken at all', while more males (32%) than females (23%) thought that 'Speed limits are set below a safe limit and it is acceptable to exceed them by up to 10 mph'. On 'other roads', 55% of females and 43% of males thought 'Speed limits should not be broken at all'.

Anti-Speeding Enforcement

6 in 10 survey respondents (59%) thought the typical penalty for excess speed of £60 plus 3 penalty points 'About right', though more males thought it 'Too harsh' and slightly more females thought it 'Too lenient'.

Almost all, 96% of males and 95% of females, 'had seen speed cameras on any road in Scotland'. Asked 'How often do you drive on roads with speed cameras?' 62% of the males and 57% of the females said they did so 'Once a week' or more often.

Male and female drivers did, though, differ significantly in their opinion of speed cameras, with more females (82%) than males (68%) thinking them a good thing and more males (17%) than females (4%) against. Support for speed cameras increased with age, from 57% of 17-24 year olds to 87% of the over 65s in favour.

One quarter of the sample (27%: males 39%; females 15%) had ever been stopped by the police for speeding, and half of those stopped had been fined and/or received points on their licence. 1 in 5 (19%: males 23%; females 15%) had been flashed by a speed camera in the past three years but 4 out of 5 (81%) of these reported that on the most recent occasion, after having been flashed, nothing further happened.

Drivers, both male and female, who had been caught speeding (had ever been stopped by the police for

speeding or had been flashed by a speed camera in the past three years) were also significantly more likely to have been involved in a road traffic accident in the last three years. The figures almost double: for males from 12% to 21%; for females from 11% to 21% (Table 1).

The review of anti-speeding campaigns showed that Scottish Road Safety Units agree that speeding drivers, especially male drivers under 25 and over 40, should be targeted by well planned and resourced publicity campaigns, and support and commend the SRSC's Foolspeed campaign; that Scottish police forces are keen to dedicate resources to anti-speeding enforcement that will reduce casualties; and that Scottish local authorities have supported Safer Routes to School initiatives and are agreed they need to resource anti-speeding measures at the community level.

Comparison with previous studies

The current study reported respondents' frequency of speeding and other infringements, using exactly the same wording of items as had been used in the two earlier studies. Table 2 makes the comparison between the proportions of Scottish drivers who said they 'Never' undertook each behaviour in each of the three studies.

Table 2: Proportions of Scottish drivers who 'Never' undertook each driving infringement in three surveys

% 'Never'	1991	1994	2002	
Driven at 40mph in a 30mph zone	16	25	20	Same
Driven at 80mph in a 70mph zone	36	42	29	Worse
Carried out a manoeuvre without signalling	39	37	52	Better
Followed too closely the vehicle in front	52	49	64	Better
Driven at 50mph in a 30mph zone	59	63	82	Much Better
Driven at 90mph in a 70mph zone	65	67	58	Worse
Driven after drinking alcohol but when you think you are OK	66	75	78	Better
Driven through a red light	67	68	71	Same
Crossed a continuous white line	71	60	65	Worse
Overtaken on the inside	75	73	76	Same
Speeded up when being overtaken	76	75	86	Better
Had a 'race' with another driver	91	88	94	Same

The final column of Table 2 indicates whether levels of commission of these aberrant driving behaviours has got better, got worse, or stayed the same over the last decade. Levels of refraining from drinking and driving – even when ‘you think you are OK’ – have improved considerably from 66% abstention to 78%. The bulk of this improvement occurred between the first two surveys, with an elevation from two-thirds (66%) to three-quarters (75%) between 1991 and 1994.

Levels of commission of other aberrant behaviours have also reduced. Only a half of Scottish drivers now say they ever carry out a manoeuvre without signalling, only a third to ever closely following, and only 1 in 7 (14%) to ever speeding up when being overtaken. Levels of red-light running and overtaking on the inside remain much the same. However, for three of the 12 items, behaviour has got worse. One of these, crossing a continuous white line, took a sharp dip from 1991 to 1994 though has

since somewhat recovered. The other two behaviours which show higher levels of commission both involve driving in excess of the 70mph speed limit

It is clear that while excessive, though not excess, speed in built-up areas has dramatically reduced across the last decade amongst Scottish drivers with 4 in 5 (82%) currently saying they ‘Never’ drive at 50mph in a 30mph zone, speeding behaviour on the motorways and dual carriageways continues to increase. In 1991 36% said they ‘Never’ drove at 10mph above the speed limit and in 2002 this figure had fallen to 29%. In 1991 65% said they ‘Never’ drove at 90mph on motorways, in 2002 this figure was down to 58%. So excessive speeding in town is down, but both excess and excessive speeding on motorways and dual carriageways is up.

Table 3 shows the levels of support for road safety engineering measures during the same period.

Table 3: Attitude to road safety engineering measures across three surveys

<i>[% in favour]</i>	1991	1994	2002
Road narrowing / gateways	15	17	68
Road humps / sleeping policemen	53	40	76
Speed limits of <20mph	22	25	86

There has been a remarkable rise in levels of support for road safety engineering measures across the decade. Those in favour of road narrowings and gateways has risen from 1 in 6 (15%) to two-thirds (68%). Those expressing support for road humps or ‘sleeping

policemen’ to reduce speed of passage has risen from a half (53%) to three-quarters (76%), despite an initial fall between 1991 and 1994. Where in 1991 1 in 5 (22%) of Scottish drivers supported 20mph speed limit areas, in 2002 6 out of 7 (86%) do.

Conclusions and Recommendations

Over the last decade, amongst Scottish car drivers, excessive speed in town has fallen but though there is now strong support for urban traffic calming measures, excess speed in town remains unchanged. In addition, excess and excessive speed out of town has risen. Knowledge of speed limits is poor other than for motorways and urban streets where it approaches 90%. Many drivers believe that 'most people drive at around 10 mph above the speed limit'. One third of Scottish drivers routinely drive at above the speed limits on motorways and on urban main roads and wide residential streets despite generally knowing the speed limits for such roads. However, 1 in 5 would prefer to drive at below 70 mph on motorways and half at below 60 mph on rural 'A' roads.

Thus many, though not all, Scottish drivers speed. In general they do so because they have the opportunity to, feel the obligation to, or cannot resist the inclination to. Speeders, identified in this study in a number of ways, have a higher likelihood of crash involvement. For example, those drivers who had been stopped for speeding or flashed by a speed camera had double the incidence of recent accident involvement.

From this study we now have a good understanding of the causes of speeding and of which behaviours identify 'crash magnets'. Table 1 summarises sets of particular road behaviours and speeding proclivities associated with recent crash involvement for male drivers and for female drivers. The best way to reduce the risk speeding drivers pose to themselves and to other, often more vulnerable, road users is to adjust their driving styles. Engineering, enforcement and education countermeasures such as traffic calming, signage, publicity campaigns and the content of driver training courses could usefully be informed by these findings.

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