Staffordshire Fire & Rescue Service
Evaluation of the Crash Course
March 2009

Prepared by

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Executive Summary

The original brief for this research from Staffordshire Fire and Rescue Service and its partners was:

- To evaluate the impact that the Crash Course has on the participants' attitudes to safe road user behaviour;
- To evaluate the effect that the Crash Course has on participants' intention to drive safely in future;
- To determine the appropriateness of the content and delivery of the programme for the primary target age group;
- To evaluate the appropriateness of the content and delivery of the project to meet its stated objectives;
- To outline possible courses of action for progression of the programme.

The specification also included paying particular attention to gender differences in attitudes to driving and the nature of peer pressure on young people.

The evidence and conclusions are summarised here in relation to this brief.

Does the course have a positive impact on the participants' knowledge of safety issues?

The evidence from the study indicates that Crash Course does have a positive impact on young people's knowledge about how to be safer on the road. There were two knowledge based questions in the survey: one concerned the causes of road crashes and the other concerned the ways in which passengers could keep themselves safer. The comparison between those who had experienced the course and those who had not shows statistically significant higher total scores on the questions designed to test knowledge of the key causes of road collisions ($p=0.001$). The comparisons on the matched sample of young people before they had received the course and afterwards showed improvement at a level approaching significance in respect of what they could do to keep themselves safer as passengers ($p=0.068$).

Does the course have a positive impact on the participants' attitudes to safe road user behaviour?

The evidence shows that the course did have a consistent positive effect on attitudes towards the wearing of seat belts. At a statistically significant level, of those who completed the matched 'before' and 'after' questionnaires, more young people felt it was acceptable always to wear a seat belt after the course than before ($p<0.001$). For those who had attended the course compared with those who had not, the effect was similar ($p=0.034$).

For those who answered the questions 'before' and 'after', significant improvement was also evident in respect of whether they thought they could ask a person who had had too much to drink to stop (their ability to be assertive). After the course a greater number of the young people felt able to ask such a driver to stop ($p=0.047$).

In the comparison of those who received the course with those who did not, those who had seen the presentation were significantly more likely to view “Always wearing a seatbelt” as acceptable ($p=0.034$) and also to think that “reading a text quickly while driving” was “stupid” ($p=0.001$).

The qualitative evidence from the focus groups confirmed that virtually all the young people felt they had gained from the course, had a greater awareness of risks on the road and an increased knowledge about how they might be able to stay safe.

Does the course have a positive effect on the participants’ intentions to drive safely in future?

409 young people completed the free text question about how they now wished to behave in future. By far the greatest number of responses indicated an intention to wear a seat belt in future (253 or 62% of those responding to the question). There is little doubt that this message is absorbed by a considerable proportion of the participants. A number also indicated that they would press others to do so as well. After that the most numerous answers concerned the resolution not to distract a driver and an intention to tell other drivers to reduce their speed or to drive more slowly when they became drivers themselves. Other responses showed an intention not to drink and drive or go with an intoxicated driver with a small number of other safety issues mentioned.

The young people’s comments in the focus groups confirmed the finding that the course does have a positive effect on intended behaviour, with respondents being able to illustrate how they now wanted to behave as drivers.

Is there any evidence of behaviour change as a result of the course?

The survey compared the self reported behaviour over the previous month for those who had attended the course and those who had not. A positive statistically significant difference was found in the self reports of those who had attended the course in respect of how frequently they had “messed” about in a car, potentially distracting the driver ($p<0.001$). Those who had attended the course also reported being more frequently “scared about the driving” ($p=0.006$), from which an inference might be drawn that they had become more sensitive to risk.

The qualitative evidence from both adult stakeholders and young people provided anecdotal examples of changes in behaviour after the course that offered some triangulation for the quantitative findings. These examples concerned not only the wearing of seatbelts but other changes such as persuading drivers to desist from mobile phone use or refusal to be a passenger with a driver who had been drinking. Some of the young people were clearly also influencing their peers or their families.

Are the content and delivery of the programme appropriate for the primary target age group?

The researchers observed the course in action with young people on five occasions. The presentation held the attention of the vast majority of the young people for the

full two hours. There were no technical problems in any of the presentations observed. The team handled the material and the different media competently, moving well from one item to another. The presentation was described by stakeholders as “very professional”.

At the start of the observation visits, some members of the team feared that the material would be overwhelming and too distressing for 15 or 16 year-olds. In the light of the findings, this concern has however now dissipated. Only 34 of those completing their opinions after seeing the presentation found it “too scary” and 76 felt it upset them too much. Focus groups and teacher stakeholders confirmed that the force of the messages was perceived as legitimate, especially given that parents had given permission and any pupil could opt out. The fear-based messages need to be of sufficient strength to motivate a response without being gratuitously graphic. The researchers felt that approximately the right level was reached.

While many 15 or 16 year olds still have mercifully little life experience on loss, trauma, or bereavement to relate to the course content, there was no evidence that any significant proportion were ‘shutting off’ from the messages. The focus groups confirmed that most of those respondents felt the shocking nature of the course was necessary and that it did not cause shutting down of responses or particular resistance. It is not recommended that the course should be presented to pupils any younger than Year 11.

The research team felt, however, that the potential of emotional disturbance was considerable and that the Crash Course partnership needs to be pro-active about encouraging excellent levels of pastoral care for participants. This is for the most part the responsibility of the schools or other host organisations but should be encouraged at every opportunity. It was felt that an information leaflet should be made available with appropriate contact numbers of agencies to which young people could turn, in addition to their school pastoral support system. This would help to ensure that the responsibilities of the Crash Course partnership are fully met.

Are the content and delivery of the programme appropriate to deliver its stated objectives?

The view of the research team is that the Crash Course is broadly appropriate to deliver on the objective of increasing safe behaviour in cars with a view to reducing the number of young people killed or seriously injured. It is an unusual presentation and may even be unique. Its particular strengths are the use of speakers who have first-hand experience; their ability to use feelings and emotions as well as factual information (both female and male presenters); the credibility of the multi-agency delivery team and ownership by the partners. The role of the Fire and Rescue Service is significant. It provides an attractive and neutral image to most young people, compared for instance to the police or even the Youth Service and it can provide ample evidence of local incidents. This part of the positive image and branding of the course should be retained.

In the view of the research team, the ‘mechanism’ making the Crash Course effective is the use of a combination of facts, visual images and emotion in face to face delivery by a team of credible people with direct experience of the effects of

road collisions. The team requires factual knowledge, stark images and a variety of first-hand experience. Team members have to be able to show appropriate feelings but also to control their emotions. They need to be able to engage a youth audience and control anger about inappropriate responses. They need a context of pastoral support for themselves as well as for the young participants. They need stable supportive management and the vigorous backing of a multi-agency partnership.

The core content file of the Crash Course should be revisited and updated. The essence of the educational messages and methods needs to be captured to ensure continuing fidelity and for future transfer elsewhere. Thereafter copyright should be taken on this effective pattern of intervention so that the essential mechanism can be preserved and replicated.

It is tempting to think that the Crash Course could only be successful with the personalities of the present team involved. These individuals are undoubtedly talented and committed but there is no evidence in this study to suggest that they are irreplaceable or that the basic mechanism could not be transferred elsewhere. It is essential that new personnel are recruited to the team as a matter of priority. Failing that this effective intervention is certain to die out in time and its coverage will be necessarily limited. There is no spare capacity within the current team strength to deliver more and demands are increasing for further presentations to adults. The report suggests the main elements for a person specification for new team members drawing on the responses of adult stakeholders and the young people themselves.

From the observations and the suggestions from young people, a few relatively minor recommendations have been drawn that might improve the impact of the course. These issues are outlined in the report and have been discussed with the Crash Course team for their consideration. In particular it is suggested that more content may be needed on coping strategies and on the effects of relatively small amounts of alcohol on judgement and coordination.

Follow up could be strengthened. Some schools do discuss the topic in tutor groups after the presentation but few take consistent opportunities to reinforce the messages in other parts of the curriculum. This is a missed opportunity. Similarly there is a need for a handout that can be given to the young people for reference to reinforce the essential messages of the course. This should address directly key steps that young people can positively take to make themselves safer even before they are drivers. It is essential not to leave people with a sense of helplessness at the end of the input. Such a handout might be combined with information on other road safety resources and the contact details of support agencies.

Further exploration is needed for Crash Course to seek topics or styles that might further harness the motivation of young men to act safely. In respect of deprivation, it is crucial that delivery should continue to schools and colleges in Stoke-on-Trent where there is more widespread deprivation than in the surrounding county.

Recommendations

In the light of the evidence the research team makes the following recommendations:

1. The Crash Course has demonstrated its effectiveness and should be retained as part of the overall portfolio of road safety interventions in Staffordshire and Stoke-on-Trent.
2. The core educational work with young people should be permanently funded.
3. The core task should remain the achievement of near universal coverage at Year 11. This is the point at which maximum coverage of the youth cohort can be secured. The essential nature of the programme should not be changed in response to pressure for income generation or demands for services to adults.
4. The course is likely to be effective with adult audiences as well as with young people. The partnership should consider using income generated in this way to fund development of the team and the dissemination of the course methods.
5. The design and content file for the course should be revised and updated to ensure all the current essential messages and methods are reflected. It should then be made copyright.
6. Particular attention should be paid to developing and increasing the content on coping strategies.
7. A handout should be made available for reference giving key messages and actions that young people can take to reduce risk.
8. Information should also be provided on agencies able to give counselling, advice or support outside the school context.
9. New examples should be constantly sought to avoid the presentation becoming stale or dated. Items of direct relevance to young people, such as the safe use of motorbikes and scooters, could be particularly valuable.
10. The effects of relatively low levels of alcohol should be stressed as awareness of effects and limits is poor amongst young people.
11. Wherever possible schools, colleges and training providers should be encouraged to follow up and reinforce the road safety messages in other parts of the timetable in as many subject areas as possible.
12. The Crash Course core team should be consolidated if possible with a single employer and common line management, preferably in local authority education in order to link most effectively with schools, colleges and the Youth Service. Ideally salaries should be reviewed.
13. Strong links to existing partners should however be preserved, especially to retain the essential contribution of the Fire and Rescue Service and the police. Branding should be carefully considered for appeal and neutrality.
14. The core team needs a stable and adequate physical base and administrative support should be considered.
15. All those engaged in delivery should have a system in place for pastoral support and the management of stress where that is not already provided.
16. The Crash Course is currently too heavily dependent on a few key staff: the essential messages and methods should be set down and used in the recruitment of new contributors.
17. The effectiveness of Crash Course should be transferable: partnerships should be sought with one or two other areas to develop pilot schemes, subject to adequate funding.
18. Progress and effectiveness should be monitored on a continuing basis. Further research could usefully address (i) comparisons with areas which do not use such interventions,(ii) the longitudinal effects of the intervention and (iii) motivations of young men towards risk taking and what messages might have effective appeal

Section 1: Introduction and background

1.1 The purpose of the evaluation

The Youth Affairs Unit at De Montfort University was commissioned in September 2008 to deliver this evaluation of the 'Crash Course'. In the words of the specification, the programme is "primarily aimed at young people who may be at risk of being involved in the horrors and destruction created by serious fatal road traffic collisions." It aims to change attitudes and behaviours in a positive direction and consequently to contribute to reducing the numbers of young people killed or seriously injured on the roads in Staffordshire and Stoke-on-Trent. The objectives of the research as specified are:

- To evaluate the impact that the Crash Course has on the participants' attitudes to safe road user behaviour;
- To evaluate the effect that the Crash Course has on participants' intention to drive safely in future;
- To determine the appropriateness of the content and delivery of the programme for the primary target age group;
- To evaluate the appropriateness of the content and delivery of the project to meet its stated objectives;
- To outline possible courses of action for progression of the programme.

The brief included paying particular attention to gender differences in attitudes to driving and the nature of peer pressure on young people. It also sought an examination not only of the sustainability of the local programme but its transferability to other areas.

1.2 The nature of the Crash Course

The Crash Course is a programme of approximately two hours delivered by a multi-agency team. It is delivered primarily to young people in the county of Staffordshire and in the unitary authority of Stoke-on-Trent. It is a 'hard hitting' presentation including real footage of road crashes in the county, filmed interviews and first-hand accounts from presenters. It includes testimony from those who have cared for casualties, investigated deaths on the road, experienced the results as families or victims, or suffered the consequences of their actions on the road in terms of convictions or even custody. It is delivered by a team normally composed of the two Crash Course full-time coordinators (who are drawn from the Youth Service and Victim Support), a representative of the Staffordshire Fire and Rescue Service and a representative of the Staffordshire Police Accident and Investigation Unit. The film footage used of crashes or interviews with those involved has been produced by the Audio Visual Unit at the Fire Service. All the victims and casualties whose stories are used have given their consent.

The Crash Course is an unusual presentation in a number of ways.

- It uses a mix of film material and live presentation. All the material is of local road crashes and incidents involving local people.
- Everything presented is 'real'. The collisions presented are real life examples. There are no actors. The presenters all speak of their first hand experience.

- The presentation offers factual information but also does not shy away from the emotional reactions of those involved.

There is little doubt that the presentation evokes strong reactions and can be upsetting. The organisers make no apology for this and, in view of the wide take-up of the course, the inference is that the stakeholders regard this as legitimate in the light of its aim of saving lives.

1.3 The national context

The Crash Course takes place against a national backcloth of concern about road safety. Cars are our most prolific lethal weapon. While the number of people killed in road accidents fell by seven per cent between 2006 and 2007, nevertheless some 2946 people were killed on the roads in 2007 and a total of 30,720 people were killed or seriously injured in that year (Department for Transport, 2008). Novice drivers are particularly vulnerable. Approximately one in five of all new drivers, the majority of whom are young, are involved in at least one crash within a year of passing their test (House of Commons Transport Committee, 2007).

The Government has set a target of a 40% reduction by 2010 in deaths and serious injuries in road accidents against the baseline of the 1994-98 average. This target is now incorporated in the key National Indicators as NI 47, 'People killed or seriously injured in road traffic accidents' and NI 48, 'Children killed or seriously injured in road traffic accidents'. (DCLG, 2007.) The Driving Standards Agency is currently consulting on proposals to strengthen the driving test and introduce a pre driver qualification in road safety (Driving Standards Agency, 2008).

A difference can be seen in respect of gender that is similar to trends in anti-social behaviour or criminal offences. In 2006, male casualties on the roads made up 58% of all casualties but 76% of those killed (DfT, 2007) Young male drivers (17-20) are however known to be approximately seven times more at risk than all male drivers and this figure increases with night time driving between 2am and 5am to 17 times higher (Ward et al, 2005). About 225 are killed or seriously injured annually. Those in the slightly older age group (21 – 25) have twice the risk and this increases to almost three times the risk for night time driving.

Some of the differences between men and women can be seen around aggressive or risk-taking driving behaviour. Young men tend to be more likely than young women for instance to be involved in 'taking and driving away' or other violations of traffic regulations. Some researchers argue that aggression, deviance or sensation seeking in men may be driven by biological differences such as hormone variations. Others hold that cultural factors such as socialisation and concepts of masculinity are also contributing. (Social Issues Research Centre, 2004.)

Some differences also exist in relation to social deprivation. Road crashes are a major cause of death among children, representing approximately 12% of all deaths in the 5-14 age group with increasing proportions as children get older. Social and economic factors are related to child road injuries with children from Social Class V being five times more likely to be killed as pedestrians than those from Social Class 1. Dangerous roads and fewer places to play are factors in this picture (Child

Accident Prevention Trust, www.capt.org.uk). In relation to adolescents, young people from deprived areas tend to show higher rates of anti-social behaviour and criminal convictions and accident liability is broadly related to behaviour traits of deviance. There is some evidence that adult road casualty rates are higher in areas with a high proportion of rented housing, low percentages of car ownership, low proportions of residents in employment and higher proportions of Social Class V but these differ in some circumstances between pedestrians and car drivers (Abdalla, I., et al, 1998). However traffic collisions (controlling for miles driven) do not appear to be consistently linked to social class but are positively correlated to being young, male and inexperienced (West, 2004).

1.4 The role of the Fire and Rescue Service

The Fire and Rescue Services Act 2004 laid upon each Fire Service the duty of "promoting fire safety in its area". It also made it obligatory to "rescue people in the event of road traffic accidents in its area" and set down a duty to "protect people from serious harm, to the extent that it considers it reasonable to do so, in the event of road traffic accidents in its area" (Part 2.8). The second clause contained some ambiguity. In initial discussions on implementation, the Government appeared to intend simply the power to close roads or take other appropriate measures to protect people at the scene of a collision but nevertheless made the promotion of "community safety" with other partners a statutory duty. The Fire and Rescue Services in most regions therefore play some part in road safety education. This is not however universal and a few areas interpret the legislation as not requiring this specific function. The Staffordshire service has embraced the full prevention role in relation to both fire safety and road safety.

1.5 The local context and road safety partnerships

The Staffordshire picture on road traffic accidents is broadly similar to the national picture. Staffordshire's monitoring of road casualties shows that almost one third of all casualties in road traffic collisions between 2005 and 2007 were aged 16 – 25, and in some districts the average reached 40% (Staffordshire Observatory, 2008a). Over a ten year period to 2006, 40% of all road collisions involved young drivers aged between 16 and 25. This age group on the other hand accounted for only 10% of the county's driving licence holders (www.staffordshire.gov.uk, 2006). In Stoke-on-Trent, during 2007 young people aged 16-19 made up 15% of all road casualties and the 20-29 year-old group made up 27%. Both groups together in the age band 16 to 29 made up 42% of all casualties (www.stoke.gov.uk, 2008). Key problems for road safety in the county as elsewhere included excessive or inappropriate speed, not wearing seatbelts, driving under the influence of drink or drugs, distraction and passenger behaviour, and peer pressure to take risks. For young drivers, inexperience also plays a major part in collisions (Young Driver Information Pack, 2008). Other risks include the use of mobile phones while driving, drivers who are not licensed or cars that are not maintained and tested.

Patterns in respect of gender are also similar locally and nationally. In both Staffordshire and Stoke-on-Trent, males are disproportionately represented in road casualty figures. In Staffordshire, 19% of all casualties killed or seriously injured were aged 16 to 20 (October 2004 to September 2007) and 83% in that age group

were male. While this may be partially explained by the fact that there are more male drivers than female drivers in Britain, the proportion of males within this age group being killed or seriously injured is much greater than the proportion of males in the driving population, suggesting that other factors are at work such as speed (Staffordshire Observatory, 2008a).

Looking at national comparisons, few areas of Staffordshire suffer high levels of multiple deprivation. Only 6 of the 525 Lower Super Output Areas (SOAs) in Staffordshire were in the top ten per cent of the most deprived areas in England in 2007. This represents just over one per cent of all areas in Staffordshire and is equivalent to a population of 8000. Approximately a further 60,000 people live within the 40 SOAs which fall in the group of the 10% - 20% most deprived areas (Staffordshire Observatory, 2008c). Deprivation levels for Stoke-on-Trent are much higher, with 53 Super Output Areas in the top 10% most deprived for the country (City of Stoke-on-Trent, 2006). The Corporate Plan indicates that out of 354 English districts, Stoke-on-Trent is rated as the 36th most deprived on income deprivation and 21st most deprived on employment deprivation (City of Stoke-on-Trent, 2005). Research in Staffordshire has confirmed the national picture that there is a correlation between areas of deprivation and deaths and injuries to children on the roads. There is a statistically significant correlation between the number of child casualties recorded in an area (2005 -2007) and the level of deprivation as recorded in the Indices of Multiple Deprivation 2007 (Staffordshire Observatory, 2008b). The pattern for adolescents is likely to show the same characteristics but it should be noted that anecdotal evidence from the Crash Course team reported that behaviour from private school pupils is very much the same as that in other schools. Teenagers from wealthy families can and do take risks in their use of cars and in some cases may have more access to faster cars, drink or drugs.

Staffordshire and Stoke-on-Trent both have Road Safety teams and extensive partnership working on issues of risk between the local authorities, the police and the Fire and Rescue Service. The effort is data led and a coordinated programme of measures is in place to increase road safety including traffic cameras and surveillance; road engineering and improvements; enforcement campaigns on particular issues such as using seat belts or not using mobile phones when driving; and measures in sentencing and diversion for drivers who commit offences. The local authority Road Safety Officers undertake road safety education in primary schools. In Staffordshire, in addition to the Crash Course, the local authority also offers a Crash Investigation Project for secondary schools which involves smaller group work and project work on safety issues and Pass Plus Extra, which is a course of six practical modules for newly qualified drivers. These programmes are also offered to Stoke schools. A new young driver coaching programme has also been introduced in Staffordshire where young drivers with approval from parents agree to training and the installation of a monitoring device in their vehicles in exchange for reduced premiums with Admiral Insurance. Early in 2008, the scheme won the Prince Michael Road Safety Award. Stoke-on-Trent offers a comprehensive road safety guide for residents (City of Stoke-on-Trent, 2008). Both authorities monitor road traffic casualties for the National Indicators 47 and 48.

What is striking about the local picture in Staffordshire and Stoke-on-Trent is that the numbers of people killed or seriously injured on the roads has been falling. In

Staffordshire, the 'severity ratio' (or the proportion of casualties that are killed or seriously injured) for all road user types (pedestrians, cyclists and passengers) is lower than in Great Britain as a whole. In 2008, total casualties from January to July 2008 fell by 557 (22%) from the previous 3 year average. For 16-25 year-olds, the reduction was somewhat more marked as casualties started to fall in 2007 and fell in January to July 2008 by 198 from the previous 3 year average of 819 per annum (24%). (Internal briefing, Staffordshire Casualty Reduction Partnership, Dec. 2008.) While it would be impossible without an elaborate study against a control area to conclude that Staffordshire's road safety strategy is having a greater effect than those in other areas, the evidence is encouraging. It is probable that the Crash Course is playing a positive part in the overall portfolio of partnership efforts to reduce casualties amongst the adolescent age group, particularly as the first two years of Crash Course development and delivery to 15 and 16 year olds will only now be affecting the cohort of young novice drivers.

1.6 Development of the Crash Course initiative

The Crash Course has been locally developed. The initiative started in 2004, when agencies in Newcastle-under-Lyme were considering use of an Avon and Somerset road safety programme. The police and their partners contacted the Youth Service to see if any of the workers were interested in developing a similar programme for Staffordshire. At this stage, Ann Morris, the first coordinator, took up the challenge and started contacting other agencies about potential input. These included Victim Support, where Colette Bennett, the second coordinator, was asked to get involved. The Collision Investigation Unit of Staffordshire Police also became involved a little later on. The Crash Course began its life as a piece of Youth Service targeted work delivered primarily to Year 11 pupils in schools to increase awareness of risks and the capacity to resist poor passenger and driver behaviours. The contributors included the Fire and Rescue Service, road safety officers, the police, the Youth Service and Victim Support. At first the presenters used the Avon and Somerset model called the Impact Road Show but could not gain permission to adapt it. They began to use more of their own experience and see the benefit with their audiences and the decision was taken to develop a tailored local course.

In 2004, HM Coroner for the County became involved in the partnership. He had been outspoken in the press about the irresponsibility of a young motorcyclist with no licence who had been 'showing off', crashed his bike and killed himself. The Crash Course team invited the Coroner to a presentation and asked him to support the programme. He has chaired the partnership board since this point providing invaluable support for the initiative.

In 2006, the Fire and Rescue Service provided increased capacity for the initiative to assist in presentations and to lend additional impetus to the ability to get access to schools. One officer was given additional staffing support so that he could contribute to Crash Course almost on a full time basis. The initiative had strong support from the incoming Assistant Chief Officer with the responsibility for community safety, who had previously had a role in identifying good practice including road safety education initiatives as part of the Fire Service national inspectorate dealing with integrated risk management. The target of assisting to reduce deaths and injuries on the road was embraced as part of the overall education effort along with promoting fire safety and

arson reduction. Crash Course was seen as emerging good practice in prevention work.

By 2005, the course was becoming known and it was suggested that an application should be made for funding to put it on a firmer footing. The application was made by the Youth Service with the Fire and Rescue Service taking on the lead body role. On 22 February 2006, the Cabinet of Staffordshire County Council approved three year funding of approximately £126,648 to support the delivery of the course to schools and other youth related institutions on the recommendation of the Cabinet Member for Children and Lifelong Learning and the Corporate Director for Children and Lifelong Learning. The City of Stoke-on-Trent also contributed. In kind support was provided by the Fire and Rescue Service and the Police. The Service Level Agreement (SLA) specified the Fire and Rescue Service as the lead body and governance of the programme by a partnership group including the Fire and Rescue Service, the Youth Service, elected Members representing the county and the City of Stoke, Victim Support, Staffordshire Police, Road Safety Officers from both local authorities and an independent chairperson, with the ability to co-opt other agencies as appropriate. The main target audience was envisaged as school pupils in Year 11 as well as smaller groups of young people seen as especially at risk. The priority was seen as delivery in the most urbanised areas. The SLA also lays down the requirement for cooperation and consultation across the partnership to avoid duplication or confusion.

The current Crash Course presentation includes speakers from the Fire and Rescue Service, the Police, the Youth Service and Victim Support. There is film footage of a contribution from HM Coroner and of an interview with a young person in custody. Further film clips or still images show road crashes that occurred in the county and impact safety tests on vehicles. The speakers develop their input from their own experiences and their own emotional reactions to them. There is no set script. However, the key messages are described in the design file for each contribution and are reinforced by more than one speaker. They include:

- The importance of wearing seat belts both front and back;
- The effects of inappropriate speed;
- The effects of alcohol or drugs on driving ability;
- The importance of not using a hand-held mobile phone or receiving or sending texts while driving;
- The effect of road crashes on victims and their families;
- The danger of distracting the driver;
- The actions young people can take to keep themselves, their families and friends safer in cars.

1.7 Previous evaluations

Two evaluations have commented on the effectiveness of the Crash Course in the past. The first was conducted internally in May 2007. 36 young people and their teachers were invited to take part in an evaluation day. For half the group, it was twelve months or more since they had seen the presentation. Virtually the whole group felt that Crash Course had made a lasting impact on them and changed their attitudes towards road safety. Almost all said that they now always wore a seat belt. In terms of reaction to the course, the young people said that it was the fact that all

the presenters had either personal or professional experience of road traffic collisions that made the course so effective.

The second study was commissioned by Staffordshire County Council Road Safety and Sustainable Travel Unit to examine the impact of the interventions of both the Crash Course and the Crash Investigation Project, offered by the road safety team. The research was conducted by Brainbox Research Ltd. Using questionnaires before and after the inputs with 222 young people and focus groups involving 32 pupils, it found that the interventions "increased their perception of risks associated with driving ...and increased their intentions to stay safe on the road." (Fylan, 2008.) The Crash Course was seen to be memorable, cost effective and flexible and in particular to have had a greater effect on the emotional aspect of attitudes. The results after pupils had received the Crash Course showed "a slight increase in positive attitude", an increase on "instrumental attitudes" and "self-efficacy" and on scores for the "intention to drive safely." In relation to risk taking scores, Crash Course "produces a significantly greater reduction in the risks that young people think they will take as a result of participating in the course ($p<.001$)."

1.8 Delivery of the Crash Course

The Crash Course is delivered in a number of different settings. This variety has increased over time as the course has become better known. The primary audience for the course has always been regarded as 15 to 16 year-olds in Years 11 or 12 of secondary school (usually termed 'high schools' in Staffordshire). This is partly because these young people may be shortly learning to drive or can frequently be passengers with their peers who are novice drivers. It is also because of the aim of reaching this young audience with maximum coverage: the school cohort at Year 11 is the last point at which there is a 'captive audience'. All delivery to schools is currently free of charge under the Service Level Agreement with Staffordshire County Council and Stoke-on-Trent City Council.

For various reasons, the Crash Course team has also delivered on a similar basis in other settings. Colleges of Further Education and Training Providers are included where they request the course as these are both settings which receive considerable numbers of those 16 year-olds who do not stay on into Year 12, the 'sixth form' at school. The team has also been invited to present to young people regarded as particularly 'at risk' of illegal or dangerous driving at Young Offender Institutions or through Young Driver training. In some cases there has been extensive cooperation with the police to reach particular local groups such as the 'boy racers'.

The further extensions of delivery are to adult audiences. Staffordshire Police now ask for the Crash Course as part of their police driver training. Significantly, the police are now also using the Crash Course as a measure in response to certain driving offences. Drivers, for example, who are given a fixed penalty ticket for use of a hand-held mobile phone while driving are currently fined £60 and receive 3 points on their licence. Under the arrangement with the Crash Course, such drivers in Staffordshire are offered the alternative of paying the £60 and attending the Crash Course instead of receiving the points on their licence. Private companies and other public bodies also request the course as a corporate delivery for groups of staff, in part to comply with their responsibilities to promote health and safety to staff

especially where driving is a major part of their duties and in recognition of the recent legislation on corporate manslaughter. These forms of delivery to adults are all income generating.

Information provided by the Education Department websites for Staffordshire and Stoke-on Trent indicates a total of 55 secondary schools in Staffordshire and 17 in Stoke. It can therefore be estimated that between 50% and 80% of these schools receive Crash Course in a typical year with other young people contacted through colleges or other settings. The reduction in the number of schools from 2006/7 to 2007/8 is understood to have been caused chiefly by reorganisations and mergers of schools in Stoke-on-Trent in that period, which meant that schools were less able or willing to host outside presentations. The numbers of participating schools in Stoke is rising again now. Given the small core team, the quantity of delivery and the number of different settings reached is impressive. It is clearly dependent to a large extent on a positive reputation. It is also remarkable that in all the visits and interviews conducted in this study, there was not one adverse comment about the administration or reliability of the course delivery. Table 1.1 below summarises this considerable achievement.

Table 1.1: Settings and quantity of Crash Course delivery

Institutions or settings	**April 2006 – March 2007**	**April 2007 – March 2008**	**April 2008 – Dec 2008**	**Jan 2009 – Feb 2009**
Schools	64	44	27	9
Colleges	18	19	9	1
Training providers	16	20	11	1
Other, (YOIs) etc.	6	32*	10*	1*
Diversion			22	6
Police driver training		7	6	
Corporate		17	8	2
Total attendance (all settings)	**14,988**	**8,566**	**7,889**	**1,821**

***Includes settings for young people not in education, and young drivers.**

Section 2: The design and methodology of the study

2.1 Main elements of the design

Proposals for the research design were refined and finalised in close consultation with the key managers and the Crash Course leaders at the Staffordshire Fire and Rescue Service immediately following appointment of the research team. The design approach aimed to produce an evaluation that could be respected by external interested parties as a rigorous, valid and independent piece of research offering insight about what works and why in relation to the programme. It has deployed both quantitative and qualitative methods to give a statistical indication of the outcomes that can be attributed to the programme together with a 'feel' for the reader of how the course works, the impact it has on individuals and the reasons why it does (or does not) change attitudes. The research team was also asked to make recommendations about the future management and development of the Crash Course.

It was not possible to examine road accident statistics to demonstrate the impact of the course in terms of reductions in accidents or deaths. Most of the young people who undertook the course at its start were still only 17 or 18 when the research took place and some were not yet driving. In any case, without a major study against a control group and controlling for other variables, it would be impossible to argue a causal link to the Crash Course. There are so many variables in play in respect of road accidents in any given area that isolating a single intervention would be methodologically beyond the scope of this study. Similarly given the six-month time scale of this evaluation it was also not possible to look at the impact of the course on a large group over any considerable period of time, nor could a full case control study be constructed nor any comparison to other methods such as using driving practice or simulated situations and hazard awareness scenarios.

Given the constraints, the research team endeavoured to construct a study that adheres to the principles of rigour and controlled research within the limitations imposed by time and other resources. The main elements of the research, employing both qualitative and quantitative methods to examine the outcomes of the course were as follows:

- A brief **literature search** was undertaken to identify the main policy drivers for education of young people about road safety risks and the key academic research that has a bearing on the approach of the Crash Course.
- Seven **observation visits** to the Crash Course presentations were carried out by five different researchers. Two of these were to adult groups in the Diversion Course and a corporate setting. The visits were essential to familiarise the researchers with the style and content but also to observe reaction and response from the audiences. Researchers sat in with the whole presentation. This element of the work contributed to the brief to evaluate the appropriateness of the content and delivery of the project and the style, tone and method of delivery for the team. A checklist was developed for note taking drawing on similar guidelines on those observing educational sessions on OFSTED visits or teaching assessments.

- **Before and after written questionnaires** were administered to a sample of those Year 11 students completing the course between September and December, as detailed below.
- **Questionnaires** with the same knowledge and attitude questions as for the 'after' survey were **completed by a parallel sample of Year 11 students** in other schools **which had not yet received the Crash Course presentation**. Most of these schools were due to receive the course from January/February 2009 onwards.
- **Qualitative focus groups** were held with young people at three schools and one training provider which had received the Crash Course. Most of these had seen the presentation in the Autumn Term.
- Qualitative **interviews** were undertaken either face-to-face or by telephone **with stakeholders**, such as representatives of partner organisations, teachers, and the course tutors of the Crash Course. The list of respondents is set out at Appendix A.

2.2 The quantitative survey

As well as ensuring a statistically-appropriate sample size, the study used both a sample of young people who received the course during the autumn term of 2008 and a 'control group' in schools which were not due to have the course until the spring or summer of 2009. Questionnaires were administered to pupils through the schools, colleges and training providers aimed at assessing the impact of the programme and its effects on young people's attitudes to driving and risk-taking. Whilst not a fully randomised control trial, this approach does maintain some of the benefits of a control group for comparison of any changes in baseline scores on relevant components of knowledge or attitudes relating to driving. Valid statistical comparisons of the impact of the programme can thus be drawn from these data. The questionnaires were employed alongside qualitative methods in group interviews with pupils that could explore in more depth any changes in knowledge or attitudes that had taken place, the role of the programme in affecting them, and their links to behaviour.

The construction of these research instruments drew upon what is known about attitudes and their links to behaviour in psychology. This background is set out in more detail in Section 3, particularly focusing on the effects of attempts to change attitudes using shocking messages, as the Crash Course seeks to do.

Changing what someone knows about a particular issue may not of course be enough to change their attitudes in a way that will impact upon their behaviour. Attitudes are generally recognised to have affective as well as cognitive components (e.g. Katz, 1960; Pratkanis, Breckler and Greenwald, 1989). That is, attitudes can be based on facts that are cognitively known (such as that driving whilst intoxicated is linked to an increased risk of fatality) *and* on emotions and values (such as the feeling that driving at high speed is thrilling or masculine). It is thus important that both cognitive and affective attitudes are measured when judging the effectiveness of a programme, such as the one being evaluated here, in changing attitudes and behaviours.

The survey instruments constructed were therefore designed endeavouring to include measures of cognitive and affective components of attitudes towards driving as well as information about self-reported driving behaviours before and after attendance on the programme, as well as over the same time periods with the 'control' group of pupils who had not yet received the Crash Course. In order to minimise the impact of experimenter effects if the speakers were still present, and to evaluate the durability of any change in attitudes, schools were asked to administer the 'after' portion of the survey three to four weeks after the course and not immediately after the presentation.

The option of postal questionnaires was rejected mainly because they are known to have such a high non-response rate but also because of the time factors and potential data protection problems with contact details held by schools. Instead questionnaires were completed in class time (usually in tutor or form groups in the schools). The returns were either collected by course tutors and the researchers or they were posted to the University. The responses were then analysed using the Statistical Package for the Social Sciences (SPSS).

It was recognised that teachers would be key players in making this research methodology effective. They had to distribute the questionnaires, broker the information about how to complete them and collect the returns. They were asked to give assistance where necessary to any pupil who had difficulty with completion due to literacy problems or whose first language was not English. Extensive written briefings were provided by the research team to the schools. This was further greatly supported by members of the Crash Course team who diligently played a very helpful part in explaining the purpose of the evaluation, and encouraging completion of the questionnaires. The researchers would wish to record their thanks to all those schools which took part and to the many individual teachers who went out of their way to get questionnaires completed or to set up focus groups.

2.3 The sample

At tender stage, it was envisaged that a sample of approximately half the schools receiving Crash Course would be drawn, reflecting broad levels of multiple deprivation across Staffordshire concentrating on 15-16 year-olds in Year 11. In the event it became apparent that bookings would build up by degrees over the early part of each term and that no complete list of schools therefore existed for the autumn term. In order to ensure a sufficiently large return and a representative sample, all the schools and other venues with young people taking bookings for the autumn term were therefore asked to administer the 'before' and 'after' questionnaires. All institutions booking or likely to book the Crash Course in the spring term were similarly asked to administer the questions to the 'control group'. Since the approach was near universal coverage of the settings educating young people in the relevant age group, no sampling was undertaken in respect of deprivation. The schools and colleges were however later coded on an estimate of local deprivation levels (see sections 4.2 and 4.6).

Returns were received from schools etc. which received Crash Course in the autumn term and from those that were due to have the presentation in the spring. The list of institutions making returns appears at Appendix B. 25 schools, colleges or training

providers took part in this element of the research. 1717 valid questionnaires were returned in total, divided fairly evenly but with slightly greater numbers from schools that had received the course in the autumn term (998) as against those that had not (719). It was possible to match some 290 young people for their 'before' and 'after' responses.

Attrition, as expected, was considerable. A number of questionnaires had to be discarded because young people had not completed them properly, or because an institution had not administered them correctly at the appropriate points. One young person for example put his age and other details on the front sheet and did not complete any further questions. Others misunderstood, did not answer or spoiled particular questions (for instance by ticking all boxes instead of selecting chosen options). The number of matched 'before' and 'after' responses was lower than expected. This was caused either by spoiled responses in respect of the demographic characteristics from which the unique identity codes were composed or by the fact that schools completed the questionnaires in tutor groups as and when the timetable allowed and not all tutor groups managed to send in both questionnaires. The sample sizes however remain sufficient for statistically valid conclusions to be drawn from them.

2.4 Questionnaire design

The questionnaire administered 'after' the course is attached at Appendix C. The questions administered 'before' the course to these pupils were exactly the same, with the exceptions that they omitted the comments on the course and were in a different order. The same questions were also given to those who had not received the course in the autumn term and were not going to do so (the 'control group'). It is therefore possible to examine the evidence on changes in knowledge, attitudes and reported behaviour before and after pupils received the presentation. It is similarly possible to examine the differences between those that did receive the course and those that did not.

The questionnaires started with structured questions on some demographic details on the participants. This enabled the creation of a unique identity code for each respondent. Individuals could therefore be matched where they had completed both before and after questionnaires. The remaining questions were designed to address:

- Knowledge about risky behaviour in relating to cars, whether as driver or as passenger;
- Attitudes towards risky behaviours;
- Self-reported past behaviour;
- Future intended behaviour.

The terminology used particularly for the 'attitude' questions was extensively discussed amongst the researchers and with the Crash Course team. The options for the alternatives on the attitude dimensions were carefully chosen to seek a reflection of young people's feelings and perceptions (rather than factual knowledge). The questions also sought to avoid use of complex words or the use of cliché youth culture terms such as 'cool', which might appear patronising in a written questionnaire. The terms were also discussed with some of the young people from the pilot groups and judged by them as appropriate and easy to understand.

The questionnaires were piloted with two groups of young people in Leicestershire, one at a College of Further Education and one with secondary school pupils. The questions were generally well understood and considered relevant. The pilot informed some minor rewording of the questions and amendments to clarify some of the guidance to teachers.

Knowledge questions were scored in relation to being correct or not and for the 'most important causes of deaths or serious injuries' in relation to known causes. Factors which are under the agency of the driver or passenger and which are serious causes of accidents scored more highly than a less frequent cause which is not in the control of the driver. For example, 'not wearing a seat belt' or 'using a mobile while driving' or 'driving too fast' are under the control of the driver and are serious causes of accidents. On the other hand, some factors such as ice, wet conditions, or sharp bends can be a factor in accidents but usually because of inappropriate speed or inattention. The scoring system on causes of crashes was as follows:

Possible reasons for deaths and injuries in road accidents (respondents asked to tick the three considered most important)	**Score (if the reason was chosen).**
Ice on the road	0
Using mobiles while driving	2
Pedestrians not looking	0
Driver on drugs	1
People driving too fast	2
Going through red lights	1
People in the car distracting driver	1
Wet and rainy conditions	0
People driving too slow	0
Not wearing a seatbelt	2
Road works	0
Driver has been drinking	2
Elderly shaky drivers	0
People driving who have no licence	2
Burst tyres	1
Sharp bends in the road	0

The questions exploring attitudes towards risk incorporated a version of semantic differential scales so that gains and change could be demonstrated. The questions on self-reported behaviour, sought to investigate as far as possible whether there is any early evidence of attitudes and intentions carrying over into future behaviour (e.g. through a question that asks both before and after 'how often have you been in a car and not worn a seat belt in the last month?'). In addition there was a free text question about what the young people would like to do differently in the future and how the course affected them. The answers to this were qualitatively analysed.

2.5 The focus groups with young people

The research team set out to capture the views of young people directly as well as through the written questionnaires. Focus groups were carried out at three schools and one training provider, involving 68 young people. In one school, Year 12 pupils took part who had received the Crash Course in the previous year in order to explore the extent to which the lessons of the Crash Course were memorable and durable.

Since gender plays a distinctive part in attitude formation towards cars and road safety, the focus groups in the schools were conducted with male and female pupils separately and by researchers of the same gender as the group. A gift token was provided to show appreciation to those who gave their time for these interviews.

The schools were selected mainly on pragmatic grounds, as the groups had to fall after the presentations and before the end of the autumn term fieldwork period. Schools that fell into that category and had expressed a willingness to take part were suggested by the Crash Course team and visits were arranged where it proved practicable. This is therefore a qualitative sample and cannot be taken to be statistically representative of the whole cohort. The findings have been drawn in the main from standardised data capture forms and contemporaneous notes.

Some participative exercises and a semi-structured, conversational interview format were designed to allow the researchers to discuss and record in detail the experiences and views of the young people involved. The approach was informal and young people contributed readily.

The focus group discussions included topics such as:

- ✓ Whether the respondents had changed their views as a result of the course;
- ✓ Whether they now intended to change certain behaviour;
- ✓ Whether they had experienced peer pressure (in relation to risk taking on the roads) in the past and of what nature and whether they now felt better equipped to resist it;
- ✓ What their reactions were to the Crash Course and what they had liked and disliked;
- ✓ Which elements of the course had had most impact on them and why;
- ✓ What they would change about the course if anything;
- ✓ Whether they would recommend the course to other young people.

2.6 Interviews with adult stakeholders

Individual interviews were conducted with adults who had an interest in the scheme either delivering the course, as recipients, or as stakeholders in the wider issues of road safety. Most of these interviews were face to face but a minority were conducted by telephone. This collected a range of views from teachers and trainers, representatives of services that are partners to the Crash Course scheme, and managers and tutors of the programme.

The questions explored using a semi-structured interview schedule with these respondents included:

- ✓ What led to the instigation of the course and what are its current policy drivers?
- ✓ How was it designed and with what assumptions about methods and impact?
- ✓ Was it in any way validated or compared to other programmes undertaken elsewhere?
- ✓ Where does it feature in the school curriculum and how much of a priority is attached?
- ✓ Are there particular barriers to be overcome in ensuring effective delivery of the course?

- ✓ If the course is perceived as being effective, what contributes to that impact?
- ✓ What are the resource implications for this type of provision?
- ✓ Are there ideas for future development?

2.7 Ethical considerations

The design for the study was approved by the Faculty Research Ethics Committee at De Montfort University. Participants were provided with anonymity by suitable means such as using pseudonyms or changing the names of institutions or locations in order to reduce the likelihood of identification. Comments on questionnaires or at interview were treated confidentially and particular care was taken to make clear to pupils that information would not be passed back to their school, the police or their parents, even if they reported illegal behaviour. The schools normally contacted parents to seek permission for young people to attend the Crash Course presentation. The schools were also asked to notify parents that anonymous and confidential questionnaires would be administered as part of evaluating the Crash Course. Quotations from adult respondents are similarly generally anonymous and would only be attributed where the individual has given specific permission.

All the researchers dealing with young people had enhanced clearance from the Criminal Records Bureau. For young people attending the focus groups, an information sheet was provided. It outlined the purpose of the evaluation and the uses to which their comments would be put. It also provided appropriate school pastoral contacts and contact details of some organisations which could provide help and support with any issues which may have arose for them in the course of the research. The researcher explained the nature of the study and its confidentiality and anonymity and the right to withdraw from the group at any time. The young people were then asked to sign to give their informed consent. The exception to the general rule of confidentiality in potential disclosures of abuse was also explained. In the event, such disclosures did not occur.

2.8 A multi-disciplinary team

An important part of design and implementation of this methodology has been the creation of a multi-disciplinary team to undertake the study. There are numerous academic disciplines which impact on the issue of road safety including criminology, sociology, psychology, statistics and youth affairs/youth culture. It was therefore seen as desirable to have a team drawn from across the Faculty of Health and Life Sciences. The team members are set out below.

Professor Denis Anthony, Professor of Nursing, Mary Seacole Research Centre
Professor Rob Canton, Professor in Community and Criminal Justice
Isabel Cartwright, Lecturer/Research Fellow, Youth Affairs Unit
Dr Liz Hoggarth, Senior Research Fellow, Youth Affairs Unit
Malcolm Payne, Director of the Youth Affairs Unit and Head of the Youth and Community Division
Dr Mohammed Shafiullah, Senior Lecturer, Psychology
Jason Wood, Senior Lecturer, Youth and Community Division
Dr Scott Yates, Senior Research Fellow, Youth Affairs Unit

Section 3: The context of policy and research

The literature relevant to evaluating and understanding the processes through which the Crash Course attempts to change young people's behaviour can be divided into three categories:

- Studies concerned with young people's understanding of 'risk' and general attitudes towards risk-taking behaviours, especially connected to driving;
- Studies concerning theories and processes of attitude change and their links to behaviour;
- Studies specifically relating to attitude-change programmes that use fear-based messages.

3.1 Young people's attitudes towards risk and driving

It has long been known that adolescent drivers are injured more frequently than older drivers, and this is something that is true worldwide (e.g. Harre, 2000). Whilst one possible explanation for this is the relatively limited on-road experience of these drivers', a number of research studies have suggested that adolescent drivers, both male and female, more frequently engage in unsafe driving behaviours such as speeding, failing to wear a seatbelt, closely following vehicles ahead, aggressive or reckless driving, and driving under the influence of drugs or alcohol (e.g. Jonah, 1986 and 1990; Cooper, 1987; Shapiro et al, 1998; Harre, 2000).

Studies have also shown that for male adolescents there is a tendency to underestimate the risk involved in various situations, and that they consistently perceive themselves to be at less risk of having an accident than their peers (e.g. Harre, 2000; see also Price and Smith, 2006). One possible reason for this exaggerated bias in assessing personal risk is that when young males develop an awareness that as a group they are perceived as dangerous drivers, something heavily reinforced in many media campaigns; "to the individual young man, this view would undoubtedly help to reinforce the image of the dangerous adolescent driver, who could only be worse than oneself" (Harre, 2000; p.212).

This has potential implications for presentations of the Crash Course. If this conjecture is correct, information which gives the impression of a generally dangerous cohort of young drivers might act as a comparison group against which this bias in the assessment of one's own risk might be driven further downwards. As Harre (2000) continues, "if part of the reason that young men feel relatively invulnerable to crashes is because they are constantly confronted with the dangerous driving of their peers, it may not always be desirable for media campaigns and the like to draw further attention to the reckless driving habits of this group" (p.214). Instead, Harre (2000) suggests that such campaigns might do better to emphasise that "most people, young men included, drive cautiously most of the time and to illustrate this with examples of safe driving" (p.214-5). This approach has been successful in modifying high-risk behaviours in health-care contexts (Harre, 2000).

There are also other issues to consider, of course. Notably, whilst inappropriate assessment of risk might be one factor affecting young people's driving behaviour, it

has also been suggested that risk-taking behaviour on the road may be deliberately sought as part of identity formation and in response to normative pressure from peers (e.g. Conner, Smith and McMillan, 2003). They may also assess risks taken whilst driving as acceptable in pursuit of other goals such as driving after drinking to meet a parental curfew (Harre, 2000). In other words, risk taking can be instrumental: a means to an end.

Harre (2000) suggests that peer-resistance skills might be most effective at addressing these issues and modifying risky behaviour but there remains the problem of risk-seeking in itself being perceived as pleasurable and "propped up with an entire social system of norms and media images that equate fast driving and 'skilful' manoeuvres with masculinity, adulthood, and peer group approval" (Harre, 2000; p.218). This type of deliberate risk-seeking has received less research than the other issue discussed, and it seems likely it will also be the most challenging to shift in adolescent road-users (Harre, 2000).

3.2 Attitude change and young people

A key set of questions to address when seeking to change behaviours such as risk-taking on the roads through changing attitudes is whether such attitude change will actually be represented in changed behaviour and if so which attitudes predict which behaviours. This is a far from straightforward issue. As Glassman and Albarracin (2006) point out, social psychologists have for decades noted that "there is considerable variability in the degree to which attitudes predict behavior" (p.778).

However, Glassman and Albarracin go on to outline a number of characteristics of attitudes that lead them to be more predictive of behaviour. Attitudes are most likely to influence actual behaviour when they are:

- Held with confidence
- Consistent
- Easily recalled
- Personally relevant
- Reported frequently
- Based on direct experience
- Associated with behavioural information
- Formed with a high motivation to think about the attitude object

(Glassman and Albarracin, 2006)

Relevant to the Crash Course aims, it is also noted that 'hedonically-oriented' behaviours – those associated with enjoyment, such as playing, or driving at speed as a thrill-seeking behaviour – tend to be affectively driven (Millar and Tesser, 1992; Millar and Millar, 1998; Glassman and Albarracin, 2006). That is, they are associated with the affective or emotional component of attitudes to a greater degree than the cognitive or informational component. This means that how people *feel* about the relevant attitude-objects is likely to be more significant for their future behaviour than what they *know* about them. This therefore suggests the use of a strategy of concentrating on feelings relating to attitude-objects during attempts to change people's attitudes relating to hedonic behaviours.

Whilst people are often fairly resistant to attempts at persuasion and attitude change, Tormala and Clarkson (2006) present evidence that suggests that when people resist attempts at persuasion but cannot create convincing counter-arguments they tend to lose certainty in their original attitudes and become more vulnerable to future attempts at attitude change.

Allied with the other findings presented here, there are a number of relevant points to consider for attitude-change sessions such as Crash Course. These findings suggest that optimum success should be achieved by making sure that information presented is personally relevant and easily recalled, can be related directly to the young people's actual behaviours (in terms of what they do now and what they can do in the future), relates as far as possible to their direct experiences, includes emotional as well as cognitively-based appeals, and is repeated over time with opportunities for young people to recall and express desirable attitudes.

3.3 'Scared straight' programmes and the use of shocking messages

A number of programmes that attempt to change the attitudes and behaviours of young people use tactics based around shocking messages or generating fear. As this is clearly of potential relevance to road safety campaigns such as Crash Course, it is also necessary to consider the evidence available on such programmes.

The prototype of such programmes was a number of 'juvenile awareness' programmes that emerged in the United States in the 1970s. These programmes typically involved young people who have been identified as 'delinquent' being taken to a prison environment and subjected to 'scare tactics' by the inmates. This experience was intended to be frightening for the young people and to act as a strong deterrent and prevent them from engaging in future criminal behaviour. The term 'Scared Straight', originally used in a television documentary about these programmes, became the term most commonly associated with such tactics and their burgeoning use during the late 1970s and 1980s.

As early as 1983, it was noted that despite the wide proliferation of 'Scared Straight' programmes across the United States, only a handful of studies had been carried out that examined their effects. The results of these few studies were mixed, with little if any evidence of positive impact on future 'delinquent' behaviours (Lewis, 1983).

A number of later studies into the effects of 'Scared Straight' style programmes also failed to produce encouraging results. Not only did most research fail to demonstrate any positive changes in behaviour attributable to the programmes, a significant number of investigations actually showed *worse* results for young people who attended them, with future offending and recidivism rates either unimproved or actually increased after attending 'Scared Straight' programmes (e.g. Finckenauer and Gavin, 1999; Petrosino et al, 2008; Feinstein, 2005; Windell and Allen, 2005; Farrington and Welsh, 2005). One possible reason put forward for this result was that the prisoners provided role models that the young people found attractive.

McKenna advances criticism of road safety programmes based on shock tactics highlighting such issues as the relative inefficiency of passive learning as against, for example, increasing the length of experience under supervision for new drivers

(McKenna, 2006.) He also draws attention to the persistence of the 'it won't happen to me' syndrome of unrealistic optimism and illusions of control even in the face of advice about risk reduction (McKenna, 1993).

The message from these studies seems quite clear: deterrence-oriented attitude change programmes relying on shocking messages are not always effective in changing young people's behaviour and they may actually have harmful effects. However, a substantial amount of psychological research has demonstrated that in certain circumstances, certain types of fear-based appeals can be successful in changing people's attitudes and behaviour (Witte and Allen, 2000; Windell and Allen, 2005; Meyerowitz and Chaiken, 1987).

Early psychological research on health education also showed that attempts to change attitudes using shocking messages can sometimes be problematic (e.g. Liberman and Chaiken, 1992; Petty, 1995). Where the attempt to change attitudes shocks people into feeling fear or other strong emotional responses and the person being persuaded does not clearly perceive a way in which their future actions can moderate these feelings, poor results in attitude change can follow as people disengage from the communication and do not rationally process the information they receive (e.g. Jepson and Chaiken, 1990; Liberman and Chaiken, 1992).

Windell and Allen (2005) provide an examination of the literature on fear appeals and consider the lessons for behaviour-changing programmes aimed at young people in terms of what they tend to do wrong and how they might better align themselves with an evidence-based approach to changing attitudes and behaviours.

One important issue is the level of fear invoked. If perceived threat caused by the use of fear-based messages is too low, "the individual does no further cognitive processing of the fear because of a lack of motivation" (Windell and Allen, 2005; p.389). Correspondingly, however, if the perceived level of threat is high but the individual does not believe that there is an effective way for him or her to take some action that will diminish this threat then it is more likely he or she will "become defensive or deny that the threat is real or that it applies to him or her" (Windell and Allen, 2005; p.389).

What is needed for a fear-based appeal to succeed is its being accompanied by an appropriate recommended course of action that has the clear potential to counter the threat raised in the fear-appeal. The individual receiving the fear-based appeal must also perceive the recommended action as achievable and effective. Windell and Allen (2005) provide a summary of overall recommendations for fear-inducing attitude-change messages. They argue that fear-based appeals will be most effective when:

- They genuinely frighten people
- They offer specific recommendations for overcoming the fear-aroused threat
- The recommended action is perceived by the recipient as potentially effective for reducing the threat, and
- The recipient believes that they can perform the recommended action

One reason that most fear-inducing 'Scared Straight' programmes are not effective, they argue, is that they fail to take account of these messages or of the psychological research into the specific components of attitude-change messages summarised above (Windell and Allen, 2005).

A challenging issue for Crash Course is clearly in the area of providing recommended actions that are perceived as effective for reducing the threats raised by the presentation itself, particularly as most of the young audiences are not yet driving. Since the course deals with road safety, there will always remain an element of risk perceived as attached to driving or otherwise using the roads. However, if this undermines the young people's perceptions of their own abilities to take effective action in addressing the risks they are presented with, there is the danger that the messages will not be as effective as they might be. Messages presented will need to take account of these potential problems, and perhaps avoid references to the inherently risky nature of road use outside of that attached to the specific behaviours being addressed, or emphasise the effectiveness of particular behaviours or courses of action in reducing the associated levels of risk.

There is also the issue that whilst some recommended actions might seem achievable to those presenting the messages, they might not be so perceived by the recipients. Windell and Allen (2005), for instance, note that whilst messages about avoiding criminal behaviour might seem straightforward to police officers presenting 'Scared Straight' programmes, the individuals involved may not themselves believe that they have the power to avoid criminal behaviour. Similar issues may well apply to young people's risk-taking behaviours on the roads – especially where they are carried out as part of a social group. This issue relates to the provision of options for coping strategies and is likely to remain a challenge for the course.

3.4 Implications

These research studies crystallise a number of questions for the assessment of the effectiveness of the Crash Course, which can be examined in the light of the evidence in this study. They will be revisited in the conclusions and include the following:

- Does the Crash Course provide fear-based messages of sufficient impact to motivate the audience to deal with them?
- Does the Crash Course also provide the individual with effective actions and coping strategies that can reduce the perceived threat?
- Does the course make use of affective components as well as information in order to affect attitudes?
- Is there any evidence that the young people pick up an awareness that they are perceived as dangerous drivers and react to it?
- Is there any evidence that young people are engaging in risk-taking behaviour on the roads in response to peer pressure or as part of their identity formation?
- Is there any follow up to the Crash Course to repeat and reinforce its central messages?

Section 4: Findings from the survey data

4.1 Introduction

All institutions taking the Crash Course in the autumn term were invited to administer the survey together with all those booking the course for the spring term. This enabled comparisons to be made between those who had seen the presentation and those who had not and between the responses of those who did receive the presentation both before and after they saw it (see Section 2). A total of 1717 valid questionnaires were received. Of those it was possible to match 290 individuals for their completed questionnaires both before and after the course.

In this section, the demographic characteristics of the sample are provided first at 4.2 in respect of age, gender, and level of deprivation. At 4.3, the differences are examined between young people who did not receive the course and those that did. At 4.4, the scores before and after the course are discussed. Finally at 4.5 and 4.6, the differences are examined between male and female respondents and between the different levels of deprivation.

All inferential statistics tests assume a minimum alpha level of 0.05 (meaning we are 95% confident that the effects observed – for gender, course etc – cannot be mistaken or attributed to chance). Thus any test returning a probability (p) value less than 0.05 (the alpha level) is considered significant.

Because none of the data can be assumed to be normally distributed we used non-parametric tests (which make very few assumptions of the data, and specifically do not require data to be normally distributed). For comparisons of two groups we used the Mann Whitney test and for more than two groups, the Kruskall Wallis test. For before and after paired data we used Wilcoxon.

Some of the questions were not answered or spoiled to differing degrees. This means that the total number of responses will differ for each question.

The views of the young people who saw the presentation are provided at the end of the section at 4.7, together with the analysis of the free text qualitative responses at 4.8.

4.2 Demographics

The demographic characteristics of the young people responding to the survey are set out below. The vast majority were aged 15 or 16 (probably in Year 11 or 12); older respondents would have been in courses with colleges or training providers. There was an even gender balance.

Respondents were asked to provide their gender and their date of birth, which was coded for age as at October 2008 as set out below.

Table 4.1: Age

	Frequency	Percent
15	683	41.6
16	653	39.8
17	241	14.7
18	63	3.8
Total completed	1640	100.0

Table 4.2: Gender

	Frequency	Percent
Male	842	49.0
Female	860	50.1
Not completed/spoiled	12	0.9
Total	1717	100.0

Since there is some evidence that road traffic casualties are higher in areas of multiple deprivation, the data was examined in relation to the deprivation factor. In order to do this, each educational institution was coded for an estimate of multiple deprivation for the Ward surrounding it based on the proportion of super output areas (SOAs) in the most deprived groups. These estimates were drawn from information from Staffordshire County Council and Stoke-on-Trent City Council on the maps and data profiles for the updated Index of Multiple Deprivation 2007. The pattern is shown in the table below.

Table 4.3: Deprivation

	Frequency	Percent
Ward contains predominantly top 10%	246	14.3
Ward contains mix of top 10% and top 20%	344	20.0
Ward contains SOAs in top 20%	64	3.7
Ward is below top 30%	989	57.6
Unknown	74	4.3
Total	1717	100.0

4.3 Comparison of responses from young people who had attended the course with those who had not

Comparisons between the knowledge and attitudes of those who had attended the presentation and the responses of young people who had not yet received the Crash Course were undertaken (using the Mann Whitney test). There were statistically significant differences indicating improvement after the course in several respects.

Comparing the 'after' responses for those who took the course with the responses of those who did not receive the course at all in the autumn term, significant improvements were evident in a number of aspects of knowledge and attitudes.

One of the questions designed to assess **knowledge of safety factors** in driving asked respondents to choose three items from a list that they considered to be "**the most important causes of deaths or serious injuries in bad crashes**." The scoring system reflected the known major causes affecting the numbers of those killed or seriously injured (KSIs) and the actions of the driver in those causes. (For instance, if a car hits a tree at speed, the occupants will be killed because of the trauma to the body of hitting a solid object with sufficient force but the underlying cause will usually be the actions or errors of the driver such as driving too fast, using a mobile or being under the influence of alcohol.) The scoring system is outlined in Section 2 above. The maximum positive score was higher for those who had attended the course at a significant level ($p=0.001$).

On the scaled questions intended to assess changes in attitude, one question sought to test attitudes towards **the acceptability of always wearing a seat belt**, by asking them to rate what they thought about that behaviour on a scale from "stupid" to "perfectly OK". As noted in Section 2, these terms were carefully considered at the design stage, tested with the pilot groups and found to be easily understood. Those who had experienced the course were significantly more likely to think it was "OK" or acceptable ($p=0.034$). Similarly when asked what they thought about "reading a text quickly while driving", those who had attended the course were significantly more likely to think it "stupid" ($p=0.001$) or in other words they took a negative view of the risky behaviour.

Another question gave a set of options designed to examine **self-reported behaviour** in the last month. For those who had attended the course, questionnaires were completed approximately three weeks after the course so that the majority of "the last month" would have been after the input. Here those who attended the course had "had a laugh and messed about in a car" less often than those who had not ($p= 0.001$). This can probably be taken to mean that a high proportion had absorbed the messages about **not distracting the driver** with irresponsible behaviour. Similarly, those who had attended the course had more frequently been "scared about the driving" ($p=0.006$), indicating a **greater sensitivity to the dangers**.

Some other aspects also showed improvements to a considerable but not statistically significant degree. These were:

- "Driving at 28 miles an hour in a 30 mile an hour area": this approaches significance ($p=0.063$), with course attenders more likely to think it "OK";
- "Having a race in cars with friends for a laugh": this approaches significance ($p=0.056$), with course attenders more likely to think it is "stupid".

There is one perverse reaction which may be a sign that course attenders were somewhat more inclined to find excitement in risk taking relating to drink driving.

- "How would you feel being driven home by a friend who has had a bit too much to drink?" This approaches significance ($p=0.075$), with course attenders more likely to feel it was "fun" or to feel "excited". In the comparison

of the 'before' and 'after' matched group below, there is also evidence that they became better able to ask such a driver to stop if they felt anxious.

This may simply be an honest response to the question of how they would *feel* in the situation. It might also be an indication that further attention may be needed to the lack of awareness of the dangers of moderate drinking when driving.

No significance differences were found on the following issues:

- The maximum positive score for being able to offer three suggestions on what a passenger could do to keep themselves or others safer in cars

Reporting frequencies for the last month of having:

- "Been on the road after dark"
- "Not worn a seat belt in the front seat"
- "Been in a hurry"
- "Gone with a driver who'd used drugs recently"
- "Been on a motorway"
- "Driven with a driver who had been drinking"
- "Not worn a seat belt in the back seat"
- "Watched the driver use a mobile"
- "Been driven by someone who had no licence"

Attitudes towards

- "Driving at 45 miles an hour in a 30 mile an hour area"
- "How would you feel being driven in a car going 98 on a motorway?"
- "If you did feel anxious or scared, do you think you could ask the driver to slow down?"
- "If you felt anxious, do you think you could ask the person to stop?"

Some of the poor behaviours or negative attitudes towards safety are remarkably durable. Even amongst those who had received the course, instances occurred of people not wearing seat belts, for instance, or going with a driver who had used drugs. Since the research evidence indicates that changes in attitudes lead to changes in behaviour, it would be expected that behaviour would be the most difficult to change and the last aspect to show differences.

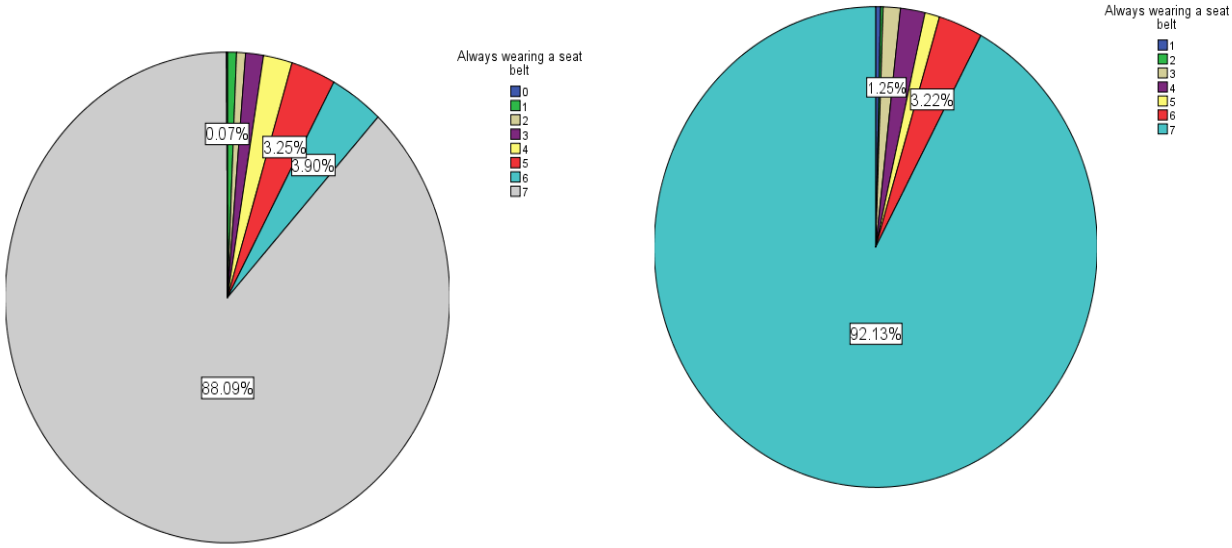
4.4 Comparison of the responses of students before they received the course with their responses afterwards

There were significant differences between responses before and after the course (using the Wilcoxon test) for two items.

The first concerned **attitudes towards the wearing of seat belts**. As above, this attitude question sought to test attitudes towards the acceptability of always wearing a seat belt, on a scale from "stupid" to "perfectly OK". 92% said it was "perfectly OK" to wear a seat belt at all times after they had seen the presentation, compared with 88% before seeing it. More young people felt it was acceptable and "OK" always to wear a seat belt after the course ($p<0.001$). This shift may seen rather less than significant for those adults who have long accepted the wearing of seat belts, required by law since 1983, but it is worth noting that there are still a few even in this cohort who feel the safe behaviour is "stupid". Only recently Staffordshire Police have felt it necessary to run a media campaign and stop checks on this matter

(www.staffordshire.police.uk , 2009). The qualitative responses and the self-reported behaviour confirm that the wearing of seat belts is still a major safety issue. Figure 4.1 below illustrates these scaled responses.

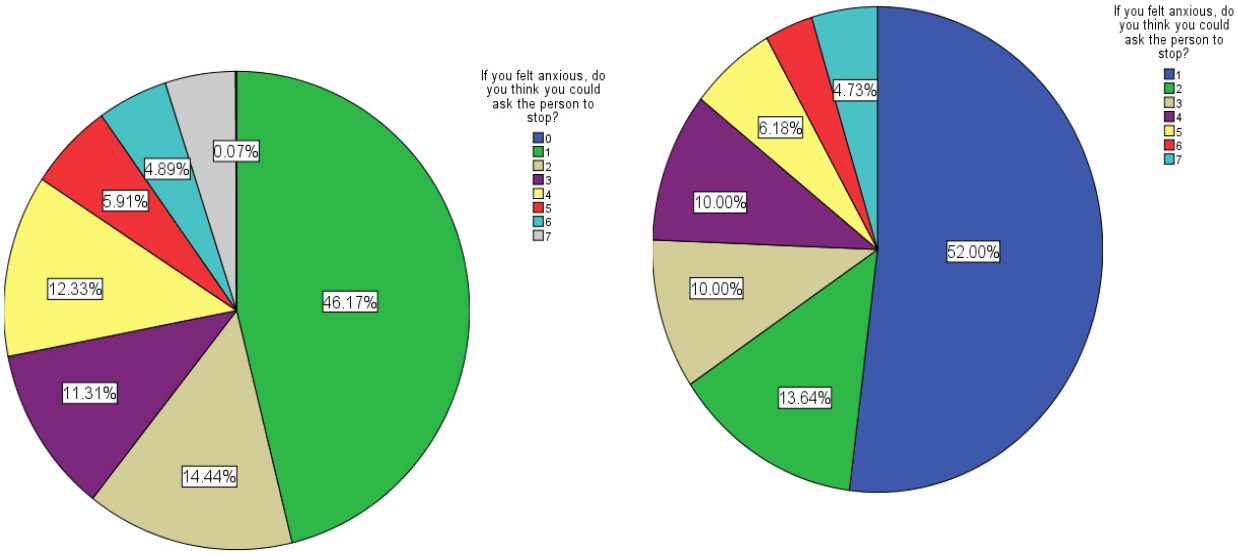
Figure 4.1: Before and after course – attitudes to always wearing a seat belt (1=stupid, 7=perfectly OK)



The second significant item concerned the paired attitude questions that asked about reactions to the use of alcohol (How would you feel being driven home by a friend who has had a bit too much to drink?) and about **whether they thought they could ask a person who had had too much to drink to stop** (their ability to be assertive). For "If you felt anxious, do you think you could ask the person to stop?" - after the course more (52%) said "yes, no problem" than before (46%). That is a greater number of the young people now felt able after the course to ask such a driver to stop (p=0.047). Figure 4.2 illustrates this difference.

When comparing the 'before' and 'after' responses, the difference in the maximum possible score on the knowledge related question of what a passenger could do to stay safer was also approaching significance (p=0.068), with higher scores after the course.

Figure 4.2: Before and after course - could you ask the person to stop? (1=Yes, 7 = No)



4.5 Gender differences

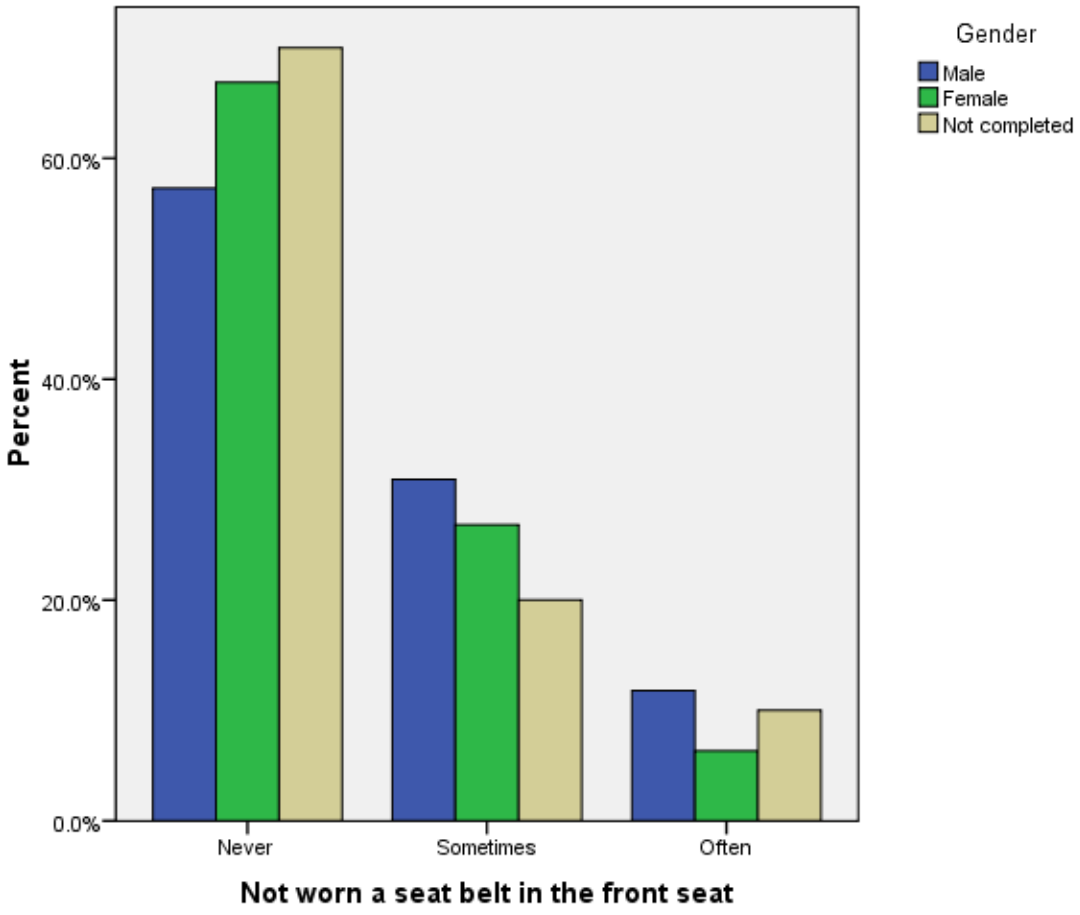
Significantly different knowledge or attitudes of boys and girls before the course were found (using Mann Whitney test) on the knowledge related questions:

- The maximum positive score for selecting three items as the most important causes of deaths or serious injuries in crashes: girls had higher scores ($p<0.001$).
- The maximum positive score for ability to list three things a passenger could do to keep safe: girls had higher scores ($p<0.001$).

Significant differences were also found on self-reported behaviour:

- Self-reporting on not having worn a seat belt in the front seat in the last month. Boys reported failing to wear a seat belt more often ($p<0.001$). Figure 4.3 below illustrates the gender pattern on the wearing of front seat belts.
- Reporting on whether they had "had a laugh and messed about" in a car in the last month. Girls reported this more frequently ($p<0.001$).
- Reporting that they had "been scared about the driving". Girls reported being scared more frequently ($p<0.001$).

Figure 4.3: Gender differences in reported behaviour on wearing a front seat belt



The differences on self-reported behaviour in the last month could have been affected by the frequency of the journey made. The difference on not wearing a seat belt for instance could be due to more frequent journeys. There is a very small significant correlation between the use of a seat belt and the reported number of journeys but less than 0.7% of seat belt use is related to journeys so that for practical purposes this factor can be ignored.

On the attitude scales:

- Girls felt more positively about “always wearing a seat belt” ($p<0.001$).
- Boys were more inclined to perceive “reading a text quickly while driving” as “perfectly OK” ($p<0.011$).
- Similarly boys were more inclined to perceive “driving at 45 miles an hour in a 30 mile an hour area” as “perfectly OK” ($p=0.014$).
- Boys also had a greater acceptance of “having a race in cars with friends for a laugh” with more seeing it as “perfectly OK” ($p<0.001$).
- A higher proportion of girls reported that they would feel scared or anxious “being driven in a car going 98 on a motorway” rather than that they would see it as fun or excitement ($p<0.001$).
- In response to the question “If you did feel anxious or scared, do you think you could ask the driver to slow down?” the girls perceived it as less of a problem to do so ($p=0.049$).
- In relation to the question “How would you feel being driven home by a friend who has had a bit too much to drink?” the girls felt more scared or anxious ($p<0.001$).

There was no significant difference between young men and young women in respect of reporting having:

- Been in a hurry
- Gone with a driver who'd used drugs recently
- Driven with a driver who had been drinking
- Not worn a seat belt in the back seat
- Watched the driver use a mobile
- Been driven by someone who had no licence

There was similarly no significant difference on the attitudes towards:

- Driving at 28 miles an hour in a 30 mile an hour area
- “If you felt anxious, do you think you could ask the person (who has had a bit too much to drink) to stop?”

In general, this confirms the pattern of previous research that young men are more inclined towards patterns of risk-taking but it does not remove concerns about the behaviour of some young women (for example on wearing either front or rear seat belts).

4.6 Deprivation

There were statistically significant differences in the data (using the Kruskall Wallis test) between estimated levels of deprivation in the ward in which the school or college is situated as follows.

For self-reported behaviour on having:

- Gone with a driver who'd used drugs recently: (top 10% most deprived more often)
- Not worn a seat belt in the back seat: (top 10% more often)
- Watched the driver use a mobile: (top 10% more often)
- Been driven by someone who had no licence: (top 10% more often)
- Driven with a driver who had been drinking: (SOAs in top 20% less often)

On the knowledge of how to stay safe:

- The maximum positive score for three things as a passenger to keep safe: (SOAs in top 20% scored lower)

On the attitude questions:

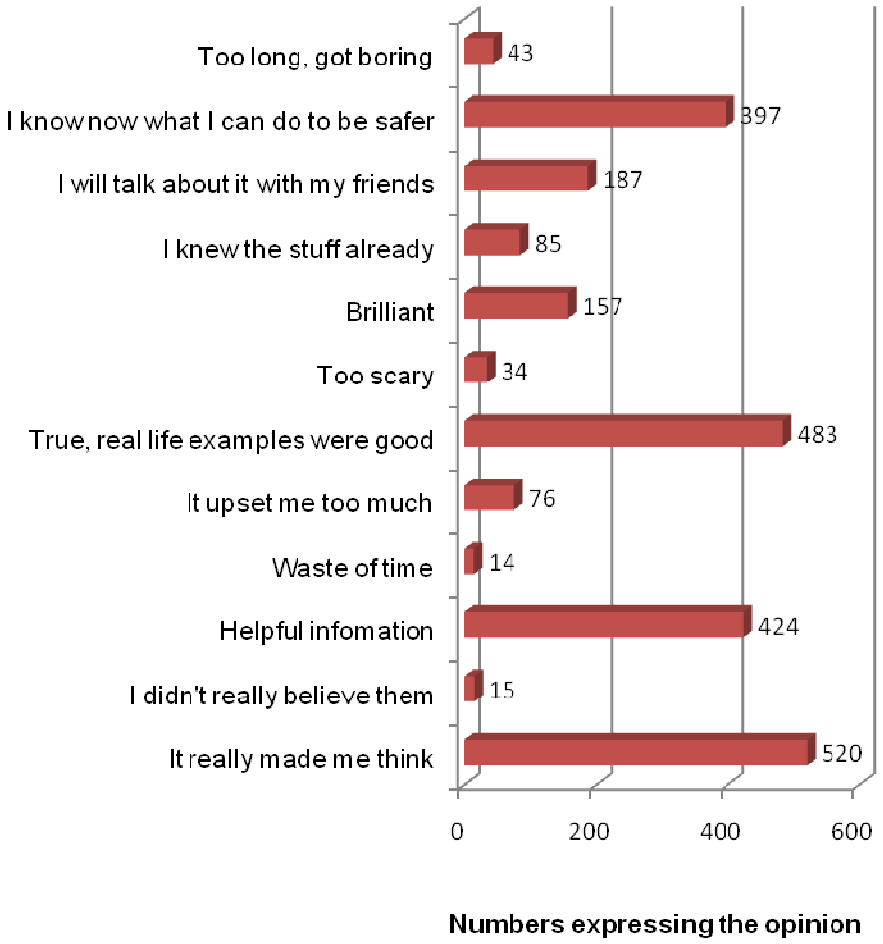
- Driving at 28 miles an hour in a 30 mile an hour area: (both top 10% and below top 30% perceived this as more "OK")
- Driving at 45 miles an hour in a 30 mile an hour area: (a mix of top 10% and top 20% saw this as more "OK")
- How would you feel being driven in a car going 98 on a motorway?: (a mix of top 10% and top 20% felt they would be more "scared/anxious")
- How would you feel being driven home by a friend who has had a bit too much to drink?: (young people in wards outside the top 30% most deprived reported feeling least "scared/anxious")

Broadly this shows that young people attending education or training in the most deprived areas were more inclined towards risky behaviours but also that those least deprived had at least ambivalent attitudes towards speeding, and drinking and driving.

4.7 Young people's opinions about the Crash Course

For those young people who completed questionnaires after they had seen the presentation, there was a set of options on reactions to the course. They were asked to tick all the options that applied to their own responses. Figure 4.4 below shows the range of responses. The numbers expressing resistance ("I didn't really believe them" or "Waste of time.") are extremely small: 15 and 14 respectively. The number finding the presentation "too scary" was also small at 34. The vast majority found the session thought provoking, helpful and informative about how they could stay safer.

Figure 4.4: Young people's opinions of the Crash Course



4.8 The free text comments

The questionnaires administered after young people had seen the Crash Course presentation had three free text questions. These comments were analysed qualitatively by coding their content.

The first of these questions asked *"Is there anything you would want to change about the Crash Course?"* A total of 141 young people offered a comment. Table 4.4 below tabulates their content. 17 young people said they wanted no change at all. As might be expected, there are some contradictions. For example, a number of young people found the presentation too upsetting (19) but another somewhat smaller group wanted to make the material even more harrowing in an attempt to shock people into safer behaviour (7). In all 20 felt the presentation was too long or needed a break in the middle: one person however felt it should be longer. Illustrations of the comments are provided below (with spelling and punctuation corrected).

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Table 4.4: Suggestions made by young people for changes to the course	
Type of comment	**Number received**
Do not make any change	17
Make more use of videos and pictures with less talking	32
Too long; make it shorter	15
Have a break	5
Include activities, involve the audience	5
Include safety of motorbikes and scooters	2
It was too upsetting	19
Make it more harrowing and graphic	7
Use current TV advertisements	2
Use more interviews or victims as speakers	7
Provide more information on what to do	2
It was boring	2
Don't know	1
Making a suggestion on safety e.g. wear your seat belt	8
Other comment or not clear	17
	141

No, it was good as it was.
I would change nothing.
It would be good to watch more videos and pictures as they attract my attention more than someone standing there talking for a long time.
Make sure the speaking parts are shorter so that it is more interesting.
Shorter, because I was getting tired.
Have a break half way.
Shorten or include activities.
Try to make it easier to focus on, for example involving the audience.
They should show things on how to be safe on motor bikes.
Motorbike/scooter accidents should be shown.
Upsetting scenes were not needed to get the message across.
Not as graphic, don't show crippled people under cars.
Don't show things that might make people cry and upset.
Music upsets me even more.
More death; harrowing videos to scare people.
I think there needs to be more imagery. It's not that I like gore I just think it needs to be more shocking.
More pictures - frighten them into not doing it!
Idea of advert, man in vehicle shows what happens to organs during crash.
Could make that more graphic for people to be careful.
To include the new advert on the TV would be effective. It shows you how wearing a seatbelt is important and keeping to the correct speed.
Have interviews with the people who lost loved ones.
Real people with recent accidents telling us how they coped etc.
Different ways of appealing to boys…got too boring.
Maybe more information on what to do.
Say exactly how much worse off you are if you're drunk or drugged up.
What would you do in a car if you had a crash and had no mobile?
More info about under age driving and the effects of that.

Just a few of the comments appeared disbelieving and this might be interpreted as defensiveness against accepting the messages.

That people wouldn't "big it up" as bad when it's not as bad.
They make it too dramatic! Hardly any actual factual information was given.

The second free text question in the survey administered after the course asked the respondent, *"Is there anything you now want to change about how you behave in cars or things you would do differently in future?"* Once again the answers were qualitatively answered and coded for the content of the answers. 409 young people wrote a comment in response to the question. By far the greatest response was to do with an intention to wear a seat belt in future (253, or 62% of those responding to the question). A number also indicated that they would press others to do so as well. The text of the responses also makes clear that a number of the young people had not always worn their seat belts in the past and a few did not seem totally convinced that they would always do so but intended to improve their behaviour in this respect. This underlines the evidence in this report that despite the long standing legislation, the wearing of seatbelts cannot be taken for granted.

After that the most numerous answers concerned an intention to tell other drivers to slow down or to drive more slowly when they became drivers themselves and the resolution not to "mess about" or distract a driver. A number mentioned an intention not to go in a car with a driver who had been drinking or not to drink and drive themselves. Use of drugs was mentioned a very few times. Some responses were simply generalisations (such as *"be more careful on the roads"*) or were unclear. One or two people noted other risks to attend to such as the need to limit the number of people in the car. One young person wrote that they would *"walk more!"* and another suggested that driving tests should be *"re-done every few years."* 22 respondents said they would make no change, often because they perceived themselves as behaving well in cars already. One of this group said no change would be made and repeated the comment that no useful information had been given. The analysis is provided at Table 4.5 below.

Table 4.5: The changes young people said they intended to make

The changes intended (Respondents could mention more than one item: comments all coded.)	**Numbers mentioning that change**
Intention to use seatbelt	253
Will tell others to use seatbelts	41
Will not 'mess about' or distract driver	69
Will tell driver to slow down, or stick to speed limits	41
Intend not to drive too fast themselves	5
Will not drink and drive and/or go with a driver who has been drinking	22
Will not use mobile or text when driving and/or allow a driver to do so	18
Will only go with a trusted driver	16
Will ask to get out if feeling unsafe	7
Will not go with a driver who has been using drugs	3
Will not go with an unsafe driver or in an unsafe car	2
Generalisation, not clear or other	37
No change envisaged	22
Don't know	1

An illustrative selection of the comments is set out below.

Always wear seatbelt, don't let driver be on phone, make sure the driver hasn't been drinking.
I won't distract whoever's driving. Make sure everyone is wearing seatbelt.
Always wear a seatbelt and if I don't feel safe in the car ask them if I could get out of the car.
Don't be afraid to ask to slow down/get off the phone.
Always wear my seatbelt. Not race around no matter how fun it looks. Make sure the seat isn't too far back. Think of the consequences and others.
I will be careful about who I get in a car with and always speak up if I feel they are going too fast.
Tell the person driving to stop, or that I feel sick if I don't feel comfortable with the way they're driving.
Nothing has changed. I have always known the consequences of driving fast.
No, because I act sensibly in cars anyway.
Yes I wear my seatbelt and nag everyone to put it on in the vehicle.
By wearing my seatbelt more and telling my mum, dad and brothers to wear theirs.
Make sure everyone wears a seatbelt because it only takes one person to kill everyone.
Make sure that everybody in the car that I am travelling in is wearing a seatbelt because it only takes one person to kill us all.
Stop messing about when someone is driving.
By making sure passengers have seatbelts on and mobile phones are not allowed.
Wear a seatbelt. If someone is going too fast I will have the courage to tell them to slow down.
I will not drink drive or drive dangerously on roads and will always wear a seatbelt.
I always wear my seatbelt now, no matter if I'm only going to the local shop. I turn the music down when my dad plays it loud.
Yes, I always wear my seatbelt now. Stopped going out with mates in cars.
Slow. No mobile phones. Wouldn't text or ring when I know people are in the car.
Not get into a car with a stupid driver. Tell the driver to slow down if I get worried.
Remember to always wear a seatbelt. Avoid using the phone when in a car.
Get the driver to not use their phone when driving.
I think in the future when I'm driving I will make sure people sitting behind me wear a seatbelt.
I won't want to go as fast as I normally would. I certainly won't be street racing except on tracks like track days.
Don't distract the driver. Always wear a seatbelt. Don't get into a car with a person that has been taking drugs or has been drinking.
If I ever got into a car with a person who had been drinking then I would certainly not get in and I would tell them not to drive
I always put my seat belt on in a car! Before I never hardly did.
I won't ever get in a car with too many passengers again.

When I start driving I'll never use my phone.
Wear my seatbelt. I don't want to die just yet.
I don't think I will ever muck about because some of the accidents look pretty nasty.
Not to drive at high speeds on small roads and bends.
I would never answer my phone while driving.
Only go in cars with people who I trust are good drivers.
I would never call anyone whilst they are driving and if they are going to answer their phone I would encourage them not to.

On all the questionnaires, a final space was offered to mention any other *"comment or concern."* This question was seldom used. Again some people repeated the safety messages. Some said they found it hard hitting or disturbing; others simply said *"thank you".* A few made suggestions for increasing road safety, especially 5 comments in relation to providing off road facilities for those who wanted to race. Some commented in some way on how important cars were in their lives. A few remarks illustrate the pressures on young people to take risks. The question of the use of legal drugs probably needs to be addressed in the presentation.

Young people aged 19-25 (boys) always race cars. Because it's a joke to young people.
Do a racing track, for people who want to drive fast so they don't race on the road.
I think they should make a track for the 'boy racers' to keep them out of the way of other drivers, innocent drivers. If they want to act silly and kill themselves then so be it. Because they all will still do it and hurt innocent people.
The Government needs to rethink their transport policy.
Speed bumps in residential areas.
Should have a camera in traffic lights, this makes drivers aware of speeding.
I think you should take your test every few years because there are too many people who don't take it seriously.
Build a robot to drive for humans.
When you ask drugs does that include medication?
Why are cars made to go over 100mph when you aren't allowed to go that fast?
I'd put my seatbelt on if it wasn't mouldy.
Been in car crash, [it's] *not a nice view.*
I love cars!
I think it's more dangerous to travel in a car being driven by mates, as opposed to your parents or responsible adults.
My mate went to KFC and started doing "doughnuts" on the car park. I couldn't tell him to slow down cos I was scared.

4.9 Summary of evidence on the effects of the course

The main findings from this data can be summarised here. They support a conclusion that Crash Course is having a positive influence with its young audiences on issues of safer behaviour on the road.

- There was evidence of **some increases in knowledge** about risky behaviour in relating to cars, whether as driver or as passenger. Those who had attended the course were better able to offer three major causes of death or serious injury in road collisions at a statistically significant level.
- There was some evidence of **shifts in attitudes** towards risky behaviours. Significantly more young people felt it was acceptable and "OK" always to wear a seat belt after they had experienced the course. A significantly higher number of the young people now felt able after the course to ask a driver who had had too much to drink to stop.
- **Self-reported behaviour** over the last month was significantly better in the group that had experienced the course than for those who had not in two respects. Those who had attended the course reported that they had "messed about" in a car less often, indicating a greater awareness of the dangers of driver distraction. They had also more frequently been scared about the driving, indicating a greater sensitivity to driving risks.
- The free text comments give some picture of **future intended behaviour**. 409 young people responded to this question of whom some 253 (over 60%) were resolved to use their seat belts and 69 (over 16%) were determined not to distract a driver in future. Other intended behaviour covered the range of safe practices recommended during the course.

This evidence tends to be further confirmed by the evidence from the focus groups with young people and the interviews with stakeholders described in the next two sections.

Concerns however must remain. The course cannot be expected to transform entrenched attitudes or risk taking and the evidence shows that the some of the young people are prepared to admit to both behaviour and attitudes that reflect a considerable willingness to put themselves at risk. It appears that young men are more difficult to convince and have more risk inclined attitudes than young women. The evidence also shows that in general young people attending educational provision in the most deprived wards are also more inclined to take risks. These issues will be a continuing challenge for the course and for approaches to road safety promotion more widely.

Section 5: Feedback from stakeholders

5.1 The strengths of the programme

The feedback from stakeholders was overwhelmingly positive. Virtually all the respondents had witnessed the team in action. They could testify personally to the impact of the presentation. The interviews confirmed views about what constitutes the essential strengths of the programme. These can be described as follows:

The use of real life situations and speakers with first hand experience

"We are using real people. They can't just say it's 'Smithy' out of The Bill."
"At first we used the Ireland adverts. After the feedback, we decided to withdraw that because people knew it was an advert. The music had an impact. All the strengths come from the individuals. Their experiences – that was the power of it."
"I think it's useful. I've seen it twice now...I left the room each time a different driver to the one that went in. I get into a car in a different way. I felt the benefit of it even with fifteen years driving experience. I'm conscious of speed: I've seen the impact on others – families of road death victims, the close up reality of what this does to people's lives. It's so real. And their stories have such gravity. It's not an act – those people have done it. They have picked up people's bodies from the roads...experience of supporting people and families. That it's so very real makes it effective. The people delivering know. They are telling you what they know. And it's not nice."
"It's truth. They are not flowering it up. The reason we had no disruption today is that they know; they've had experience."
"In the beginning we used the Lyle and Bailey adverts developed to target young people in Ireland. They were shocking, not gory. Young people said 'Take it out because it isn't real.'"
"The unit [CIU] *can get* [real] *footage. We take photos of every accident...There's indefinite access to the right undated images."*

The use of feelings and emotion as well as factual information to deliver consistent messages

"It's the emotion and the effect of seeing how vulnerable you are. Shattering the illusion that you can have a thrill like Alton Towers."
"It's the calmness of the people speaking. X was so quiet. It was as if he'd gone into himself. They listened."
"Messages are consistent and recur throughout the delivery. It's revisiting the messages. There are no mixed messages."

Presentation by a credible multi-agency team

"The jobs they do give credence and colour but it's their ability in front of an audience to do what they do that marks them out. Mix that with their credibility and you've got dynamite."
"The 'multi-agency' makes it more interesting. The Fire Service can give their input – their personal experience. Sometimes the police have an uphill struggle if the audience have preconceived ideas. It may be an advantage having the Fire Service. People have less bad experiences of them."

Ownership by the partners and effective networking

"The interest of the County Coroner is significant. [The team] *have been networking and they have a name across the county."*

Practical logistics and professional production

> *"It's transportable. Logistics – you don't have to bring the audience to it."*
> [A film or theatre production] "*won't impact as much as someone in your personal space...Personal testimony live versus on video is powerful."*

5.2 The commitment of the team

Interviews with those involved in delivery underlined the complete commitment of the whole team to getting the safety messages out to young people. They have all been personally touched by their experiences.

> *"They are fantastic and dedicated. They don't mess about. They come straight to the point."*
> *"I don't like to see people hurt. I didn't like to see the mess people were in. You had to get on with it. But the worst time...is going back home and thinking about the people and the others who were left....Ask a question like 'how many have not worn a seat belt?' and see ninety per cent put up their hands. That motivates me."*
> *"The people who do it have a way of conveying it with compassion and a truly genuine desire that people don't end up these god awful messes with the implications that go on and on and on. I think everybody would like to think they could prevent it happening to someone else."*

5.3 Perceptions of impact

All those interviewed shared the belief that Crash Course does have a positive impact. They felt that it is remembered and in many cases does actually change attitudes, intentions or behaviour.

> *"Comments are made by young people say twelve months later. They say 'I remember that: I'm going to wear a seat belt.' Generally it does have an effect. We can't measure it exactly. There are so many strategies for Road Safety. You can never be sure and you can't measure how many lives have been saved. What I do know is that it's costly. Every road traffic accident where there's a death costs £1million."*
> *"What motivated me was the effect it had on the audience... Teenagers – they won't listen for more than ten minutes. Here was a class listening for two hours...maybe not the whole talk but bits of it do sink in...I can't quantify it but I do feel it's making a difference. It's the most effective presentation I've ever seen."*
> *"The group we brought here* [in the internal evaluation] *had all had Crash Course. The finding was that they were still challenging friends and families. They had realised they could have an influence."*
> *"I've not driven the same since seeing it. I've seen others affected by what they've seen; there is no reason why they have not changed their behaviour like I have. It must have saved some lives. If one has been saved, then it's worth it."*

5.4 Anecdotal evidence of change

The interviewers asked for examples of concrete change. The respondents were able to provide a number of anecdotal examples of changes in attitude or behaviour amongst young people they knew. A number were parents themselves and had seen the effect on their own teenagers. All were glad that their son or daughter had gone through the course, despite the strong reactions that it provokes.

- One young woman who had seen the presentation got to own her own car. She resisted the pressure when many of her friends took lifts and urged her to go faster. When another of her peer group got a car and was driving foolishly fast, the girls decided after about two weeks not to accept any more lifts with her. This group pressure made the new driver slow down in order to get her friends back.
- A teacher told of two young men who came to her saying that they had seen a road accident. They told her that before Crash Course they would have just passed it. Now they had gone across, dialled 999 and stayed with the injured until the services came. "*We felt fantastic, miss."*
- At one of the colleges, one of the audience came up to talk to the presenters. She said she was in a car with her boy friend and was going to put the seat back and go to sleep. Then she had remembered the Crash Course from school, put the seat back up and put her seat belt on. The car was in a crash. She had been told that if she had not worn her seat belt, she would definitely have been killed or seriously injured.
- One young woman had mild learning difficulties. Her mother had died some time previously of a serious illness and her father had refused permission for her to attend Crash Course at school in Year 11. The training provider, where she now studied, had discussed the issue with the father and persuaded him that she might attend if she felt up to it. She did get understandably upset. The father however said that when he came to take her home, it was the first time she had ever managed to talk about her mother's death.
- A school pupil was waiting for his father in an unusual place. The father asked him why he had not phoned him on his mobile to tell him. The boy said that because they had seen Crash Course he had not wanted to ring him on his mobile when he knew he was driving.
- A young man who habitually came home in his "mate's" car phoned his mother for a lift. He had discovered that his friend had been drinking in the pub and had decided not to accept the usual lift with him.

5.5 The course as part of the curriculum

Teachers who were interviewed saw the course as an effective part of the school curriculum especially in relation to the Every Child Matters target of helping young people to 'stay safe'. Of those who commented, most would have booked the course even if the school had had to pay.

> *"It was fantastic. Absolutely fantastic. The first time, we had a challenging group. They were talking. A couple were late. By the end of the presentation, you could hear a pin drop."*
> *"It was the talk of the school for a good week after the two occasions."*

"My year thought it was excellent. It was clear that the hard hitting messages, even though very emotional and personally very traumatic for many of the pupils, had a real impact. In my view it raised awareness of the issues of safety on the roads and helped the pupils to think twice and make informed decisions about behaving responsibly."
"It's hard hitting information, scare tactics, it brings home the truth to children that things like this *do happen. It makes them realise they need to be responsible young people. They were still talking about it in period 4. They were saying 'it was grim'...they were saying 'I'm definitely putting my seat belt on now.'...I'm full of plusses."*
"Crash Course is an important part of my PSHE programme because it deals with life and relates directly to the students...This is one of the most important and hard hitting deliveries students could receive. It's important they are made aware of their actions."
"This school welcomes Crash Course. They would still have it even if they had to pay. Some of the other curriculum offerings they will not have again even if they are free."
"We do it with small groups. I know it is resources. There's no payment for the course. We would pay if there was a charge. We'd fight for that and put up a definite strong case."

There is a potential to integrate the Crash Course messages with the wider curriculum that is not often fully exploited. When it does happen it has the particular advantage of reiterating and reinforcing the messages. A few schools and training providers had picked up the topics in areas such as citizenship, media studies, basic skills, maths or physics.

"In the curriculum, as part of the pastoral scheme of work – part of Every Child Matters – there is a healthy lifestyle unit about road safety. We teach it as part of Citizenship...It's all about empathising with those affected by road issues, about understanding being a safe driver. So it ties in perfectly with this scheme of work. We've taught this as a follow up...The Crash Course was the hook. It made them keener...It helps that we consolidated with follow up lessons."
"And in basic skills...if I said 'we're doing a literacy session', they aren't bothered but if I say 'the driving theory test' they are all interested. They don't realise they are working on literacy skills and we also incorporate the maths. [The driving theory test] i*t's something they need and they want to do it."*
"I would love to see follow up in the schools. Is that 'fantasy island'? Assertiveness training would so much help the young people. And they should do first aid."
"I would want to see it as part of a wider aim of giving our kids experiences that might keep them safe ... roads, pools, wherever."
"If it was part of a curriculum, so many pieces could fit – like law and order. But in general that doesn't happen. ..One school did use it for maths."

5.6 Pastoral care for pupils

Several stakeholders expressed concerns about the level of pastoral support in schools for young people who found the presentation distressing or who had

reminders of the personal issues in their own lives. This accords with the perception of the researchers that while some schools clearly do have systems of support in place, great care needs to be exercised to ensure that help is available to all who need it. Best practice was seen where schools, colleges or training providers offered immediate support for those affected by the presentation and also raised the issues for discussion later in smaller groups.

> *"Schools have to do more... It's no use saying – say in an inner-city 'rough and ready' school – 'Oh, you know what they're like here.' Yeah – isn't that more reason. They are more likely to be touched. Ideally – get them back as a form and let them talk."*
> *"In one place a small group were not paying attention and the policeman spoke. There was a total change in atmosphere. He made them realise what an important issue this was and they started paying attention. Some young women walked out in tears...It's important to have a counselling service on hand. In a few minutes they had gathered themselves and came back in."*
> *"We had learning mentors available to talk to pupils outside the hall to ensure that pupils who have had a personal experience which made them upset had someone to talk to. It is sometimes a surprise who gets upset with the content of Crash Course and on a number of occasions it has affected those who can be disaffected in school."*
> *"They were saying they'd never seen anything like that before and for those of them that had had experiences, it enabled them to talk about their experiences and say why they were upset...even seeing their Head of Year get visibly upset. One of the boys, a Year 11 prefect, said that this made him feel OK about being upset and crying."*
> *"Mrs X used the Crash Course to talk to her tutor group. She had wept at the thought of what it would be like if it were her son in a body bag. She shared that with the group."*
> *"We do follow up in groups one or two weeks after it...We found it hits them in a couple of weeks time. They actively pick up the topic. We'll keep the group together. We'll debate it."*
> *"I would like to see more support for the people who get really upset. We wish them all the best and pack up and leave. It's got to be the team responsibility in conjunction with the host. We could stop with them all for five or ten minutes...acknowledge people have got upset. It's about a composure thing."*
> *"Do we have access to counsellors? We should have. That's why it should be part of education – a jigsaw piece in a wider jigsaw...It's a tough shitty world and you need kids to know about it. "*

5.7 Support for team members

Both members of the delivery team and other partners expressed concern in different ways about the need for personal support to team members in view of the emotionally taxing role they take on.

> *"We are going to have to address the emotional drain. The challenge (which is the new word for impossibilities) will be in getting people who can have the same impact."*

"No – the staff support is not sufficient. [The work] *is highly emotionally charged. They want someone to turn to on a regular basis, a fixed location, a line management system, permanent funding and a place in a structure."*
"We've got to look out for each other. We're not Jackanory here. We're not telling stories. We've seen it, smelt, felt it. Maybe we don't support each other quite enough. We hear each other so often, we get immune to it. [What would be ideal?] *Someone away from the team who would just listen. It's not about fixing it – just about being able to off load."*
"Two sessions a day are difficult. When you have an emotionally charged audience. I don't like it when people are really sobbing and you know you've upset them. And I find it difficult to talk about incidents which have hurt me as well...It's not all the time: sometimes you just switch off...No, we haven't got hard shells. I remember sitting at my dining room table in tears."

It was acknowledged that the pressures were sometimes felt because of the high levels of resistance in some members of the audiences. At times young people can be badly behaved or make rude remarks. While a large proportion of this behaviour is probably due to defensiveness, it is still extremely draining for the presenters who must keep control of their own emotions despite the fact that they have been personally affected by the experiences they describe.

"Sometimes you get difficult people. Like those who are texting all the time. But nobody has lost it."
"If you criticise people's driving, they may go up like a firecracker. It creates a barrier. You want them to say 'OK, that was worth listening to.'"
"X is still laughing and grinning. It hasn't touched him...It's not cool to be smart or better than anyone else."
"Is it a fear of grief, of having to deal with loss? Unless they have experience of it, people don't identify with grief and loss. There's an element of indestructibility. Putting grieving off because it's not something you have to think about now. It goes back to 'are you afraid of dying?' Most young people would say 'I don't think about it – it's not going to happen to me.'"
"People who come to the Diversion Courses are cynical. They are feeling anti-establishment and won't compute the danger. They have fallen out of love with the agencies who do it. But at the end, they do look crestfallen and they do thank the inputters...If you can influence people that cynical, there's a real market outside Year 11."

5.8 Future developments

Some stakeholders spoke of potential future developments and linkages that they felt would be beneficial in the longer term. Some of these are reflected in the final recommendations of this study.

"I dream that all strategies will tie up together as part of a community-wide thing...social and community cohesion and intergenerational work. This could link in to older and young people or parents and young people watching this together."
"As we are working towards Integrated Youth Support Services, there are opportunities to work with the Youth Offending Service and the Leaving Care

teams ...and to integrate Crash Course more into the social development process rather than have it as something young people come into and go out from. We need to link people with responsibility and power and to be interested in the personal and development process and we are more likely to reach the young people we want."
"One employer. A Crash Course unit with the materials and the resource and a greater ability to deliver. If it saves lives here, use it somewhere else."
"It's memorable, hard hitting, extremely effective in relation to targeting young drivers. It was the right message for the right audience. But does it give enough coping strategies?"
"Yes – coping strategies. [There's a problem if] *at the end you have a sense of helplessness. What can you do to reduce your risk?"*

Equally several people made clear that they felt developments should not be made at the cost of the delivery to young people in the critical age band just before they can legally learn to drive.

"Year 11 gives coverage – it's a hostage audience. A number are already responsible young people in vehicles who can have an influence on others. Can you afford not to do it, even if it's only five out of fifty that change their behaviour? There isn't an alternative at the moment."
"We need to maintain the initial direction of this course – year 11 in high schools. Catch them and head it off – so it is in their memory."
"Its central purpose is part of the PSHE strand in schools. It is also part of the casualty reduction focus."

Many respondents talked about the need to expand the team in order to ensure sustainability and coverage. They also showed an acute awareness that this would not be an easy task.

"I want it to grow because I think it's important. If it can function in Staffordshire, it can function elsewhere. There are two things that are significant here – the skills and the people to deliver it (what if [people] *drop out or move?) and the numbers to deliver it."*
"The objective was for a small Crash Course team to be set up to form small satellite teams. So at the end of the three years, there would be new teams... It was never done – the core team started to deliver to bigger groups."
"It's still a 'limited edition'."

A number of the partners had views about the need to strengthen the management and support structures for the Crash Course team and its development. These included comments that a permanent base and consolidated line-management were needed. The pattern of secondment and short-term funding was not viewed as helpful to development and salaries were seen by several as needing review

"Don't think the salaries are adequate – I would review it."
"I would want them to be permanent."
[There has been] *"bureaucratic delay.* [Sometimes] *they have not been paid for overtime...They feel out on a limb – not police, not city, not county. They feel insecure."*

"When you compare what they do and the commitment with other organisations, they are underpaid."
"I would be ashamed if it stayed exactly as it is. It is becoming more and more reformed. I would like to see it reformed as part of a wider educational programme."
"Who should be the employers of the staff? Secondment or a single employer? I support the latter."
"There is a need for a project coordinator or team leader – an identified leader to push and be in charge on a day to day basis. And to have a group behind as strategic – the existing steering group – for direction."

Section 6: The evidence from young people in the focus groups

Seven focus groups were held at three schools and one training provider. Groups were conducted separately for young women and young men by female and male researchers respectively, with one exception where a female researcher worked with a male group. 34 young men and 34 young women took part in these groups. With the exception of two South Asian young men, all the respondents were white. In one school, the male and female groups were both from Year 12 and had seen the Crash Course presentation a year earlier.

6.1 Reactions to the course

In all the focus groups young people were emphatic that the course was useful and that they would recommend it to others. There was virtually unanimous agreement across the groups that they had learned from the course. Key learning concerned "wearing seatbelts", "don't drink and drive", "don't text and drive". Young people were also able to remember the input and discussed a huge amount of it in great detail. All the groups were very animated – and it was hard for the interviewers to capture all the comments made.

In the Year 12 groups with a year's gap since the course, the young people could still remember the presentation and give examples of what they remembered and what they had learned. The girls appeared to remember somewhat more detail than the boys. They talked about there being *"a lot of discussion about it around school"* and how the rest of the school knew that they had seen it. *"Lots of people were crying."* One of the students who had not seen it knew a lot about it. She said she felt she had *"missed out"*.

Most were intending to learn to drive and saw it as a necessity.

> *"You need to travel around, get to college and stuff. They said they don't want to put you off driving, they want you to drive, they just want you to do it safely."*
> *"If you've got a far away job ...I know a man who has to drive all over the country. He does specialist door fitting. Driving gives you freedom to go wherever you want."*

Reactions to the presentation were positive including the following:

> *"Everyone was glued to it, it's never like that usually in assemblies, especially a two hour one…everyone was crying, no one was talking at all, even the boys were crying."*
> *"Some of the boys try to be hard, but it did get to them."*
> *"We've been told loads about seatbelts and stuff before, but it was like a chore, now you see the effects."*
> *"My step dad's a police officer and he's been telling me about this stuff for ages, but I didn't really believe him, it didn't seem real before."*
> *"We're more scared now. We're aware of the dangers, and because we haven't started driving yet it's good because we were excited but we're wary now, we don't want to kill anyone."*

"It's all reality isn't it. Everyone has seen things. The fireman guy who had to leave the one bloke...he's seen it, hasn't he."
"It was sad – the baby. It was six months old and it will never have a life."
"It's quality, brilliant – put it that way. It was how it was put together; they show it in a different way. They use the whole thing, different sections. They told a bit of the story between. After they spoke the video would link it to what they said."
"I felt more aware…more aware of what can happen. You know the next few days, you sort of get in the car and say, 'I'll put the seatbelt straight on'... Say your Dad hasn't put it on straight away, you say 'Come on then: I've seen this today, you need to put it on.'"
"It didn't make you want to do that because you saw the effects. We see boy racers and in the past we thought it was fun, but now I think…what are you racing for?"
"The accident one of the women described was nearby ...it made it seem very real to me."
"It was a bit affecting that you could die in seconds of hitting a solid object or another car."
"I also learnt something new which is if a man does a hit and run the passenger can also get into trouble just as much as the driver."
"The fire-fighter had made the most impact on me because he was a man <u>and</u> was emotional."
[First young person] *"Seatbelts the main one, ain't it."* [Another young person] "*No, but seatbelts don't stop everything."* [First young person] "*No, but they save you more than not wearing one."*
"You never forget it, it's stuck in your head… it's just stuck."
"People cry and all that about it, no-one liked it but it's safety though ain't it."
"All the details makes you remember… Like the guy who works in the fire service, he said 'yeah I'll go and do this, it's on my way home' and then he finds this awful crash."
"Some of the lads got the message; I think everybody got the message."
[Young man.]
"It was more graphic than what you see on TV – because of the real life stories…if you don't hear these you don't think it'll happen to you."
"The body bag – I remember that."
"I'll always remember the one about sitting behind someone and being thrown forward."
"I remember the pictures and the women talking."
"The atmosphere was very effective – all being together...It was good being [all together] *in the hall."*

In the light of some research evidence that hard hitting messages can be counter-productive, the young people were specifically asked in most of the groups whether they felt that the unapologetic emphasis on the frightening side of road collisions would make them react by shutting down and refusing to think about it or even to want to live dangerously and take even more risks. The consensus was that this was not the case and had not applied in their experience.

"We were given enough information to care, but not to shut down."

"It's more serious than other things like smoking…you can die instantly…you've got more than one chance with smoking, with driving you've just got one chance."
[Various responses in a group of young men] "*I don't agree with that…" "No, you've seen what can happen now…" "Seeing a dead person doesn't make me want to do it." "Yeah, one of these videos could be you soon if you carry on driving like that...." "It's giving you a choice about whether you want to die, whether you want to drive like a maniac. Pick which way you want to die…"*
"If we'd shut down, we wouldn't be able to recall it."

There were a few reactions of resistance or bravado.

"When I get a car I won't drive round at thirty even though I've seen that. You need more dramatic real pictures of accidents. People getting squashed."
"Some of it would never actually happen."
"You walk out and like 'I'm alright now.'"
"I don't always put my seat belt on even now."

A small minority did find the presentation long or said some parts were 'boring'.

"The man did get a bit boring and he repeated himself."
"The police one was boring."

In several of the groups, the interviewers asked the young people to write **'text messages'** to a friend about what they thought of the Crash Course. These 'texts' were very positive and are illustrated here (without correction of grammar etc.).They convey the young people's opinions in a vivid and personal way.

Hey U, alr8 Jus watched the crash course. You should watch it. It really gets the message across. PS wear seat belt

The crash course is well worth a look at it made me open my eyes and think before get into a car and I now always wear a seat belt and would be comfortable at asking the driver to slow down etc.

a up just watched crash course It has opened my eyes to the dangers of drinking – some of which I've done. Don't get in a car when drunk or drugged up. Also don't answer phone in car

Or8 mate watcha crashcourt 2dai and put your seatbelt on dunna gerr ina car wiv sum1 plastered or drugged up

Hey, Just bin & watched Crash Course, recommend u watch it. Reli makes u think bout driving. Shocking pics, quite scary!

Aup: Jus watched Crash Course. Ti gd u shu watch it. Realy makes u fink about drivin. Tis prity gorey. inabizzle

Ulright. I have just seen the crash course video its some scary shit Made me think about getting in a car again.

It was horrible. Don't remember much but the things that have stuck in my head are that wearing a seatbelt really can save your life.

IYA we ad dis crash course 2dai. I thought it woz horrible cuz it woz dead sad. Dey tlkd abwt dis bay hu died nd it woz ded sad! Tb ly x ☺

Had a crash course today. Was interesting and had some amazing stories. Gory in places LoL! A bit lengthy though ☺

The crash course is well bad, it is well graphic. Its changed how I feel about getting in a car. It teaches you that life is precious and to not just waste it because of something stupid.

M8...U missed the crash course It really got the messages across ...Meet later to tell you all about it.

Crash Course was hard-hitting and emotionally traumatic.
Was on this course today. Shocked me how little things like not wearing your seat belt could do so much damage to a person in a crash.

Aup lad. You should have seen what we were watching today. It was a Crash Course presentation. It was dead graphical. You should have seen it you would drive safely always.

Iyahh! We had dis crash course today. It was a right experience ya shud watch it. I cried 101. It was really emotional n it was right good. Look it up. ly tb xxx

Hey dude ☺ U OK! Just had the crash course. Everyone thought it was horrible wasn't that bad i don't think though.

6.2 Young people's evidence of changes made

The young people were challenged about whether they had actually made any changes as a result of seeing the presentation. Many were able to give anecdotal examples to the interviewers of ways in which they had changed their pattern of behaviour.

- *"I went in a taxi and put a seat belt on."*
- *"I was on the bus and everyone was messing around and it said 'do not distract the driver' so I told them to shut up."* (This young woman said she would not have done this before seeing the Crash Course.)
- *"I've kept telling everyone about it since, especially my step-dad – he drives really fast."*
- Interviewer: "What about seatbelts in the back?" Young woman *"Sometimes before* [the course] *I couldn't be bothered."*
- [Young man] "*Yeah I stopped my dad from going on the phone when he's driving"…* [Another responding] "*Yeah my dad's murder for that… he'd probably say 'it's alright', yeah but I've seen this a few weeks ago… wait until you get home – it's not going to run off."*

- One young man in Year 12 who had seen Crash Course a year previously said that he was aware that since he had seen the presentation he not only wore his own seatbelt but tried to ensure fellow passengers did as well. Similarly in the Year 12 group with young women, all the group felt it had affected them at the time and shortly after. About half felt it was still having a regular effect on them, such as wearing seatbelts *"all the time". "I usually put them on now, before I wouldn't always bother, but I still think of those images." "I still tell people to put their seatbelts on."*
- *"I know someone who'd been driving and they wanted to take me in the car – it was a tin can, and I'd seen how they'd been driving, so I said no."* [The respondent thought this was a result of the course.]
- One young man had been convicted of driving without a licence. He did say he would not do so now because *"you think more about what could happen."*

6.3 Evidence of risk taking behaviour

The focus groups showed ample evidence of the alarming degree of risk taking behaviour amongst young people. Young people's comments suggested that some risks were particularly prevalent such as not wearing a rear seat belt. In some cases it was apparent that parents were condoning such behaviour.

Two young women for example explained that they had to travel from football to netball coaching and that because of the shortage of time between the sessions, they changed their 'kit' in the car and did not put on their seat belts. *"We do it in the car. There's no time between. We trust my dad. We could go in the toilets and change but it's a waste of time."*

There were some hair-raising accounts (perhaps with some exaggeration) of collisions or near misses that they or their friends had experienced.

> *"I know someone who hasn't even passed their test and they were racing and half the bottom of their car came off".*
> *"I know someone who was driving illegally and the wheels fell off – it was a robbed car."*
> *"Two of my mates got killed on the Stafford Road. The guy was p..... off and swerved straight into a car."* [In this group, two thirds of the young men had been in road collisions.]
> *"I've been in a car going 100 on the Audley road. I nearly died* [with fright]. *We'd been racing on the dual carriageway. We cut up a lorry in the slow lane and then had to turn left. I said 'Don't go for it' but he said he just had to. If you tell boys not to, they feel they have to do it anyway. He said his adrenaline was going. I was scared at the time but it was exciting after."*

There appeared to be a generally held belief that it was possible to know and trust a driver perceived as 'safe' and that therefore it was acceptable for the driver to drive extremely fast. In one group this was particularly marked as an idea that a person can be 'a very good driver' and therefore get away with doing dangerous things.

> *"All of my mates are 'dangerous' drivers. One of them is just f...ing Formula*

One. He's just a sick driver – going 65 on a country lane or 100 on a motorway."

The use of alcohol and the lack of understanding of limits were also particularly noticeable issues. While most remembered that the Crash Course had warned against drink-driving, most of the young people appeared to judge the question of whether someone had had too much alcohol to drive by the criterion of whether they were 'falling over', 'staggering about' or 'blasted'. Few had any clear idea of the alcohol limits or how soon drinking could affect the capacity to drive. In one group, four of the girls told the researcher that they would go in a car with an older boy who had had *"say two pints"* to drink but not if they were staggering about: only one girl said she would definitely not go in a car with someone who had been drinking at all. Some of the young women admitted being more inclined to get into a car with someone who is over the limit or not trustworthy if they are themselves "*a bit tipsy" or "if you're desperate to get home and you've got no bus money".*

"Boys know deep down it's wrong, but they don't realise it'll happen to them…we know boys who'll have a few drinks and drive, as long as they're not falling over drunk…"

In one of the boys' groups, nearly all of the young people very emphatically said that they would not consider getting into a car in the first place with somebody who had been drinking. However, it emerged during the discussion of these issues that the young people had been defining "been drinking" as having consumed the equivalent to 8-10 pints of lager! This would mean that the person in question was, in their words, *"blasted".* The entire group said they would not hesitate in refusing to get into a car with a driver who was "blasted". However, when the question was put to them with a focus on more moderate (but still dangerous) drinking such as a driver who had drunk about three pints of lager, there was much more uncertainty. For many, the consumption of three pints of lager before driving was seen to be *"not too bad."*

6.4 Peer pressure

In the groups, it was widely acknowledged that peer pressure played a part in behaviour especially the fear of what other people would say or of not belonging to the group.

[Young man] *"I don't want to say no because he'll probably laugh at me."*
[Another responding] *"Yeah, but you can't do that for the rest of your life… I'd rather have people take the mick than be dead."*
"If one of your mates said they are not getting in the car, you'd say 'Why?' They are on their own then." [Young woman]

In one group there was a discussion about how no one puts seat-belts on when they are in the school coach as they are sometimes broken and are often dirty. On school trips they may put them on in the coach if the teacher checks. They explained that in these situations it *"isn't seen as cool"* to put them on.

Some of the young men talked about the part that cars play in developing an image.

"If you're a boy racer, you don't want something that's no good."
"Most young people want to drive today because they think it's cool. It's the fashion. You see the same people in the same cars in the same places. Here it's Maccy [possibly Macdonalds] *and the Festival Park and Riverway. You go there because you have to be seen. You see girls even in Saxas – they look stupid."*
"If you've got a nice car, it means you get nice women."

Some of the young women felt that young men in particular 'need to show off'. Some also showed some recognition that they may be playing a part in the boys' feeling they need to race, drive fast or otherwise impress them.

"We were a bit impressed before when the boys drove fast and raced, but not so much now…would be a turn off though if a boy was driving his mum's Micra or something."
"Boys do a lot of races – it's about dominance, you don't see girls doing that, we'd be happy to do park and ride, or go shopping".
"There's no pressure on girls, we're more mature, that's why we don't go out with boys the same age"
"We like going in other people's cars. It's fun. It's a change of scenery. Your friend can take you as soon as he's passed his test...Feeling older ... choosing the music ...it's the thing to do."

6.5 The difficulties of intervening with others

Several of the young people spoke about trying to tell parents to be more careful or to slow down and one girl had been telling her brother not to text whilst driving, but they often felt that their families did not take them seriously. Several of them were worried about the speed at which their relatives habitually drove. Some of them suggested their parents and families be invited in to see the film too. Some thought their parents would be willing to come: one girl said *"we'd make them!"* Many of the respondents appeared to feel that bad driving was wrongly always blamed on young people.

"I've been telling mine [my father] *but he just tells me to shut up and not be silly."*
"They think we're over exaggerating about what we've seen."
"It'd help us if our parents had seen it."
"They'd just tell us to shut up or stop being stupid."
"My mum's boyfriend used to drink over the limit when I was a little kid.
[Interviewer: Could you avoid that now?] "*You'd just say no, you're drunk, I'm not getting in the car. But it's not your natural instinct."*
"I didn't like it being aimed at our age group. It's age discrimination. I know blokes of 35 or 40 who go down the pub and have four or five pints and get straight in the car. You don't see our age group do that."
"It's not just teenagers and I've been in a car with women who are just the same."

In one of the male groups, some of the boys commented that they simply would not ask the driver to slow down (although it would not be difficult to do if they wanted to).

Most saw their response as conditional on the circumstances, depending for instance on who the driver was, how experienced they were, and on who else was in the car and how they were reacting. They felt it would be hard to ask the driver to slow down if they were an experienced driver or an older person and especially if the passenger in question did not yet have a licence. It was pointed out that not all those who speed are young people and that some of their friends' parents drive too fast but they did not feel able to ask them to slow down. Some of the young people said it would be easier to ask a female driver to slow down, but a male would be more likely to take the request personally, and to refuse to listen to criticism from somebody who did not hold a licence. The perceived ease of asking the driver to slow down was also affected by who else was in the car. If the car was full of the young person's friends, then it depended on how their friends were reacting. If only one person spoke up but the others did not, there was a feeling that that person would look *"nerdy".* Some of the young people said that if they were scared by a driver's speed, they would look around the car to see whether anybody else looked uncomfortable before judging whether to speak up, or they might quietly ask another passenger if they agreed that the car was going too fast.

6.6 Gender differences

Reactions to the presentation across the genders were mixed and not extremely sharply divided but young women tended to focus slightly more on the emotional effect of the course content and often mentioned their response to the female presenters. The young men showed rather more interest in the technical information and the graphic portrayal of collisions. Several of the boys commented that it did not really affect them or that it was not sufficiently graphic to register but others did say that they had been 'upset' or emotionally affected. The boys' text messages (included above) also indicated that some of them had found the course 'scary' or 'shocking': it appears that this exercise showed private personal opinions which differed slightly from some of the more over-confident or dismissive reactions expressed in the group discussions.

> [Young man] *"I wasn't really that bothered at all to be honest..."* [Another group member] *"He's hard… though."* [Young man] *"I was a bit shocked at what was happening but I wasn't affected by it really."*

It seemed clear that in general the boys found it hard to show emotion and express their feelings. In one group, the young women said that some of the young men had been crying and that while some did not understand that reaction, most did and wanted to discuss the course. *"We talked about it all day."* In another group of young men, there was discussion about how a male teacher had showed emotion.

> [We] *"talked amongst ourselves – all of us. And with the teachers. Mr X was crying, [he'd] just had a new baby.*" Interviewer: Did that help you? *"Yeah… it's not just us, it's the adults who feel it as well."*

Some of the young women viewed the boys as less mature and therefore less likely to take responsible action.

> *"The boys said it was horrible…not sure if the boys will do anything about it, they're less mature…we'll have to wait and see when they get cars".*

The research team devised a particular exercise to explore attitude differentials between the male and female groups on several issues using semantic differential scales. The descriptors for the extremes were discussed with the young people and in particular they were comfortable with the term “cool” as meaning something acceptable to one’s peers and good for the self-image. The following graphs illustrate the means of the responses given in the focus group attitude scales for males and females. Figure 6.1 shows the results for the questions relating to driving at very fast speeds, and Figure 6.2 shows the results for attitudes towards driving whilst drunk. The focus groups were not randomly selected and cannot be deemed to be representative. Total numbers participating were small. These figures cannot therefore be seen as statistically valid but they do give some insight into the attitude differences between the genders.

Each graph shows a plot of the mean scores for each of the seven-point attitude scales. Scores are counted from the left hand of each scale, so for instance a score of 1 on the drunk driving safe/unsafe scale would represent a tick at the extreme “safe” end of the scale, and a score of 7 would represent one at the extreme “unsafe” end. In each case, the first term in the legend (e.g. safe, exciting, easy to ask to stop, etc.) for the bars represents the low end of the scales and the second term (e.g. unsafe, not exciting, difficult to ask to stop, etc.) represents the high end. Bars represent the means of all of scores given by both male and female focus group respondents.

Figure 6.1: Differences between young men and young women in attitudes to speed

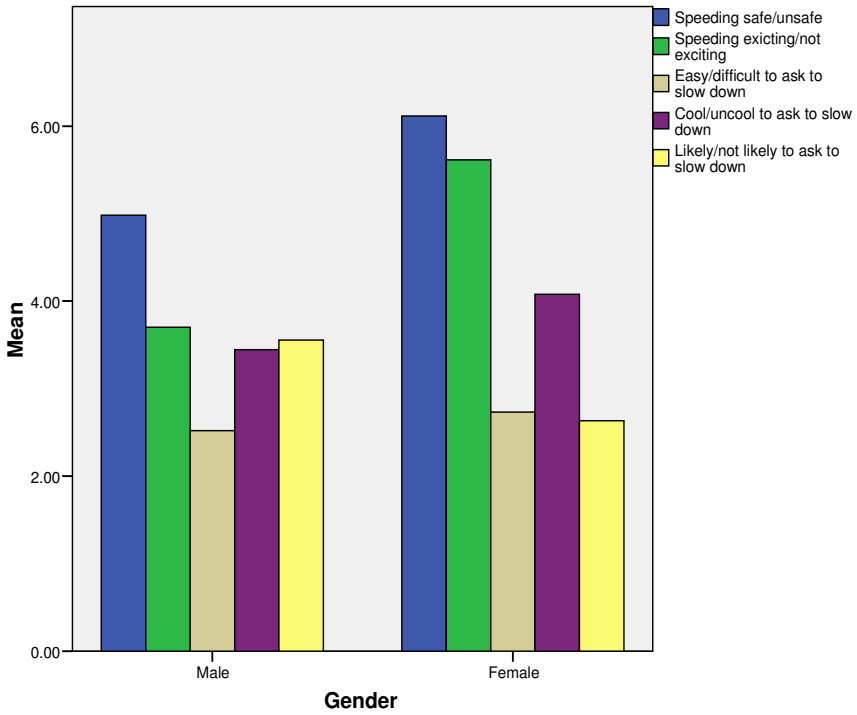
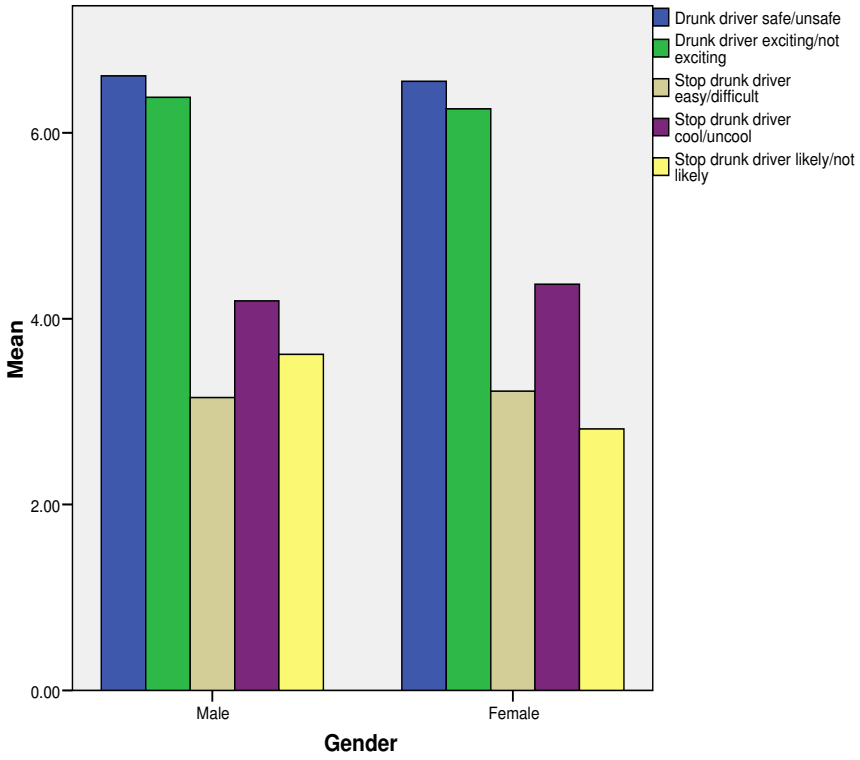


Figure 6.2: Differences between males and females in attitudes towards driving while intoxicated



As can be seen, there are no notable differences between the genders for attitudes towards driving whilst drunk. Both male and female focus group members rated this as unsafe and not exciting, and both were towards the middle of the scales on average on the issue of how easy or "cool" it would be to refuse to ride in a car with a drunk driver and of how likely they would be to do so. Females rated themselves on average as slightly more likely to refuse to ride with a drunk driver, but this averages only 0.5 of a point on the scale.

In relation to the issue of speeding, however, there were some clearer differences between the responses of males and females. Whilst there is a degree of similarity in average responses to the questions about how easy and how "cool" it would be to ask a speeding driver to slow down, males on average rated speeding as both less dangerous and more exciting than females did. Female focus group members also rated themselves, on average, as more likely to ask a speeding driver to slow down.

6.7 Suggested improvements to the course

There were relatively few suggestions for improvements to the presentation. The main themes that emerged are set out below.

- There were some (relatively few) demands for more graphic or disturbing images, or for physical examples of damaged car parts.

- A number of people felt that the content should relate more directly to their age group, perhaps with testimony from someone who had lost a teenage son or daughter.
- Many suggestions concerned having more content about coping techniques.
  "There should have been more ideas on how not to get into that situation."
  "Tell us more what we could do in certain situations."
- The point was made that little of the information related to motorcycles or scooters, which are seen by many young people as a cheaper alternative to a car, or in some cases as more exciting.
  "They should tell everyone more about the danger of bikes, scooters, because lots of young people get scooters and in the snow and ice everyone got texts saying they'd fell off their scooters."
  "I want a bike. They should have more about bike accidents... Yes. It's a death trap."
- Some respondents felt the request to imagine such events happening to individuals in their family was 'too much' or unnecessary.
  "I do think it was a bit over the top when they said, like, think about your Mum and your Dad…your little sister. Yeah, that was a little bit over the top."
- Another suggestion was that there should be a practical element or some kind of follow up activity or discussion – that they should *'do'* something afterwards.
- An exercise of having to wear "beer goggles" and then having to do various physical things like catch a ball was suggested. (Pupils understood that there is a device you can wear which affects your judgement as if you have drunk alcohol and suggested that this would really show how even if the person feels fit to drive their judgement may be affected.)

Section 7: Conclusions and recommendations

7.1 Evidence and conclusions

The original brief for this research from Staffordshire Fire and Rescue Service and its partners was:

- To evaluate the impact that the Crash Course has on the participants' attitudes to safe road user behaviour;
- To evaluate the effect that the Crash Course has on participants' intention to drive safely in future;
- To determine the appropriateness of the content and delivery of the programme for the primary target age group;
- To evaluate the appropriateness of the content and delivery of the project to meet its stated objectives;
- To outline possible courses of action for progression of the programme.

The brief included paying particular attention to gender differences in attitudes to driving and the nature of peer pressure on young people.

In this section these main questions of the study are addressed in relation to the evidence from the observation visits; the questionnaires and focus groups for young people; and the interviews with the stakeholders. Those quantitative measures that reached or closely approached statistical significance are reported here alongside the trends of the qualitative findings. The relevant statistical measures that did not reach significance are reported in Section 4.

Does the course have a positive impact on the participants' knowledge of safety issues?

The evidence from the study indicates that Crash Course does have a positive impact on young people's knowledge about how to be safer on the road. There were two knowledge based questions in the survey: one concerned the causes of road crashes and the other concerned the ways in which passengers could keep themselves safer. The comparison between those who had experienced the course and those who had not shows statistically significant higher total scores on the questions designed to test knowledge of the key causes of road collisions ($p=0.001$). The comparisons on the matched sample of young people before they had received the course and afterwards showed improvement at a level approaching significance in respect of what they could do to keep themselves safer as passengers ($p=0.068$).

Does the course have a positive impact on the participants' attitudes to safe road user behaviour?

The evidence shows that the course did have a consistent effect positive effect on attitudes towards the wearing of seat belts. At a statistically significant level, of those who completed the matched 'before' and 'after' questionnaires, more young people felt it was acceptable and "OK" always to wear a seat belt after the course than before ($p<0.001$). For those who had attended the course compared with those who had not, the effect was similar ($p=0.034$).

For those who answered the questions 'before' and 'after', significant improvement was also evident in respect of whether they thought they could ask a person who had had too much to drink to stop (their ability to be assertive). After the course a greater number of the young people now felt able to ask such a driver to stop ($p=0.047$).

In the comparison of those who received the course with those who did not, those who had seen the presentation were significantly more likely to view "Always wearing a seatbelt" as "OK" or acceptable ($p=0.034$) and also to think that "reading a text quickly while driving" was "stupid" ($p=0.001$).

Some other aspects of attitudes had changed to a considerable degree in a positive direction but not with statistical significance.

The qualitative evidence from the focus groups confirmed that virtually all the young people felt they had gained from the course, had a greater awareness of risks on the road and an increased knowledge about how they might be able to keep themselves safer.

Does the course have a positive effect on the participants' intentions to drive safely in future?

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The evidence on this particular question is mainly drawn from the survey question to those who had received the course. 409 young people completed the free text question about how they now wished to behave in future. By far the greatest number of responses indicated an intention to wear a seat belt in future (253). There is little doubt that this message is absorbed by a considerable proportion of the participants. A number also indicated that they would press others to do so as well. After that the most numerous answers concerned the resolution not to distract a driver and an intention to tell other drivers to reduce their speed or to drive more slowly when they became drivers themselves. Other responses showed an intention not to drink and drive or go with an intoxicated driver with a small number of other safety issues mentioned.

The young people's comments in the focus groups confirmed the finding that the course does have a positive effect on intended behaviour, with respondents being able to illustrate how they now wanted to behave as drivers.

Is there any evidence of behaviour change as a result of the course?

This aspect is the most difficult to measure or otherwise capture in any study of efforts to change attitudes and risk behaviour. In this case, the young people were not legally able to drive and no measures of actual behaviour could be taken.

The survey compared the self reported behaviour over the previous month for those who had attended the course and those who had not. A positive statistically significant difference was found in the self reports of those who had attended the course in respect of how frequently they had "messed" about in a car, potentially distracting the driver ($p<0.001$). The course attenders also reported being more

frequently “scared about the driving” (p=0.006), from which an inference might be drawn that they had become more sensitive to risk.

The qualitative evidence from both adult stakeholders and young people provided anecdotal examples of changes in behaviour after the course that were sufficiently credible to provide some triangulation for the quantitative findings. These examples concerned not only the wearing of seatbelts but other changes such as persuading drivers to desist from mobile phone use or refusal to be a passenger with a driver who had been drinking. Some of the young people were clearly being a positive influence on their peers or their families.

Are the content and delivery of the programme appropriate for the primary target age group?

The researchers observed the course in action with young people on five occasions. The presentation held the attention of the vast majority of the young people for the full two hours, which was not expected given the normal attention span for such groups.

There were no technical problems in any of the presentations observed. The team handled the material and the different media competently and moved well from one item to another. The presentation was widely described by stakeholders as “very professional”. On a very few occasions it appeared that one or other speaker was losing the attention of some of the audience but since the presentation is so varied and moves from one topic or film item to another, this was not a major concern.

At the start of the observation visits, some members of the team feared that the material would be overwhelming and too distressing for 15 or 16 year-olds. Considerable numbers from the school audiences did leave the room in tears though quite a number came back in later. In the light of the findings, this concern has however now dissipated. Only 34 of those completing their opinions after seeing the presentation found it “too scary” and 76 felt it upset them too much. Focus groups and teacher stakeholders confirmed that the force of the messages was perceived as legitimate, especially given that parents had given permission and any pupil could opt out. The fear-based messages need to be of sufficient strength to motivate a response and the researchers felt that approximately the right level was reached. Despite some suggestions in the young people’s responses for making the content even more fear-inducing, there is no indication that this is necessary to produce impact and in the view of the research team it is undesirable and could lead the presentation in the territory of gratuitously violent or distressing images.

While many 15 or 16 year olds still have mercifully little life experience on loss, trauma, or bereavement to relate to the course content, there was no evidence that any significant proportion were ‘shutting off’ from the messages. The focus groups confirmed that most of those respondents felt the shocking nature of the course was necessary and that it did not cause shutting down of responses or particular resistance. The researchers would agree with the suggestion made in the focus groups that the course should not be presented to pupils any younger than Year 11.

The research team felt, however, that the potential of emotional disturbance was considerable and that the Crash Course partnership needs to be pro-active about encouraging excellent levels of pastoral care for participants. This is for the most part the responsibility of the schools or other host organisations but should be encouraged at every opportunity. It was felt that an information leaflet should be made available with appropriate contact numbers of agencies to which young people could turn, in addition to their school pastoral support system. This would help to ensure that the responsibilities of the Crash Course partnership are fully met. Some young people might, for instance, be troubled by loss or by the drinking or drug taking of their friends or relatives but unwilling to go to a teacher in school. This would be a matter for the partnership but such agencies might include the Youth Service or Connexions. The research team were unable to identify a general youth counselling service or a specialist bereavement counselling service for young people in Staffordshire, though such services exist in Birmingham and in Wolverhampton. 'Cruse' offers bereavement counselling for all age groups in Staffordshire and there are national organisations such as 'Winston's Wish' which deal with young people and their parents needing help in the face of bereavement.

After the observation visits and the comments from the focus groups, the research team would suggest one change. The invitation to personalise imagined scenarios, to picture 'someone you love very much', although made in good faith and with the best of intentions, was felt to be unnecessarily intrusive. Some young people (for instance those in care) may be at the stage of feeling that they are unloved and love nobody and for others the image may be too vivid and potentially disturbing.

Are the content and delivery of the programme appropriate to deliver its stated objectives?

The view of the research team is that the Crash Course is broadly appropriate to deliver on the objective of increasing safe behaviour in cars with a view to reducing the number of young people killed or seriously injured. It is an unusual presentation and may even be unique. Its particular strengths are the use of speakers who have first-hand experience; their ability to use feelings and emotions as well as factual information (both female and male presenters); the credibility of the multi-agency delivery team and ownership by the partners. The role of the Fire and Rescue Service is significant. It provides an attractive and neutral image to most young people, compared for instance to the police or even the Youth Service. It also takes the direct role in extracting victims from collisions and can provide ample evidence of local incidents. It would be regrettable if this part of the positive image were to be lost to the Crash Course.

The 'realist evaluation' perspective (e.g. Pawson and Tilley, 1997) suggests that interventions do not just work or not work – that their impact depends on the circumstances. Their central question is 'What works, for whom, in what circumstances?' Their concept of 'mechanism' describes the way in which an intervention brings about change, using the interaction of programme with 'client' to influence choices and actions. The mechanism will be triggered in certain contexts or circumstances.

This may show itself in the Crash Course situation. If personal testimony is important, that will be a particular success factor and it would probably only work under certain circumstances, such as having contributors with the right sort of experience or speakers being able to control their emotions.

In the view of the research team, the 'mechanism' making the Crash Course effective is the use of a combination of facts, visual images and emotion in face to face delivery by a team of credible people with direct experience of the effects of road collisions. The team requires factual knowledge, stark images and a variety of first-hand experience. Team members have to be able to show appropriate feelings but also to control their emotions. They need to be able to engage a youth audience and control anger about inappropriate responses. They need a context of pastoral support for themselves as well as for the young participants. They need stable supportive management and the vigorous backing of a multi-agency partnership. The Crash Course also needs to adhere to the principles shown from research about the circumstances that make fear-based messages effective in risk reduction.

The core content file of the Crash Course should be revisited and updated. It is possible that team members could become too familiar with the material with long practice and the essence of the educational messages and methods needs to be captured for future transfer elsewhere. Thereafter copyright should be taken on this effective pattern of intervention so that the essential mechanism can be preserved and replicated. Fidelity is a major issue for successful social interventions. While the Crash Course content remains an informal arrangement, there is a danger of attempts to replicate it without some of its essential ingredients.

It is tempting to think that the Crash Course could only be successful with the personalities of the present team involved. These individuals are undoubtedly talented and committed but there is no evidence in this study to suggest that they are irreplaceable or that the basic mechanism could not be transferred elsewhere. It is essential that new personnel are recruited to the team as a matter of priority. Failing that this effective intervention is certain to die out in time and its coverage will be necessarily limited. There is no spare capacity within the current team strength to deliver more and demands are increasing for further presentations to adults.

The responses of adult stakeholders and the young people themselves enable a 'person specification' to be drawn up of the type of person likely to succeed as a new member of the Crash Course delivery team or of a team developed elsewhere in the country. The criteria would include being:

- Confident
- Articulate
- Able to speak clearly and adjust to various levels of understanding and use layman's terms
- Non-judgemental
- Willing to communicate with all ages 16 to 70
- Liking young people and regarding them positively
- Having direct experience with road traffic collisions or their victims in some respect; knowledge of the subject
- Able to convey personal experience, feeling and emotion without 'breaking up'
- Able to take constructive criticism

- Able to adapt and change
- Able to be a team player
- Reliable
- Friendly, courteous and polite

Such criteria could be used for advertisement and open selection for potential new team members. A trial or probation period would be advisable to allow for development of a personal 'script' and contribution and assessment of delivery in practice. Internal recruitment without either internal or external advertisement carries the danger of unsuitable people being placed in the team for management or administrative reasons. The health professions, including the ambulance service, might prove to be an additional source of suitable contributors.

7.2 Suggestions for improvement

From the observations and the suggestions from young people, a few relatively minor recommendations have been drawn that might improve the impact of the course. In order to reach this conclusion the questions raised by previous research have been taken into account (see Section 3). These issues have been discussed with the Crash Course team for their consideration.

In brief, that research evidence suggests that:

- the fear-based messages need sufficient impact to motivate the audience to deal with them;
- prevention education also needs to provide the individual with effective actions and coping strategies that can reduce the perceived threat;
- attitudes are most affected when risk reduction education makes use of affective or emotional components as well as factual information;
- young people may react negatively to a realisation that they are perceived as dangerous drivers;
- risk-taking behaviour on the roads may be a response to peer pressure or part of identity formation;
- follow up to repeat and reinforce the central messages can increase the impact of prevention education.

As outlined above, the research team takes the view that the course does combine many of these elements. The shocking and frightening messages of the presentation are sufficient for its purpose and legitimate. The course uses affective components of the messages very well and presenters are extremely good at using their own emotions appropriately. While it is a strength that the presentation is not scripted and contributors can include their own experiences using their own words, it is essential that all speakers always include the central messages designed for inclusion in their 'slot'. This issue should be monitored from time to time to ensure that content is not drifting from the intended design.

It is probable that more content is needed on what the coping strategies might be. Young people did appear to pick up on those that were suggested but in the face of peer pressure and other practicalities more may be needed. Young people themselves might usefully be involved in work to produce some practical suggestions

or ‘one-liners’ to use in response to pressure. One example might be to go out always equipped with the bus or taxi fare in case of an emergency need to refuse a lift with an irresponsible driver. Some stakeholders suggested that first aid training for young people would also contribute to the ability to cope with a road collision. The coping strategies should also acknowledge the pressures from peers and the need to fit in and establish an image and identity.

In view of the poor levels of awareness on the effects of alcohol, somewhat more emphasis might also be placed on this issue. Young people need to realise that judgement and coordination are affected long before a person appears seriously drunk.

Follow up is weaker than it might be. Some schools do take up the topic in tutor group discussions after the presentation but few take consistent opportunities to reinforce the messages in other parts of the curriculum. There is a missed opportunity here. Other road safety interventions can also play a part in reinforcing the learning. Young people have also suggested involving parents. If this could be achieved, the probable follow up in family discussion might also reinforce impact. Assertiveness training would be extremely valuable as follow up, both in relation to avoiding dangerous situations and in respect of peer pressure.

No written material is currently supplied with the course. There is a need for a handout that can be given to the young people for reference to reinforce the essential messages of the course. This should address directly key steps that young people can positively take to make themselves safer and reduce risk even before they are drivers. It is essential not to leave people with a sense of helplessness at the end of the input. Such a handout might be combined with information on other road safety resources and the contact details of support agencies.

Some young people suggested the use of activities within the presentation itself. As it is, the course is in danger of being a little too long so major interactive work is unlikely to be feasible. A short exercise like a quiz might possibly work well to vary the dynamic of the session. Other activities such as those around the effects of alcohol or computer-based hazard reaction exercises could well be part of follow up work.

There is a danger that young people will become negative towards the safety messages if they feel that they are being blamed for dangerous driving on the roads. There was certainly some evidence from the focus groups that some felt they were being made scapegoats for the reckless behaviour of some adult drivers. This will require careful nuancing of the way in which the risks are expressed. Affirmation of the basic common sense of young people and the wish of the majority to stay safe should be emphasised in the presentation.

The evidence confirms the risk-taking tendencies of young males and also suggests a link to deprivation. This is of huge concern for the development of more effective road safety education. Further exploration is needed for Crash Course to seek topics or styles that might further harness the motivation of young men to act safely. One possible avenue for consideration might be to suggest that ‘grown up’ adult men (‘big men’) protect their ‘mates’ and their loved ones rather than putting them at risk. In

respect of deprivation, it is crucial that delivery should continue to schools and colleges in Stoke-on-Trent where there is more widespread deprivation than in the surrounding county.

7.3 Recommendations

The evidence of the study leads the research team to make the following recommendations:

1. The Crash Course has demonstrated its effectiveness and should be retained as part of the overall portfolio of road safety interventions in Staffordshire and Stoke-on-Trent.
2. The core educational work with young people should be funded on a permanent basis.
3. The core task should remain the achievement of near universal coverage at Year 11. This is the point at which maximum coverage of the youth cohort can be secured. The essential nature of the programme should not be changed in response to the pressure for income generation or the demands for services to adults.
4. The course is likely to be effective with adult audiences as well as with young people. The partnership should consider using income generated in this way to fund development of the team and the dissemination of the course methods.
5. The design and content file for the course should be revised and updated to ensure all the current essential messages and methods are reflected. It should then be made copyright.
6. Particular attention should be paid to developing and increasing the content on coping strategies.
7. A handout should be made available for reference giving key messages and actions that young people can take to reduce risk.
8. Information should also be provided on agencies able to give counselling, advice or support outside the school context.
9. New examples should be constantly sought to avoid the presentation becoming stale or dated. Items of direct relevance to young people, such as the safe use of motorbikes and scooters, could be particularly valuable.
10. The effects of relatively low levels of alcohol should be stressed as awareness of effects and limits is poor amongst young people.
11. Wherever possible schools, colleges and training providers should be encouraged to follow up and reinforce the road safety messages in other parts of the timetable in as many subject areas as possible.
12. The Crash Course core team should be consolidated if possible with a single employer and common line management, preferably in local authority education in order to link most effectively with schools, colleges and the Youth Service. Ideally salaries should be reviewed.
13. Strong links to existing partners should however be preserved, especially to retain the essential contribution of the Fire and Rescue Service and the police. Branding should be carefully considered for appeal and neutrality.
14. The core team needs a stable and adequate physical base and administrative support should be considered.
15. All those engaged in delivery should have a system in place for pastoral support and the management of stress where that is not already provided.

16. The Crash Course is currently too heavily dependent on a few key staff: the essential messages and methods should be set down and used in the recruitment of new contributors.
17. The effectiveness of Crash Course should be transferable: partnerships should be sought with one or two other areas to develop pilot schemes, subject to adequate funding.
18. Progress and effectiveness should be monitored on a continuing basis.
19. Further research could usefully address (i) comparisons with areas which do not use such interventions, (ii) the longitudinal effects of the intervention and (iii) motivations of young men towards risk taking and what messages might have effective appeal.

APPENDIX A

List of adult stakeholders interviewed

Chief Superintendent Mark Bates	Staffordshire Police
Colette Bennett	Crash Course Coordinator (Victim Support)
Richard Biffen	Collision Investigator, Staffordshire Police
Graham Bott	Deputy Head of the Youth Service, Staffordshire County Council
Councillor Eric N. Drinkwater	Staffordshire County Council
Donna Head	Indigo Training
Martyn Herward	West Midlands Regional Manager, Victim Support
Denise Horton	Learning Support Practitioner and lead for ECM 'Stay Safe', Mitchell High School
Bob Johnson	Fire Safety Officer, Staffordshire Fire and Rescue Service
Nick Lloyd	Head of Road Safety and Sustainable Travel, Staffordshire County Council
Mark Ludlow	Head of Year 11 (2007), Blurton High School
Giles Millington	Head of Year 11, St Thomas More High School
Mark Mould	Collision Investigation Officer, Staffordshire Police
Ann Morris	Crash Course Coordinator (Youth Service)
Neil Mycock	Senior Collision Investigator, Staffordshire Police
Debbie Oakley	Indigo Training
Ian Smith	HM Coroner, Staffordshire
Stuart Smith	Assistant Chief Fire Officer, Director of Safer Communities, Staffordshire Fire and Rescue Service
Maureen Sneyd	Head of Year 11, Norton Canes High School
Sally Wilding	Deputy Head Teacher, Sir Thomas Boughey High School

APPENDIX B

List of schools, colleges and training providers returning questionnaires and/or hosting focus groups

Blurton High School, Blurton, Stoke-on-Trent
Brownhills High School, Tunstall, Stoke-on-Trent
Cannock Chase High School, Cannock
Cannock College
Clayton Hall Business and Language College
Clough Hall, Kidsgrove, Stoke-on-Trent
Indigo Training, training provider, Stafford
Longton High School, Meir, Stoke-on-Trent
Mitchell High School, Bucknall, Stoke-on-Trent
Norton Canes High School, Cannock
Painsley Catholic College, Cheadle
Project Management, training provider, Stoke-on-Trent
Retail Group Stoke Challenge, training provider
St Thomas More School, Longton, Stoke-on-Trent
Sir Graham Balfour High School, Stafford
Sir Thomas Boughey High School, Halmerend, Stoke-on-Trent
Stoke-on-Trent College, including Burslem Campus
The Friary School, Lichfield
Walton High School, Stafford

Four sets of questionnaire returns were also sent in unlabelled. It has not been possible to identify the school, college or training provider.

The researchers acknowledge with thanks their debt to the many teachers and tutors who assisted with the distribution of questionnaires and the organising of focus groups. Without their help, this study could not have been completed.

APPENDIX C - The 'after' questionnaire (questions, other than the first four which only applied after the course, were identical for the 'before' comparisons)

dmu.ac.uk DE MONTFORT UNIVERSITY LEICESTER

Staffordshire Fire and Rescue Service
Evaluation of road safety training by De Montfort University

We need to know what you think about the causes of crashes, and how you feel about cars and driving. You have now had the Crash Course and we need to know if it helped you or not. It would really help us if you would complete these questions.

Please try to be honest – your views matter. Just tell us what you think. It may help to make the course better.

We do not need your name. It's completely confidential. Your teachers will not read your answers and no one in your school, nor your parents, will know what you have said. The people who analyse the results will not know who you are. We will look at the trends of what everybody tells us and may quote what you tell us but your name and details will not appear in any report.

Please ask your teachers or the course tutors if you need help filling this in.
Thanks for your help.

1. First we need a few details about you, please.

	Please write the answers in the boxes here.
Date of birth (day, month, year e.g. 02/07/92)	
Are you male or female?	
Year group or college course	
Your initials only e.g. Gary John Smith is **GJS**	

2. What did you think of the Crash Course? Tick all the boxes that apply to you.

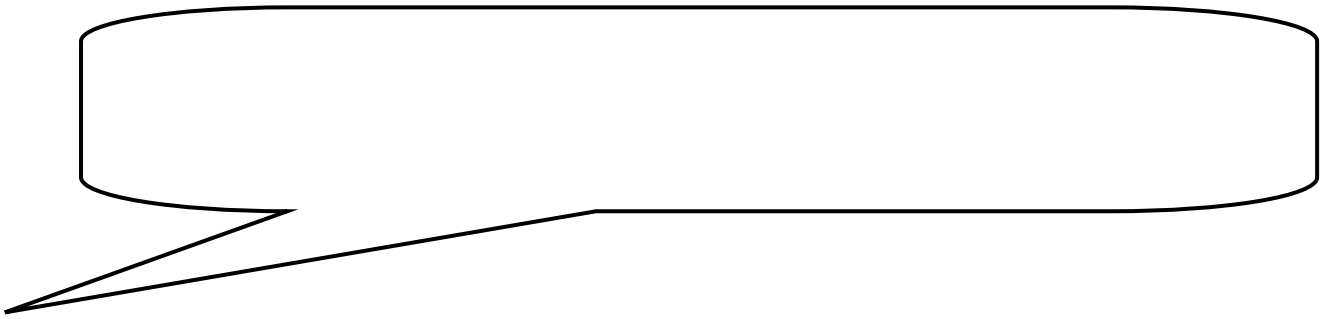
It really made me think		Too scary	
I didn't really believe them		Brilliant	
Helpful information		I knew the stuff already	
Waste of time		I will talk about it with my friends	
It upset me too much		I know now what I can do to be safer	
True, real life examples were good		Too long, got boring	

PTO

3. Is there anything you would want to change about the Crash Course? If there is, please write it in here. If you wouldn't want to change it at all, please go to the next question.

.....
.....

4. Is there anything you now want to change about how you behave in cars? Or things you would do differently in future? Please write in the bubble below.



5. Roughly how many times have you gone somewhere in a car in the last month? Please tick.

None at all	Up to 10	11-20	21-30	31 or more
□	□	□	□	□

6. Have you done any of these things, when you have been in a car in the last month? Please tick the answer that applies to you on each line.
If you have not gone anywhere in a car at all, please go to the next question.

	Never	**Sometimes**	**Often**
Been on the road after dark			
Not worn a seat belt in the front seat			
Been in a hurry			
Gone with a driver who'd used drugs recently			
Been on a motorway			
Driven with a driver who'd had been drinking			
Not worn a seat belt in the back seat			
Had a laugh and messed about			
Been scared about the driving			
Watched the driver use a mobile			
Been driven by someone who had no licence			

PTO

7. Please tick <u>three</u> things in the list below that you think are the <u>most</u> important causes of deaths or serious injuries in bad crashes. *Only, the three you think are most important, please.*

Possible reasons for deaths and injuries in road crashes	**Please tick just the 3 reasons you think most important.**
Ice on the road	
Using mobiles while driving	
Pedestrians not looking	
Driver on drugs	
People driving too fast	
Going through red lights	
People in the car distracting driver	
Wet and rainy conditions	
People driving too slow	
Not wearing a seatbelt	
Road works	
Driver has been drinking	
Elderly shaky drivers	
People driving who have no licence	
Burst tyres	
Sharp bends in the road	
Someone driving when they are tired	
Another reason (please say what that is)	

8. Please give us three things you can do as a passenger to keep yourself and others safer in cars on the road?

i.....

ii.....

iii.....

PTO

9. Circle the number on each scale that best describes what you <u>feel</u> about the things listed below.

Driving at 28 miles an hour in a 30 mile an hour area

STUPID	1	2	3	4	5	6	7	PERFECTLY OK

Always wearing a seat belt

STUPID	1	2	3	4	5	6	7	PERFECTLY OK

Reading a text quickly while driving

STUPID	1	2	3	4	5	6	7	PERFECTLY OK

Driving at 45 miles an hour in a 30 mile an hour area

STUPID	1	2	3	4	5	6	7	PERFECTLY OK

Having a race in cars with friends for a laugh

STUPID	1	2	3	4	5	6	7	PERFECTLY OK

10. How would you feel being driven in a car going 98 on a motorway?

FUN/ EXCITED	1	2	3	4	5	6	7	SCARED/ ANXIOUS

If you did feel anxious or scared, do you think you *could* ask the driver to slow down?

YES, no problem	1	2	3	4	5	6	7	NO, too difficult

11. How would you feel being driven home by a friend who has had a bit too much to drink?

FUN/ EXCITED	1	2	3	4	5	6	7	SCARED/ ANXIOUS

If you felt anxious, do you think you *could* ask the person to stop?

YES, no problem	1	2	3	4	5	6	7	NO, too difficult

12. If you want to make a comment or mention a concern, please write it in here.

.....

That's great. Thanks for your help. Please put your form in the envelope and give it to your teacher or tutor.

APPENDIX D

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