
Evaluation Support for Safe Drive Stay Alive - Final Report

October 2015

Commissioned by Transport Scotland

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Executive Summary

Background

Drivers aged 17 to 25 are a high risk group in terms of road traffic accidents and fatalities¹. Safe Drive Stay Alive (SDSA) is a road safety educational approach for young people, first run in Scotland in 2002. The campaign and similar road safety interventions (including the Edinburgh Young Drivers Initiative – EYD) currently run in a number of local authority areas in Scotland.

Transport Scotland wished to explore the extent to which the impact of SDSA and similar interventions in Scotland are contributing to specific commitments from its current Road Safety Framework. In particular, commitments to:

- seek to influence young people's attitudes to road safety and future driving behaviour, before they get behind the wheel; and
- continue to look for innovative ways to target younger drivers, with appropriate messages about safe driving, to increase their awareness and understanding of their vulnerability, and the dangers they face due to inexperience.

What the study involved

The study carried out by ODS Consulting:

- included a literature review carried out by Transport Scotland, which explored existing research and evidence in relation to the impact of SDSA or other young driver interventions;
- used a case study approach to review existing evaluative evidence of impact, and gather new qualitative evidence (from a small number of young people, teachers and SDSA coordinators) of the impact of SDSA in two areas (Central and Tayside), and the EYD Initiative; and
- involved SDSA coordinators from across Scotland in a workshop, to discuss their current approach to evaluation, and the intended impacts of SDSA.

The main outputs from the study are:

¹ Transport Scotland's Go Safe on Scotland's Roads, Scotland's Road Safety Framework to 2020. Available at <http://www.gov.scot/resource/doc/274654/0082190.pdf>

- this final report, which includes three detailed case studies, shares the lessons emerging from the three case studies in relation to the impact of SDSA, analyses existing evaluative material (in particular, an independent evaluation study of SDSA Central) and sets out suggestions for the future development of young driver interventions in Scotland; and
- a draft evaluation framework to accompany the main report, which provides a structure for SDSA coordinators to plan and deliver future evaluation of SDSA.

This study was intended to be a small scale evaluative project, mainly focusing on informing future evaluation. It is not intended to be a full evaluation of SDSA. The review is qualitative in nature, and strongly based on the views and perceptions of those involved in the research.

Key findings

The impact of SDSA and EYD

This review considered qualitative evidence (perceptions of young people, teachers and SDSA and EYD coordinators) gathered during case studies and the limited existing evidence about the impact of SDSA. The study suggests that:

- Those involved in establishing SDSA and EYD sought to influence knowledge, attitudes and behaviours of young people in order to reduce accidents and fatalities associated with young drivers.
- In relation to changing knowledge and awareness, SDSA demonstrated success, regarding specific road safety messages. In particular, the Central event appears to have enhanced participants' understanding of their vulnerability as road users, which is a key priority for Transport Scotland's Road Safety Framework.
- In relation to changing attitudes, there is also some evidence of success. In particular, the independent evaluation of SDSA Central suggests that attitudes towards driving fast did improve following its event, with a significant proportion changing their view that this was exciting as a driver or a passenger. Case study discussions supported this finding, with young people offering examples of how their attitudes had changed.
- The independent evaluation study of SDSA Central also suggests that the event was much less successful at changing knowledge, attitudes and behaviours in relation to other road safety messages. This seemed to relate to areas where attitudes were already positive and responsible in advance of the event, particularly in relation to breaking the law (wearing seatbelts and speeding) and aggressive driving behaviours. Views expressed in the case study discussions reinforce this, as young people felt some messages were already well known or 'common sense'.

The study concluded that further evaluation would be needed to:

- understand the impact of other SDSA approaches not reviewed in this study;
- understand the extent to which any changes to knowledge and attitudes are sustained beyond the time frame this study explored; and
- explore the long term, behavioural changes in attitudes and driving practices, once young people are qualified to drive.

Effectiveness of SDSA and EYD

Based on the perceptions expressed in this study, and the independent evaluation work carried out for SDSA Central, the SDSA approach appears to have had a positive impact on the knowledge and attitudes of young people, in relation to certain road safety messages. In this sense the study concludes, it is supporting the aims of Transport Scotland's Road Safety Framework, which aims to influence young people's attitudes, target younger drivers with appropriate messages about safe driving, and increase their awareness and understanding of their vulnerability, and the dangers they face due to inexperience. The evidence in relation to EYD is weaker, and further evaluative work would be required to strengthen this.

Transport Scotland's Road Safety Framework specifically commits to promoting 'innovative ways to target younger drivers'. The perceptions expressed in this study suggest that the following elements of SDSA and EYD events are effective mechanisms at getting key messages across:

- The graphic nature and hard-hitting (at times shocking) tone of SDSA events – which participants and teachers believed 'brought home' the consequences of particular behaviours.
- Materials based on local 'real life' stories, and inputs from those involved in serious road traffic accidents.
- Using a mix of techniques – like using glo-sticks - to communicate messages about local statistics, and a young person's individual vulnerability.
- Using a range of wider techniques to explore experiences and key messages – such as those used at EYD to allow young people to experience collisions (at low speed), or the impact of drinking on their perceptions (using 'drunk goggles').
- Bringing large numbers of young people together, for a high profile event - this seemed to create a focus for the messages, and was viewed as a better approach than classroom based teaching or other resources.

Future development of young driver interventions such as SDSA and EYD

This study proposes that coordinators and relevant local partners involved in these interventions should work together in the future to:

- select specific outcomes which their event should focus on delivering (based on relevant intelligence and evidence);
- clearly define the target group for their intervention;
- put in place an outcomes focused evaluation process for future events;
- consider the links between SDSA or EYD and other road safety interventions happening in the local area; and
- explore, test and evaluate additional 'wrap around' educational elements – including work in schools before and after the events.

Future evaluation of young driver interventions such as SDSA and EYD

This study identified opportunities to strengthen the evaluation of young driver interventions using a self evaluation approach. There was support from practitioners for a more outcomes focused approach to evaluation, greater consistency between areas, and practical tools to support them to evaluate more effectively.

This study concluded that future evaluation of young driver interventions such as SDSA and EYD will be most successful if it:

- involves key partners in the identification of specific outcomes, target groups and messages in advance of designing the event;
- uses outcomes focused research tools to gather information about participant knowledge, attitudes and behaviours, before and after the event;
- considers opportunities to measure the impact of the interventions in relation to driving behaviours in the longer term – at least in a qualitative way; and
- as far as possible, takes account of the role of wider factors and influences in determining outcomes experienced by participants.

The evaluation framework alongside this report has been developed to support the above suggestions.

Finally, the study proposes that any future decisions about the evaluation of SDSA acknowledge recognised challenges in evaluating the impact of educational road safety interventions, and takes a robust but proportionate approach. It also suggests that any future evaluation undertaken at a national level could usefully take a strategic approach to evaluating a range of educational interventions together.

1. Background

About Safe Drive Stay Alive and related programmes

- 1.1 Drivers aged 17 to 25 are a high risk group in terms of road traffic accidents and fatalities². Safe Drive Stay Alive (SDSA) is a road safety educational approach for young people, first run in Scotland in 2002. The campaign and similar road safety interventions currently run in a number of local authority areas. These include:
- Central (covering Clackmannanshire, Falkirk and Stirling);
 - Dumfries & Galloway;
 - Fife;
 - Grampian (covering Aberdeenshire, Aberdeen City and Moray);
 - Tayside (covering Angus, Dundee and Perth & Kinross); and
 - West Dunbartonshire.
- 1.2 At its heart, SDSA is a hard-hitting and emotive theatre style event designed to raise awareness of the risks and potential impact of unsafe driving among young people, and encourage young people to behave more responsibly as road users. SDSA events bring together a large number of young people, and use a mixture of film, live presentation and real life testimony from members of the emergency services (who regularly deal with road collisions) and from members of the public (whose lives have been affected by road collisions).
- 1.3 In the City of Edinburgh, the Council and local partners run a theatre style event called Edinburgh Young Driver's Initiative (EYD) to educate young people, primarily aimed at those in S6. It is different to SDSA in two main ways. Firstly, the play (which replaces the film used at most SDSA events) does not use graphic imagery (such as images from the scenes of accidents). Secondly, the event includes a range of interactive learning experiences – such as using equipment to allow young people to experience how alcohol might affect their perceptions, or how it feels to be in a collision even at a very low speed. Further information about the format and style of SDSA and EYD events is provided in the case studies in Section 3 of this report.
- 1.4 There is no standard monitoring system across the local projects. Some have undertaken small scale evaluation of the impact of the project locally. There is currently no overarching evaluation of the impact of SDSA across Scotland.

² Transport Scotland's Go Safe on Scotland's Roads, Scotland's Road Safety Framework to 2020. Available at <http://www.gov.scot/resource/doc/274654/0082190.pdf>

- 1.5 The Transport Scotland Road Safety Framework Project Fund 2014-15 has supported a number of small-scale projects across Scotland. This includes SDSA in one area, in order to support the delivery of outcomes in relation to young drivers. As a requirement of the fund, organisations were required to carry out evaluation of supported activities.

The Commission

- 1.6 In February 2015 Transport Scotland commissioned ODS Consulting to carry out a study of SDSA activity in Scotland to further inform the evidence base with respect of SDSA. It was agreed that the study should:
- Examine a brief literature review, in scope with the general research approach, to explore existing research and evidence in relation to the impact of SDSA or other young driver interventions;
 - Use a case study approach to review any existing evidence of outcomes and impact where possible, and gather new qualitative evidence of the impact of SDSA in two areas, and the EYD initiative;
 - Involve SDSA coordinators from across Scotland in a workshop, to discuss their current approach to evaluation, and the intended impacts of SDSA;
 - Through a draft evaluation framework, provide a structure which SDSA coordinators may use to plan and deliver future evaluation of SDSA; and
 - Through a final report, share the evidence and lessons emerging from the three case studies in relation to the impact of SDSA and EYD, which may be used to inform the future development of young driver interventions in Scotland.
- 1.7 Transport Scotland wished to explore the extent to which the impact of SDSA in Scotland is contributing to specific commitments from its current Road Safety Framework. In particular, commitments to:
- seek to influence young people's attitudes to road safety and future driving behaviour, before they get behind the wheel; and
 - continue to look for innovate ways to target younger drivers, with appropriate messages about safe driving, to increase their awareness and understanding of their vulnerability, and the dangers they face due to inexperience.
- 1.8 It is important to emphasise that this study was intended to be a proportionate but fit for purpose small-scale evaluative project, taking a case study approach. It is not intended to be a full-scale evaluation of SDSA. The review is qualitative in nature, and strongly based on the views and perceptions of those involved in the research. While such an approach provides indicative evidence about the outcomes and impact of the approach, further work would be needed to understand the extent to which this small study reflects wider experiences and is supported by wider evidence.
- 1.9 The evaluation framework has been published separately, but should be viewed as a companion document to this report.

2. Methodology

- 2.1 Transport Scotland produced a literature review on SDSA. This can be found at Chapter 3.
- 2.2 An initial workshop was held with representatives from Transport Scotland, Scottish Fire and Rescue Service, Police Scotland and local leads for SDSA across Scotland. The workshop allowed participants to share their experiences of planning and delivery. It mainly focused on exploring experiences of monitoring and evaluating SDSA, in order to develop a new framework to support future evaluation.
- 2.3 In consultation with Transport Scotland, three case study areas were agreed. Central and Tayside regions were selected as well as Edinburgh, which runs a different style of event. It was felt there was value in including this different method of delivery, for comparison.
- 2.4 In each of the three case study areas, we set up a discussion with the lead officer responsible for the planning and delivery of the initiative. In both SDSA areas, this was a representative from Scottish Fire and Rescue Service and in Edinburgh, a road safety officer. We gathered background information on the delivery of the approach in their area and explored their views on the impact of the initiative on young people.
- 2.5 We contacted the Director of Education in the three case study areas for permission to approach schools in order to engage them in the research. We selected one school in each location, ensuring a mix of size, location and type of school. Because the fieldwork took place in June 2015, school availability limited sampling. However, we were able to visit a school in each of the case study areas. At each school, we met with the teacher who had organised the school's participation in the road safety initiative, and with a relevant group of pupils who had attended the event in the last 4 to 8 months.
- 2.6 The research tools (discussion guides) used during this study focused on exploring the outcomes of the approaches being reviewed. However, because of the long term nature of some intended outcomes (particularly those relating to attitudinal and behavioural change), it has not been possible to draw substantive conclusions about the longer term impact of SDSA or EYD from a study of this scale and type. The accompanying evaluation framework sets out a logic model of the intended outcomes, which explains the theory behind how changes in awareness may in the longer term impact on attitudes and behaviours. And this report analyses evidence about the outcomes of the approaches in terms of knowledge and understanding, and (to an extent) attitudes, in the short term.

Limitations of the review

- 2.7 As previously mentioned, this study does not represent a full scale evaluation of SDSA. It is important to recognise that the scope of the project has not allowed for extensive fieldwork to be carried out, and this has affected the extent to which robust conclusions can be drawn about the outcomes and impact of the interventions. In particular, the study has allowed for limited engagement of participants, which means views may not be representative of wider stakeholder groups.
- 2.8 There is very limited robust evidence, either from existing research or from previous evaluation of SDSA, to inform this review. The challenges of robustly and proportionately evaluating SDSA and similar programmes are discussed in Chapter 3. As a result of a lack of existing evidence, this study is strongly perception based.
- 2.9 It is also important to point out that a range of factors may have influenced participant recollection and perceptions of the interventions being studied here. It should be noted that pupils in one SDSA case study school had attended their event approximately four months prior to the discussion with a researcher for this study. The other SDSA school and the EYD pupils had seen their event approximately eight months previously. The time period since the pupils in each of the three schools participated may have influenced their recollection of the event, and the level of outcomes that could be measured.
- 2.10 Other factors which may have varied between case study participants, and could have influenced perceptions or recollection of SDSA or EYD include:
- the age of the young people;
 - the way road safety education is delivered in their school; and
 - prominence of road safety issues locally – such as recent high profile accidents.

3. Literature review

This section of the report

3.1 This section of the report provides the key points from a literature review, conducted by Transport Scotland's Finance and Analytical Services in March 2015. It reviewed three key sources of existing evidence³.

Key findings

3.2 Whilst there is a wide range of literature available on young driver interventions, there are very few publications which specifically focus on Safe Drive Stay Alive, with only a small number of evaluation reports published online. With regards to such interventions in general, a systematic review conducted by TRL (Kinnear et al, 2013) is comprehensive in its assessment of how young driver interventions are generally evaluated and where there are currently gaps in the evidence base.

3.3 One of the key points arising from the TRL review (Kinnear et al, 2013) is that young driver interventions tend not to be robustly evaluated, and as such, the evidence demonstrating their impact is weak and limited. Indeed, it is claimed that the development and delivery of interventions "is not based on strong evidence", with little known about their impact on longer term knowledge, attitudes and behaviour.

3.4 The review points to authors who have argued that without evidence, we cannot know if young driver interventions are being effective, ineffective or actually causing harm (by increasing risk or exposure). The report outlines that evaluations are low in number and those which are undertaken are often of poor quality.

3.5 For example, a review of SDSA in Fife in 2008 (not mentioned in the TRL review) considered views on whether its event was perceived to be useful and enjoyable, and whilst it sought to understand some views on road safety issues, there was no baseline to assess whether the intervention had an effect on attitude or behaviour. Furthermore, the sample in the evaluation was self-selecting and participants were asked subjective questions, which are open to interpretation, such as "whether their friends would think they are a person who

³ Fife 2008 evaluation, Fife Community Safety Partnership (2008) *Safe Drive Stay Alive: Evaluation Report 2008* [online] (<http://www.fifedirect.org.uk/publications/index.cfm?fuseaction=publication.pop&pubid=8B68940F-0AA9-F0DE-BD5F0449FB978F63>)
TRL Young Driver report, Kinnear, N. et al (2013) *Novice drivers: Evidence Review and Evaluation*, Transport Research Laboratory [online] (http://www.trl.co.uk/umbraco/custom/report_files/PPR673.pdf)
Christie, N, & Slaney, J (2009, May). *Staying Safe: Protecting Young People 16-24 on the Roads*. Guilford: University of Surrey (Unpublished)

likes to take risks and whether participants thought that SDSA has resulted in a change in their behaviour in a car in any way". As such, the evidence presented in the review is useful for understanding how the event has been received, but does not provide a reliable indication of achieved impact.

- 3.6 The TRL report does recognise the difficulty in demonstrating reduced collision risk or involvement following an educational or training intervention, but suggests that monitoring "proxy variables (e.g. behaviours associated with collision risk)" over shorter timeframes can provide an indication of likely impact (Kinnear et al, 2013: 33).
- 3.7 It is suggested that the key stages of a useful approach to evaluation are to establish clear aims and objectives (for the intervention) then develop a logic model which "illustrates the theory behind why the intervention is expected to achieve certain results" (Kinnear et al, 2013: 33). The authors argue that this will encourage practitioners to consider the process behind their intervention, ensure it is based on sound theory and help them to identify elements worth considering when evaluating impact and outcomes.
- 3.8 The authors also make a case for randomized controlled trials (RCTs) and claim that these are "the best way for determining whether an intervention is effective". The report highlights that these are often less expensive and more straightforward than anticipated, whilst producing reliable results. However, it is worth being aware that these may not always be practical, as trying to establish a control group can sometimes be challenging whilst continuing to take a proportionate approach to evaluation.
- 3.9 In regards to Safe Drive Stay Alive, the review discusses an evaluation involving 15 and 16 year olds from six secondary schools which found that attitudes improved in the short term (a few weeks) but that the effects had largely dissipated after a number of months. Indeed, there was some suggestion that attitudes towards driving within the law may have actually have experienced an adverse effect.
- 3.10 Outwith the review, and in addition to the Fife study already discussed, an alternative evaluation of Safe Drive Stay Alive was undertaken in Surrey using focus groups. This study found that some young people indicated that their behaviour had improved shortly after the intervention and four months later. However, there was no baseline study conducted for this study to compare the post-intervention attitudes. In addition, some of the young people mentioned that they had witnessed short term improvements in peers which had later disappeared, whilst others suggested that follow up sessions and materials (in school or college) on how to handle risky situations to reinforce messages would be beneficial, suggesting that there is room for improvement.
- 3.11 Overall, it seems that young driver interventions are typically either not evaluated robustly or at all. Many reviews have sought to understand whether events are well received, but have not reliably investigated impact or outcomes. With regards to Safe Drive Stay Alive, there are a small number of evaluations which have attempted to monitor the impact the event has had on attitudes and

self-reported behaviour and these have typically shown short-term improvements in attitudes which have regressed over time. However, as discussed in this research, these reviews tend to be subject to methodological or sampling issues. Most notably, they tend not to include baseline data, meaning that there is very little reliable evidence available about the impact and outcomes associated with the Safe Drive Stay Alive roadshows.

4. Three approaches in detail

This section of the report

- 4.1 This section is made up of three case studies which explore the experiences and views of those involved in SDSA in two police divisional areas (Tayside and Central) and the Edinburgh Young Driver's Initiative (which is delivered throughout the City of Edinburgh area). The case studies are mainly qualitative in nature and strongly based on stakeholder perceptions, but include quantitative outcome focused evidence where this was available. No existing evaluation materials from SDSA Tayside were available for inclusion in this report.

Case Study 1: Tayside

- 4.2 This case study is about the Safe Drive Stay Alive (SDSA) events, which are delivered every November with 20 schools across Tayside. The programme has been running in the area for ten years and is open to local authority and independent schools.
- 4.3 This case study was developed through discussions with the Scottish Fire and Rescue Officer with responsibility for organising the event, a teacher from a secondary school who has attended the event with pupils for six years, and a group discussion with ten S6 pupils who had attended the event in 2014, eight months prior to this research.
- 4.4 The school has a road safety programme for S2 pupils and also uses other resources which focus on safe driving behaviours for other ages of pupils.

Why the programme was initiated

- 4.5 The programme was introduced because the Police were aware that the number of road traffic accidents among young people was disproportionately high when compared to other groups. Ultimately, the Police wanted to reduce the number of accidents.

Planning and delivery

- 4.6 Safe Drive Stay Alive is planned and delivered by a partnership group made up of Police Scotland, the Scottish Fire and Rescue Service, the Scottish Ambulance Service, NHS, the Tayside and Central Scotland Transport Partnership (tactran) and three local authorities (Dundee, Angus, and Perth and Kinross). This group meets four or five times between June and November each year to plan and discuss the programme.
- 4.7 The Road Safety Officer involved explained that as the event has been running for a decade there is little input required to promote the event. Schools are very much aware of SDSA and see it as a valuable resource.

The approach in Tayside

- 4.8 Prior to setting up the SDSA programme in Tayside, the partnership group visited the Isle of Man, where SDSA was already running. This helped them to develop their own version of the event.
- 4.9 SDSA in Tayside is targeted at S4 pupils but is delivered to pupils in S4, S5 or S6 depending on the schools' preference.
- 4.10 The programme focuses on the behaviour of passengers, pedestrians and cyclists as well as drivers.
- 4.11 The programme now attracts around 2,000 pupils each year. There are three separate events across Tayside - in Dundee, Perth and Forfar. Pupils travel to the event by bus from their school and attend along with pupils from other schools in the area.
- 4.12 This year (2015) is the first time that the show has been updated to make it more contemporary. The film footage now includes more modern technology and vehicles which the SDSA partnership believe young people can better relate to.

Funding and resources

- 4.13 Last year SDSA cost £32,000 to deliver in Tayside. The programme receives funding from all three local authorities in Tayside, which covers the majority of the cost. The Scottish Fire and Rescue Service, NHS and Tactran also contribute, and pupil transport to the event is funded by Stagecoach.

Event activities

Party atmosphere

- 4.14 The event begins with pupils arriving at a "rave". Pupils are given glo-sticks and encouraged to participate in the party atmosphere.

"We try to bring them [the pupils] up to a state of being on a night out, so they're having a good time, they're relaxed..."

Lead Officer

Show and real life inputs from emergency services

- 4.15 The music then stops and the show starts on a large screen. It involves films about real life stories, road safety adverts, interspersed with inputs from the Police, Ambulance Service and other emergency services who have been involved or attended a real life accident. Those who attended this accident then talk about their involvement in the aftermath and how it affected them. This approach is intended to reinforce the reality of the accident shown.
- 4.16 Pupils felt that the film footage worked well because of its shocking nature.

“The videos were quite graphic...they were quite bloody.”

S6 pupil

Real life stories of those affected by accidents

- 4.17 Following the show, a number of speakers who have either been in a road traffic accident or who have lost a close family member because of a road traffic accident come on stage to talk about their experiences.
- 4.18 The personal messages were felt to be particularly effective in bringing the event out of the screen and into reality for the pupils.
- 4.19 Pupils stated the impact was powerful when hearing people speak live and meeting the family members and victims of road traffic accidents. This element helped them to empathise with the victims and gain a better understanding of the real implications of dangerous driving.

“When people started to break down on stage it was really hard to keep it together.”

S6 pupil

“You’d be imagining yourself in their position.”

S6 pupil

“It was like an emotional rollercoaster.”

S6 pupil

Adverts and final message from the Police

- 4.20 The event ends with more road safety adverts and a final message from the Police about driving safely. Pupils are then invited to ask questions and meet with all the speakers, including the family members and victims of road traffic accidents.

Views on relevance of materials

- 4.21 Both the teacher and pupils agreed that the material was relevant and well designed for the age group. The teacher felt that as they do not have any other driver safety programmes for this age group and since not all pupils learning to drive will be able to take advanced driving lessons, the SDSA show provides a useful and much needed safety resource.
- 4.22 Pupils felt that the show was well tailored to them and that the content was relevant, including different types of vehicles (cars, motorcycles) and a variety of road safety scenarios involving drivers, passengers and pedestrians.
- 4.23 They also felt that the interactive nature of the theatre style show made it more effective than if delivered in another format such as in their classroom, by the class teacher.

“It wouldn’t have been as effective any other way.”

S6 pupil

4.24 However, all pupils agreed that the show would be more relevant in S6 when they would be closer to gaining a provisional license. They felt and that there should be more follow up to keep the messages fresh in their minds.

Local monitoring and feedback

4.25 SDSA Tayside collects feedback from young people through social media and has always found responses to be positive. Pupils are also asked to complete a questionnaire (which wasn't made available for this study) a few weeks after the event, which also received favourable responses.

4.26 The school does a small amount of follow up work with pupils during Personal and Social Education class, to explore reactions to the event, and the teacher stated that pupils always provide a positive response to the show.

Impact

Emotional impact

4.27 The teacher from this school felt that SDSA is a valuable resource. The school does not use other driving safety resources for pupils, because they feel they are less effective than SDSA.

“Our stuff didn't have as much impact as Safe Drive Stay Alive.”

Teacher

4.28 This school in particular places a high value on road safety as in recent years they have lost two pupils in road traffic accidents. The father of one of these pupils delivers a message during the show, which was felt to have a huge impact on pupils. Many pupils become emotional during the events, often crying or feeling the need to leave the hall. Last year three pupils fainted during the event.

“It's so hard hitting, every time it gets me and I've been going for six years!”

Teacher

Changes in knowledge and awareness

4.29 The group of pupils we spoke to had very good retention of the event and remembered details well. Pupils felt that the main messages were around:

- drink driving;
- distractions at the wheel; and
- being safe as a passenger and a pedestrian.

4.30 Pupils in this case study area felt most of the key messages they heard about during the event were not new to them, and were often 'common sense'. However, pupils in this group agreed that the way in which messages were delivered made them more memorable. In particular the pupils felt that the stories they heard from family members of victims will stay with them most as they were so shocking and emotional.

“I think it was really effective because it was so hard hitting.”

4.31 S6 pupil

- 4.31 One pupil noted that the event delivered information such as statistics in a novel way and that this had helped her to remember it. For example, the glo-sticks distributed at the beginning of the event were differently coloured to represent different statistics of road traffic accidents in the area. Pupils found these statistics to be surprising and sometimes shocking.
- 4.32 Pupils agreed that the information given was useful and raised their awareness of the issues. They felt that the information from the emergency services was useful to help learn about the wider impact of accidents, and that the emotional link created from the film to the live speakers helped embed it in their minds.

“Yes, if people were naive before then they were made really aware.”

S6 pupil

Changes in attitude or behaviour

- 4.33 While pupils suggested the event had improved their awareness and understanding of road safety issues, this does not necessarily mean their attitudes or behaviours have changed as a result. During discussions researchers explored changes in pupil attitudes to road safety and driving since the event, and how young people thought the event may have influenced their attitudes or behaviours in the longer term. It should be noted that none of the young people involved in this case study were driving yet so they could not say if it had affected their driving behaviour.
- 4.34 The teacher stated that it was difficult to prove that attitudes and behaviours had changed but hoped that they had. From her discussions with pupils, she felt that there would be some change in their behaviour.
- 4.35 Pupils stated that they had already changed their attitude and behaviour towards road safety, particularly as passengers, pedestrians and cyclists. For example, one pupil who cycles said that they had changed how they ride on the roads and how they behave both towards other cyclists and drivers.
- 4.36 Pupils and the teacher agreed that the shocking nature of the films and emotional messages from family members had an impact on their attitudes, immediately after the event. However, it was more difficult to understand if there will be a long term impact or sustained change in behaviour or attitude. Pupils had a mixed response, with some quite confident that they would take the messages through into their driving practice in the future. One pupil mentioned that he thinks it will be at the forefront of his mind when he does start lessons. But others felt that the event was so long ago that the messages “fade away”.
- 4.37 Anecdotally, the teacher suggested the programme is likely to be impacting on pupil attitudes as it is widely discussed not just among the S6 pupils attending the event but also among younger pupils. One pupil who attended the road

show felt that they were more receptive to taking advanced driving lessons and behaving more cautiously on the road having been to the SDSA event.

Reduction in the number of accidents

4.38 The lead officer reported that over the years that SDSA has been in operation, the number of fatal accidents in the area has reduced. However, there is currently no substantive evidence to attribute any of this change to SDSA, or to understand the contributions of wider factors – such as changes to car safety, road design and engineering, education or awareness raising work.

Achievements

4.39 The officer coordinating SDSA stated that the programme is now so well established, with high participation levels, that very little promotional activity is needed.

4.40 Young people felt that the event was good and would recommend it to their peers. The style of the show and content kept them interested and pupils felt that the length of the show was just right. The teacher also agreed that pupils appeared to listen attentively at the event and that it “holds your attention”.

“It doesn’t compare to other road safety materials and I definitely wouldn’t change anything.”

Teacher

Challenges

4.41 The biggest challenge to SDSA Tayside is funding and much time is spent fundraising to ensure that the event continues year after year.

4.42 Although SDSA has built up a group of people in different organisations who are committed to delivering the event, getting full buy in from all partners has been a challenge at times, particularly where organisations have been reorganised or newly formed.

What’s next?

4.43 SDSA Tayside plans to continue running the event in its current format, with newly updated content. Currently the partnership group responsible for the event feel that their approach is working well, based upon feedback they have received from staff and pupils.

Case Study 2: Edinburgh

About this case study

4.44 This case study is about the Edinburgh Young Driver's Initiative event, which takes place every year in September. All 33 secondary schools in Edinburgh are invited to participate each year. September 2015 will be the fifth year the event has been delivered, and pupils from 10 independent and 23 local authority schools are expected to attend.

4.45 This case study was developed through discussions with the Road Safety Officer responsible for organising the event, a teacher from a secondary school who has attended the event with pupils for five years, and a group of 19 young people in S5/6 (from the same school) who had attended the event in September 2014; eight months prior to our research.

Why the programme was initiated

4.46 Edinburgh Young Driver's Initiative (EYD) was borne out of the Edinburgh Road Safety Plan 2010, which reported that young people were particularly vulnerable road users. For example, in 2011, 17 to 25-year-olds accounted for nearly a quarter of all road casualties in Edinburgh, and young men were the most likely to commit driving offences. Statistics showed that new drivers are most at risk during their first year of driving. Building on this evidence, the Edinburgh Young Drivers event was established to target young people - those most likely to be learners.⁴

4.47 Locally, there were also issues that it was hoped the EYD event could address. For example, the class teacher involved in this case study indicated that there had been an increase in the number of young people joy-riding motorbikes and there had been a serious motorcycle accident locally that had resulted in the young rider being hospitalised for over a year. This encouraged the school's interest in participating in EYD.

Planning and delivery

4.48 The Edinburgh Young Driver's event is planned and delivered by the 'Streets Ahead Partnership' - made up of Police Scotland, City of Edinburgh Council, the Scottish Fire and Rescue Service, the Scottish Ambulance Service and NHS Lothian.

The approach

4.49 The event is targeted at S6 pupils, but some schools (as in the case of this case study school) also choose to bring their S5 pupils.

⁴ www.streetsaheadedinburgh.org.uk

4.50 The Streets Ahead Partnership wanted to design an intervention specific to young drivers, but they did not want to use the ‘shock tactics’ or graphic imagery employed by SDSA to engage with young people. Instead, they wanted to create something that was interactive and made the young people remember the road safety messages.

“We’re not telling them what to do, like in a lecture, it’s showing them instead.”
Road Safety Officer

4.51 The EYD event’s central play focuses on the topic of distractions such as using mobile phones when driving and the presence of other passengers. This was thought to be topical and relevant for the young people. Wider event activities explore the impact of crashes, real life experiences, and the effect of alcohol on perception such as the simulators and ‘beer goggles’ discussed later in this case study.

Funding and resources

4.52 The Road Safety Officer estimated the event costs between £18,000 and £20,000 to deliver each year. The biggest outlay is the venue hire, as the event takes place at the Corn Exchange venue in Edinburgh over four days.

4.53 In addition, there is a substantial cost to transport the pupils to and from the venue. The cost of travel last year was £8,000. Police Scotland thought it was best to provide this service to manage the 500 pupils who attend the event each day. Teachers indicated that having transport available made it much easier to attend the event.

“One of the factors that made us sign up to the event was the fact that the bus travel was paid for. That was a huge draw.”
Teacher

4.54 During the first year, all the partners involved in the Streets Ahead Partnership contributed to the cost of planning and delivering the event. For the last three years, the event has been sponsored by a local firm of solicitors, who cover the majority of the costs (with the exception of transport costs, paid for by the Road Safety team). It is expected that the arrangement with the local solicitors will continue. The time input from partners is neither costed nor budgeted.

Event activities

Play

4.55 The EYD event begins with a play, performed by a group of young professional actors. The idea of the drama is to show the consequences of risky behaviour. The play tells the story of four friends. One has just passed his driving test and takes the others out for a drive in his new car. The story shows how they are challenged to a race by another car and ultimately have an accident. The passengers are seriously injured.

4.56 The teacher we spoke with was very positive about her first impressions of the EYD event. The play in particular she felt resonated with the young people, and was missed one year, when it was replaced with a quiz.

“The play sticks in their minds – the characters are really friendly and they get lost in the story.”

4.57 Teacher

4.57 While the teacher felt the play was a good way of engaging young people with road safety messages, the young people felt that the format did not engage them as well as other methods (such as a film) might. Although one or two pupils did remember it in detail eight months after seeing it, they felt it was boring and not professionally produced. Most of those who participated in this case study had a poor recollection of it.

“It was too clichéd and boring. You could anticipate what would happen next.”

S5/6 pupil

“There should’ve been more props (for the play) it was just a box.”

S5/6 pupil

4.58 This school in Edinburgh incorporates two road safety lessons into their PSE timetable. One of these lessons is the EYD event, and the other involves watching road safety adverts. The pupils spoke enthusiastically about the adverts they had seen in class and had very good recall of their content, in comparison with the EYD play. They seemed to remember the graphic nature of these adverts.

4.59 Those involved in the design and delivery of the EYD event are currently exploring ways to review the content, and make it more relevant for their target audience. Suggestions made by young people during this case study discussion included having a film instead of a play, which might be a more professional approach.

“If it was on film, it would be more effective.”

S5/6 pupils

4.60 They also wanted to see the content made more relevant to them and their situations. To achieve this, they suggested including motorbikes as the central vehicle and having a female central character to give a more balanced view.

4.61 Both the teacher and pupils suggested that more shocking content may make the messages more memorable and meaningful.

Presentations

4.62 The EYD event also features short presentations from real-life victims and drivers involved in road traffic accidents, including those at fault. For example, one man describes a car accident in which his passenger died, and the significant repercussions of this for him.

- 4.63 Pupils and teachers agreed that these speakers resonated with the young people and made them think about the possible consequences of their actions. Pupils suggested that more of the speakers should be of a similar age to them.

“There was a lady whose son had died and the kids were all in tears; they had pictures of her son in the background. They came away really upset.”

Teacher

“There was a woman in a car crash....it hits home more, if it happened to them.”

S5/6 pupil

“They (speakers) should be the same age as us, and have been in a crash, or caused a crash.”

S5/6 pupil

Interactive activities

- 4.64 The second element of the EYD event involves a series of activities and games for the young people to participate in. Approximately one hour is spent on these activities. They include ‘drunk goggles’ - which simulate the impact of alcohol on perception while pupils are asked to walk in a straight line. There is also a seatbelt slide, where young people try to guess their speed. This is to illustrate the impact of a collision at just 7 mph.



Source: Streets Ahead Partnership, 2012

- 4.65 The Scottish Fire and Rescue service attends the EYD event and demonstrates the equipment they use when attending a road traffic accident along with an example of a car which had been in an accident. NHS representatives attend the event with their medical recovery vehicle that the young people can sit in. There are also hazard perception/reaction tests, and a breathalyser kit that is used on the young people after offering them liquor chocolates.
- 4.66 Young people were positive about the interactive activities at the event, and felt they added value to the play and real life stories.

“The simulators were class – you had to strap yourself in.”

S5/6 pupil

“The beer goggles – they were worth having. It lets people see the difference if you’ve been drinking.”

S5/6 pupil

4.67 The teacher we spoke with felt that the interactive activities reinforced key messages. In particular, she felt the breathalyser kit activity raised awareness of the number of units in drinks.

Local monitoring and feedback

4.68 Teachers who attend the event receive an online survey to capture their views immediately after the event. This survey contains questions on the timing of the event, the different aspects of the event, and how relevant they thought it was for pupils. This data is collated and used to improve the practical arrangements around future EYD events, such as the length of the play, and the inclusion of a 'snack break'.

4.69 An evaluation of EYD⁵ took place in 2014 with teachers attending the event. The report states that 22 schools took part in the EYD event that year, but does not specify the number of teachers responding to this evaluation.

4.70 The results showed that teachers rated the personal accounts from those who had been in road traffic accidents as the most effective element of EYD event (92%), followed by the interactive displays (85%).

4.71 The report states that 50% of the respondent teachers rated the drama performance as very effective whilst 36% thought that it was moderately effective. However, there were comments relating to the content requiring to be updated and the teachers who had been to the event before mentioned that the humour was lacking. There were also comments on it being too long and that it would benefit from being 15 minutes shorter.

4.72 In previous years, the now Scottish Fire and Rescue Service conducted a survey immediately after the EYD event with young people to gather their views. This asked the young people to rate the extent to which they had learned something from the EYD event. For example, their learning in relation to driving hazards and the consequences of inappropriate driving behaviour. However, this has not been conducted since 2012 when eight pupil responses were recorded.

Impact

Changes in knowledge and awareness

4.73 The teacher we spoke to during the development of this case study felt that the event was aimed at the right age group and that the messages were the right ones for her pupils. She also indicated that she would happily take her S4 class along to the event as she felt the messages were important to this age group too.

⁵ Streets Ahead Young Driver, Final Report, 2014

“It was the right message for the age group. It makes them think about their behaviour.”

Teacher

4.74 The Road Safety Officer felt that while the EYD event would have contributed to more knowledge and awareness of road safety issues, there is currently no solid evidence to support this claim.

4.75 The young people who participated in this case study had attended EYD eight months previously. Although a few could recall the main messages and the content of the play in detail, most found this difficult.

4.76 The feeling among young people was that the messages contained within the event were the same road safety messages they had heard before. In fact they generally felt they had not heard anything new and that the messages conveyed in the play were largely ‘common sense’. There was no evidence to suggest that the knowledge and awareness of this small group of young people had changed.

“It’s the same old messages; we’ve heard them all before.”

S6 pupil

“I’m sick of the same messages. There’s always a car crash and then why it’s bad.”

S6 pupil

4.77 According to a 2012 survey of 8 participating pupils’ immediately after the EYD event:

- 88% agreed that they knew a lot more about driving hazards.
- 38% agreed they had a greater awareness of behaviours that can affect a driver.
- 88% said that they were more aware of the consequences of inappropriate driver behaviour.

4.78 However, the very small sample size means that this data may not be indicative of the experiences of most pupils.

Changes in attitude and behaviour

4.79 During discussions researchers explored changes in pupil attitudes to road safety and driving since the event, and how young people thought the event may have influenced their attitudes or behaviours in the longer term. It should be noted that none of the young people involved in this case study were driving yet so they could not say if it had affected their driving behaviour.

4.80 The teacher found it difficult to say whether the attitudes of young people had changed as most of her pupils were not yet driving. She did suggest that the event contained elements that would resonate with the young people, but that it might be more effective to have some shock tactics included so that the young people remember them.

“It would be better to have more harsh messages with real stories that have more impact and they remember more.”

4.81 Teacher

4.81 The pupils stated that the event had not changed their attitude or behaviour towards road safety or driving. Like their teacher, they perceived that more shock tactics may influence their attitudes and behaviours. They did find the real life stories ‘hit home’ more than the play.

“It needs to be more shocking and realistic.”

S5/6 pupil

4.82 According to the 2012 survey of 8 participating pupils, immediately after the EYD event, 71% said that the EYD event would have an effect on their behaviour as a road user. However, the very small sample size for this survey means that this statistic cannot be relied upon as evidence of the experience of most pupils.

Reduction in the number of accidents

4.83 The Road Safety Officer said that overall in the Edinburgh area, there had been a reduction in the number of road accidents, but that this could be influenced by a wide range of factors. There is currently no substantive evidence to attribute any of this change to SDSA, or to understand the contributions of wider factors – such as changes to car safety, road design and engineering, education or awareness raising work.

Achievements

4.84 For the Road Safety Officer, the biggest success for the Edinburgh Young Driver’s Initiative is the variety of activities on offer for the young people when attending the event. The enthusiasm of all the partners to continue working together to support the event has made delivery of the EYD event a success. A further achievement is the reach of the event, with all secondary schools in Edinburgh now participating. For the pupils we spoke to, they thought the most engaging elements of the EYD event were the interactive activities.

Challenges

4.85 An initial challenge was to make contact with each of the schools and get them interested in participating in the event. The Road Safety Officer explained that it was difficult in the first year to get schools to sign up to a ‘new’ event. As a result, during the first year of delivery the Streets Ahead Partnership did not meet its target of engaging with every secondary school in Edinburgh. This was despite publicity and promotion of the event by the Road Safety Officer as well as by the Scottish Fire and Rescue service and Police Scotland. However, over time, word of mouth among schools has helped to generate interest in the event, as schools anecdotally shared their experiences and encouraged one another to attend.

4.86 The Road Safety Officer felt that now the event has been running for a number of years, the schools know what to expect and are keen to register their interest as soon as the event is advertised.

What's next?

- 4.87 There are plans to undertake some follow up evaluation work with the pupils. Those involved in organising the event suggested this would ideally take place in January, following the pupils seeing the show the previous September. The idea would be to ask what they remember, whether anything has changed for them in terms of attitudes or behaviour, and whether there have been any incidents that pupils know of.
- 4.88 Gathering more detailed qualitative feedback a few months after the event has been planned for some time, but time pressures on staff and resources have meant that it has not been carried out as yet.

Case Study 3: Central

About this case study

- 4.89 This case study is about the SDSA event in Central region which takes place every year for one week in February. There are 11 shows in total: two a day for five days and then one additional evening session for parents or teachers who also wish to see the event.
- 4.90 The show takes place in the MacRobert's Centre in Stirling, with around 330 people attending each show. It is open to all S4, S5 and S6 pupils, but this case study focuses on a school which attended the event with its S4 pupils.
- 4.91 This case study was developed through discussions with the Lead Officer responsible for organising the event from the Scottish Fire and Rescue Service, a teacher from a local secondary school who has attended the event with pupils for a number of years, and a group discussion with eight young people in S4 who had attended the event in February 2015. It includes an analysis of existing evaluative material provided by SDSA Central.

Why the programme was initiated

- 4.92 SDSA Central has been running since 2007. The senior management team of the then Central Fire Station were invited to see the SDSA event in Fife, which had been running for several years. They felt it would easily translate to fit a Central region audience.
- 4.93 The Lead Officer described how there was a real need at that time for road safety messages aimed at young people. Their view was that statistics showed that half of all serious injuries or fatalities in Central region were in the 17–25 age category.

Planning and delivery

- 4.94 There is now a committee involved in the planning and delivery of the event. They are a constituted group, allowing them to apply for funding. The group includes representatives from:
- The Scottish Fire and Rescue Service
 - NHS
 - Scottish Ambulance Service
 - Police Scotland
 - Absolute Entertainment (music DJ).

Approach

- 4.95 SDSA Central is aimed at pupils in S4, S5 and S6. There are 18 secondary schools in the Central area and all are invited to attend. It is estimated that the event is delivered each year to approximately 4,000 pupils.

- 4.96 It took twelve months from viewing the Fife SDSA film to getting the Central event up and running. In order to make the film more relevant to a Central audience, it was re-filmed in the local area. The Fire Service worked with their Police colleagues to use a real life accident that had taken place locally. They also involved local school pupils to appear as extras in the film. They gathered evidence from the Police about which cars were most likely to be in accidents and used these in the film.
- 4.97 The officers at the Central Fire Service agreed that the event should take place in January or February so that there is time before the summer holidays for the SDSA team to visit schools to follow up with further educational inputs.
- 4.98 SDSA Central uses quite shocking footage in its film and aims to show the consequences of decision making through the input from emergency services and families and friends.

“We’ve been criticised for being too hard-hitting . . . we’re going to show them that these are not actors, this is real life.”

Lead Officer

Activities

Disco introduction



- 4.99 The session starts with a DJ from a local radio station. The DJ plays loud disco music and invites members of the audience on to the stage to dance.
- 4.100 The young people who attended the event said that they were at first unsure about the loud party atmosphere and felt it was out of place and went on too long. However, they appreciated the change in emotion in the room when the road safety elements were introduced. On reflection, they said that they liked this style of introduction as it was effective at getting the message across.

“It was weird at the start, they were all disco dancing.”

“I thought I had come in the wrong door.”

“There was a real crash in emotion when the music stopped.”

S4 pupils

Film and inputs from emergency services

- 4.101 During the event, the DJ explains that they will see a film about an accident. The film depicts a story in which there is a road traffic accident and the scene afterwards. It then stops and the emergency service representatives from the film appear in person on stage. Police, Fire and Rescue and Ambulance workers give their account of the accident scene.
- 4.102 The young people we spoke to for this case study had excellent retention of the detail of the event. They described the film and subsequent presentations from the emergency services as “powerful” and “emotional”.

“The real life actors brought it to life; they made you believe it could happen to you.”

S4 pupil

- 4.103 The pupils were also very positive about how the film was made locally, and depicted streets and locations that they were familiar with. This was thought to make it more relevant to them. However, the pupils and teachers at this school did not think that road traffic accidents were a common occurrence in their local area.

Real life stories from friends and families

- 4.104 The second part of the show invites people onto the stage who have all been affected by accidents. One is a mother whose teenage daughter is in a wheelchair after her boyfriend crashed their car. Others include a young man who uses a wheelchair after being involved in an accident, and a father whose son died in an accident.
- 4.105 The pupils interviewed as part of this case study felt that this was the most effective element of the event.

“It makes you think of what you could do to yourself and your family.”

“It showed the consequences; that it’s not just your life, but you could endanger your friends’ lives.”

S4 pupils

Other elements

- 4.106 The event also includes adverts, input from Headway (a brain injury charity) and others who have been in accidents. Those involved in real life situations are available to speak to the young people as they leave.

Views on relevance of materials

- 4.107 The young people we spoke to felt that the content of the SDSA event was good, but could perhaps include some information on driving laws, such as speed limits, breaking distances and in what circumstances you might lose your licence. The young people also suggested more scenarios featuring

cyclists and pedestrians. They felt that this would help to make the event more relevant to their age group, who are not yet drivers.

Funding and resources

4.108 Historically the three local authorities covered by Central region (Stirling, Clackmannanshire and Falkirk) contributed to the costs of running the event. However, in 2013, when the Scottish Fire and Rescue Service was formed, the funding from the councils ceased. The Fire Service team said they were “determined to keep it going” and so began to fundraise through local events. They successfully secured contributions from the Big Lottery Fund and Transport Scotland – which is currently enough to cover delivery of the event for one year.

4.109 In 2014/15 the event cost £18,844. Transport Scotland provided a grant of £9,400 and the Big Lottery gave £10,000. The table below shows the breakdown of costs.

Transport to and from the venue for all schools	£9,055
Venue hire costs	£7,915
DJ from Central FM	£750
Advertising	£435
Evaluation	£420
Glo-Sticks	£143
Incidentals	£126
Total	£18,844

Source: Fire Safety Officer, SDSA Central

Local monitoring and evaluation

4.110 The Lead Officer collects feedback from the event from pupils in questionnaire form and online through social media.

4.111 SDSA Central received evaluation support from an external agency⁶ to analyse surveys completed before the SDSA event in 2012 and surveys completed three months after the event to assess any possible changes in pupil’s opinion as a result of SDSA. A total of 203 pupils responded prior to the event to questions about their views on road safety, dangerous driving, and their views on self esteem and sensation seeking. A total of 312 pupils responded to the same questions three months after the SDSA event. Both the ‘before’ and ‘after’ surveys were self-selecting, and this affected the sample achieved. The survey gathered limited information about the sample, beyond the school that respondents attended. This information showed that that most of the respondents to the ‘before’ survey attended three of the fourteen attending schools. However, pupils from these schools responded

⁶ Safe Drive Stay Alive Evaluation Report, by Research Resource for the Scottish Fire and Rescue Service, 2015.

poorly to the 'after' survey, with most almost all the responses to the second survey coming from five other schools. This essentially means that different people completed the 'before' and 'after' surveys.

4.112 The results of this independent analysis are discussed in the impact section below. Since this evaluation support, SDSA Central has continued to carry out the same survey with pupils, although more recent results were not available for this study.

4.113 When we spoke with pupils about using social media to provide feedback, some were embarrassed to leave any comments on the Facebook page for fear of appearing 'uncool' in front of their peers. This highlights a potential drawback of this approach, as it suggests those responding may not be representative of their wider peer group.

"I didn't want to be associated with being passionate about road safety."

S4 pupil

4.114 According to those involved in coordination, the feedback on social media is largely positive and suggests young people have learned from the event.

4.115 The Lead Officer indicated that any feedback received from pupils and teachers about the event is taken on board. This has resulted in changes to the content to keep it up to date and relevant.

Impact

Changes in knowledge and awareness

4.116 The qualitative evidence gathered during this study and the quantitative survey evidence gathered for SDSA Central indicate that the approach has developed the knowledge and awareness of young people, in relation to some themes.

4.117 The young people we spoke with for this case study indicated that although the messages and information contained in the SDSA event were not new to them, the way in which they were presented helped to increase their understanding of the issues. The teacher also felt strongly that the messages were much more likely to resonate with the pupils when coming from those with experience.

"By taking them away from what they're used to, where there are real people and real experiences is better. It's not delivered by me, it's real people and not actors."

Teacher

4.118 For example, pupils spoke about how being presented with the consequences of dangerous driving impacted on their views. For some, the event had left a lasting impression.

“To this day, if I see a car by the roadside in an accident, I genuinely think of SDSA.”
S4 pupil

4.119 But others suggested the messages were forgotten shortly after the event.

“The message gets lost after a week or so – there is the initial shock, but then you forget it.”

S4 pupil

4.120 The independent evaluation of SDSA Central found that one of the biggest changes within three months of attending the event related to participant knowledge of their vulnerability as passengers of young drivers. For example, the proportion of respondents who were in agreement that drivers under the age of 24 were more likely to be involved in a crash increased from 51% before, to 65% after the event.

4.121 The pupils we spoke to said that without this event, they would not have received this information from elsewhere. Road safety is not included as part of the curriculum at this school for older pupils, and so the SDSA event is the only road safety element in their timetable. The pupils also indicated that they would not have sought this information for themselves.

Changes in attitude or behaviour

4.122 While pupils suggested the event had improved their awareness and understanding of road safety issues (as discussed above), this does not necessarily mean their attitudes or behaviours will change as a result. To understand these issues better, researchers explored changes in pupil attitudes to road safety and driving since the event, and how young people thought the event may have influenced their attitudes or behaviours in the longer term. It should be noted that none of the young people involved in this case study were driving yet so they could not say if it had affected their behaviour as a driver.

4.123 During discussions, pupils had mixed views as to whether their attitude or behaviour had changed as a result of SDSA. Some felt that it had “definitely” impacted on their attitude and behaviour. For example, some pupils spoke of being more observant and aware of dangerous or erratic driving on the roads – as a pedestrian as well as a passenger.

“Yes – it shows that driving isn’t a big joke.”

“Definitely, you look out and notice more things.”

S4 pupils

4.124 One pupil indicated that the event had made him reconsider whether he wanted to learn to drive at all. Others said although they had been moved by the event, it had not put them off learning to drive.

“It was really in depth and afterwards I was like ‘I don’t know if I want to drive’ – it was quite emotional.”

“I was scared, but not enough to not want to drive.”

S4 pupils

4.125 During the independent evaluation⁷ conducted for SDSA Central, pupils were asked to complete the before and after surveys now used regularly by SDSA Central to indicate their views against a number of statements about dangerous driving. The evaluation compared the before and after responses to demonstrate changes in attitudes towards driving. The table below shows the statements young people were asked about, and the patterns in their response before and three months after the event.

Table 4.2: Impact of event: Change in perceptions for before and after surveys⁸

		Strongly agree/ agree	Strongly disagree/ disagree	Neither	Mean score	Change in level of agreement in percentage points ⁹
I always wear a seatbelt when in a car	Before	88%	7%	5%	1.56	+2
	After	90%	5%	5%	1.54	
If I was in a car where someone was not wearing a seat belt I would ask them to put it on	Before	75%	12%	12%	2.08	+5
	After	80%	9%	11%	1.88	
Drivers under the age of 24 are more likely to be involved in a crash	Before	51%	22%	27%	2.66	+14
	After	65%	16%	19%	2.50	
I think driving fast is exciting	Before	54%	26%	20%	2.67	-19
	After	35%	38%	27%	3.07	
Most drivers will be involved in a crash within one year of passing their test	Before	28%	36%	36%	3.11	+4
	After	32%	30%	38%	3.03	
If I had a crash within the first year of driving, I would end up in hospital or being killed	Before	26%	35%	39%	3.11	+6
	After	32%	28%	40%	3.00	
I like being a passenger in a car that is being driven fast	Before	43%	33%	24%	2.89	-23
	After	20%	60%	21%	3.58	
It is OK to cross a junction knowing that the traffic lights have turned red	Before	11%	84%	5%	4.20	+1
	After	12%	81%	7%	4.21	

⁷ Safe Drive Stay Alive Evaluation Report, by Research Resource for the Scottish Fire and Rescue Service, 2015.

⁸ A total of 203 pupils responded to the ‘before’ survey and 312 pupils responded to the same questions three months later during the ‘after’ survey.

⁹ The figures in this column represent percentage point changes (absolute values, representing the arithmetic difference between two percentages) rather than percentage change.

It is OK to drive above speed limits	Before	12%	67%	21%	3.73	-4
	After	8%	81%	11%	4.11	
It is OK for drivers to drive close to the car in front as a signal to its driver to go faster or get out of the way	Before	6%	85%	9%	4.13	-1
	After	5%	87%	9%	4.25	
It is OK to chase another driver, if they have made you angry, with the intention of giving him/her a piece of your mind	Before	6%	88%	6%	4.33	-2
	After	4%	92%	4%	4.50	
I will be involved in a crash within the first year after passing my driving test	Before	8%	55%	37%	3.67	-5%
	After	3%	65%	32%	3.95	

4.126 As the table above indicates, large proportions of young people already had a good knowledge and responsible attitudes in relation to legal requirements before the event – such as wearing a seatbelt, not driving through a red light, and following speed limits. Perhaps as a result of their predominantly positive attitudes, these aspects did not change significantly following the event. Most also appeared to find aggressive driving unacceptable before attending the event – with most indicating their view that it wasn't ok to drive close to the car in front to signal to the driver to go faster or move; or to chase another driver, if they made you angry, with the intention of giving him or her a piece of your mind. Again, attitudes in relation to these types of driving behaviours did not change significantly after the event.

4.127 The independent evaluation concluded that SDSA Central did have an impact in reducing the number of young people thinking it was exciting to drive fast, or be a passenger in a car that is being driven fast – with 19% and 23% of young people appearing to positively change their attitudes to these aspects (respectively) three months after the event.

4.128 The other main area of change indicated by the survey related to pupil awareness of their vulnerability as a road user. For example, the proportion believing that drivers under the age of 24 are more likely to be involved in a crash rose by 14 percentage points, three months after the event.

Reduction in road traffic accidents

4.129 The Lead Officer said that the accident statistics for the area could be a positive indication of the impact SDSA has had. He said that five years or so ago (before SDSA) three people died on average per year in the 17-25 age group on the roads in Central, but that since SDSA began, “we've not had a single one.”

“The proof of the impact is in the reduced number of accidents. We receive the Scottish Transport Statistics and Stirling and Clacks had the lowest number of accidents in Scotland.”

Lead Officer

- 4.130 He acknowledged that there are other factors which may influence these statistics – including stricter driving tests, better road conditions, layouts and traffic calming methods. But overall he believes that SDSA is having a positive effect on the attitude and behaviour of young people.
- 4.131 The teacher and pupils also stated that they thought SDSA had the potential to reduce road traffic accidents.
- 4.132 The independent evaluation report¹⁰ conducted for SDSA Central reported that there were 719 accidents in 2011 in the Central area in total, with just over one-fifth (22%) involving those aged 12-22. The majority of these accidents were slight in severity (84%) with only one recorded fatality. However, the report recognised that it was not possible to make any direct links between SDSA and changes in accidents, given the other potential factors impacting on the likelihood of accidents. There is no substantive evidence, from the evaluation report or from this research which can attribute reductions in road traffic accidents to SDSA.

Achievements

- 4.133 The SDSA Central team has begun to use social media such as Facebook and Twitter to gather feedback from young people – something they had been 'very bad' at doing historically. Young people are asked questions such as 'What do you remember from SDSA?' and 'How has it impacted on you?' Those involved felt this had been an efficient and successful way of capturing positive feedback from those attending events.

Challenges

- 4.134 The biggest challenge currently for the SDSA Central team is to organise transport for all schools to attend the event. Logistically it can be challenging to coordinate with so many schools involved.
- 4.135 In the future, the biggest challenge they will face is generating enough funding to continue to deliver the event.

What's next?

- 4.136 This case study school plans to continue their relationship with SDSA Central and attend the event again in February 2016. SDSA Central will continue to fundraise in order to deliver the event.

¹⁰ Safe Drive Stay Alive, Evaluation Report by Research Resource for Scottish Fire and Rescue, 2015

5. Impact and effectiveness of the approaches

This section of the report

5.1 This chapter provides an analysis of the evidence gathered during this review. It begins with an overview in relation to the impact of the SDSA and EYD interventions studied, followed by an analysis of the effectiveness of delivery. Finally this section explores how the study might influence future evaluation of young driver interventions, such as SDSA and EYD.

Impact and outcomes

5.2 This section provides an overview of the evidence in relation to the outcomes – or changes brought about – by SDSA and EYD.

Motivations and intended impacts

5.3 During this study we explored the motivations for employing young driver interventions locally, and the specific outcomes being sought. Generally, SDSA appealed as an educational intervention for older pupils, based on its use in other places.

5.4 In all three case study areas local partners were motivated to use SDSA and EYD to deliver similar aims. In particular, they wanted to educate older pupils in order to improve the knowledge, attitudes and behaviours of young drivers, cyclists and passengers in their areas. Ultimately, it was hoped this approach could reduce the number of road traffic accidents among those aged 17-25 – an age group disproportionately affected by accidents.

5.5 Road Safety Officers in Edinburgh had become ‘inundated’ with requests from schools for them to give a talk on road safety to pupils. EYD was established as a more practical way of providing information to a large number of pupils at once.

5.6 Beyond these motivations, we did not find evidence that local partners had taken a systematic approach to selecting the intervention from a range of options, or developing the specific messages to be communicated during the event based on a set of clearly defined outcomes. Having said that, we did find that those involved had developed key messages to focus on topics of relevance and importance to this age group, in relation to road safety.

5.7 The young driver interventions we studied specifically aimed to bring about positive outcomes for young people at three levels:

- improving their knowledge and awareness of risks and responsible behaviours;
- improving their attitudes as road users (often as a driver, but also as a passenger, pedestrian or cyclist); and
- improving their behaviours as road users.

- 5.8 These outcome areas were explored during our study, and have been further developed in the logic model for the accompanying evaluation framework, which seeks to improve future evaluation of similar interventions.
- 5.9 Below we provide an overview of the evidence in relation to outcomes and impact from the case studies developed in this study.

Emotional reactions

- 5.10 When we spoke with pupils, teachers and those involved in the delivery of SDSA and EYD they repeatedly drew attention to the emotional impact of particular aspects of the events, and the importance of this in delivering desired outcomes.
- 5.11 During this review, pupils attending the SDSA events reported that they found the events emotional and upsetting. We heard:
- pupils say they were shocked and scared by the event;
 - the hard-hitting nature of the event and personal stories had made the messages real, and relevant to them;
 - reports of pupils in tears and fainting as a result of the content of the event; and
 - reports of a dramatic change in the mood among pupils directly following the event.
- 5.12 By comparison, pupils who attended the EYD event and engaged in this review did not report emotional reactions to the same extent. Some compared the content of the event to their experience of viewing more dramatic and shocking road safety adverts, and suggested that the EYD event would be strengthened with the addition of this type of content.
- 5.13 It is important to recognise that an emotional reaction is not necessarily in itself a positive outcome. It might suggest that young people found the event interesting, exciting or entertaining – rather than leading to outcomes relating to learning. However, pupils and teachers believed the emotional impact meant that messages were more likely to be listened to, recalled more easily, and have a lasting impact. In this sense it was perceived to be an important factor in achieving desired outcomes among this age group.

Knowledge and understanding of young people

- 5.14 We did find evidence that SDSA in particular had improved pupil knowledge and understanding of some road safety issues, although existing evidence from SDSA Central suggests this may vary depending on the specific road safety topic being explored.
- 5.15 During case study discussions pupils were asked whether they felt their knowledge and awareness of road safety had improved through these interventions and the vast majority attending SDSA events agreed it had. Pupils involved in EYD were less likely to think this was the case.

- 5.16 When we begin to look at specific road safety messages, the existing evidence and the views gathered during this study suggests that the impact of SDSA varied depending on the specific area of knowledge or awareness being promoted.
- 5.17 In relation to some aspects of knowledge, during discussions pupils stated that the messages contained within SDSA and EYD were not new to them, either because they had heard them previously, or they were 'common sense'. For example, they said they were familiar with the key messages about distractions, and drink driving.
- 5.18 This was supported by the independent evaluation of SDSA in Central which suggested that most young people were quite aware of some of the road safety messages being promoted during the event, before attending. In particular, they seemed conscious of messages relating to breaking the law or behaving aggressively. For example, 88% of young people clearly already knew to wear their seatbelts, and said they did so in advance of the event. Two thirds (67%) didn't think it was ok to drive above the speed limit, and 94% already thought it wasn't ok to drive close to the car in front to encourage them to go faster, or to chase another driver, with the intention of 'giving them a piece of your mind'. The three month survey did not demonstrate very large shifts in views in relation to these areas of knowledge.
- 5.19 Case study discussions highlighted pupils felt their knowledge and understanding had particularly improved in relation to their vulnerability as a young driver or a passenger of a young driver. In particular, pupils highlighted that messages about road safety statistics in their peer group had struck a chord with them, with a number being quite shocked by the odds of being involved in a collision. The method of delivering this during SDSA events – handing out glo-sticks and explaining later how the different colours represented different statistics – seemed to have been important in getting this message across.
- 5.20 Again, this qualitative finding was supported by the independent evaluation of SDSA Central. In particular, when asked if they agreed or disagreed that drivers under the age of 24 were more likely to be involved in a crash, 51% of pupils before the event indicated they knew this, rising to 65% three months after the event.
- 5.21 While this evidence suggests some positive change to the knowledge and understanding of pupils, it does not allow us to understand the extent to which this is maintained beyond three months. As discussed in Chapter Three of this report, there are recognised challenges of measuring the outcomes of road safety interventions in a long term and attributable way. For the young people attending SDSA events from S4 (the main target audience for SDSA), it is likely to be at least a year (but probably more) until they qualify to drive. This means that any impact would need to be relatively long lasting to have an effect on driving behaviours.

5.22 The variability of change reported for different areas of knowledge and behaviours, suggests SDSA events may be most valuable if focused on topics which young people know less about – and in particular, their own vulnerability as a young driver or passenger.

Responsible attitudes

5.23 Although the pupils we spoke with indicated that SDSA had made them more aware of their vulnerability and the significant consequences of certain behaviours, the qualitative evidence is less strong in relation to how the approach has led to significant changes in attitudes – particularly in the long term. However, we heard examples of pupils changing their attitudes in the short term:

- one pupil in Tayside cycles regularly and now feels more aware of the potential dangers, and is more careful when on the roads;
- pupils in both Tayside and Central said that they were now more confident as passengers to confront their driver over potentially dangerous driving;
- as passengers, pupils in Central said that they were now more aware of erratic driving from other cars on the road; and
- one pupil in Central said that after the SDSA event, he actually questioned whether he wanted to learn to drive at all, given the responsibilities that come with driving.

5.24 The independent evaluation of SDSA Central suggests that many young people already had responsible attitudes in relation to a number of areas, before attending the event. These mainly related to behaviours that meant breaking the law or behaving aggressively. Before the event, most already didn't feel it was ok to:

- cross a junction knowing the traffic lights were red;
- drive above speed limits;
- drive close to a car to signal its driver should go faster or move out of the way; or
- chase another driver if they made you angry – with the intention of giving them a piece of your mind.

5.25 The SDSA Central survey analysis suggests only very small changes in attitudes in relation to these areas.

5.26 The survey work suggests that the most positive changes were seen in relation to young people's attitudes to speeding. The proportion of young people saying they thought driving fast was exciting fell from 54% to 35% - a change in agreement level of 19 percentage points. Similarly, those saying they liked being a passenger in a car that is being driven fast fell from 43% to 20%, representing a 23 percentage point change in level of agreement. A much more modest but still significant change was observed in relation to observing speed limits, with 12% agreeing it was ok to drive above speed limits before the event, and 8% agreeing with this afterwards.

5.27 Pupils participating in EYD said that the event had not changed their attitudes or behaviour, and suggested the messages needed to be portrayed in a more shocking way in order to engage with this age group.

Improved driving and other behaviours

5.28 None of the pupils we consulted as part of this review had begun taking driving lessons, although all said they were planning to do so when they were old enough.

5.29 The scope of this review has not allowed us to review evidence which might demonstrate that pupils who have seen SDSA or EYD in the past have improved their driving behaviour. As demonstrated by the literature review conducted by Transport Scotland, attributing behavioural changes to educational interventions such as SDSA or EYD is recognised to be very challenging.

5.30 However, some of the young people we engaged during the study believed that the events would impact on their driving behaviour in the future. Additionally, a few gave examples of how their passenger behaviour might have already changed. The SDSA Central evaluation suggested that behaviours in relation to wearing seatbelts were already good before the event, with only very small changes in reported behaviours after three months. The proportion of young people who changed their agreement with the statement about wearing their seat belt in the car rose by just 2 percentage points from 88%. The proportion saying they would ask someone else not wearing a seat belt to put one on in a car increased by 5 percentage points from 75%.

Reduction in accidents

5.31 Ultimately, those involved in the delivery of SDSA and EYD delivery hoped such interventions would impact on knowledge, attitudes and behaviours which in turn would lead to a reduction in road accidents and fatalities involving young drivers. In all three case study areas, those we spoke with suggested that road traffic statistics show a decrease in the number of road traffic accidents in recent years. Some felt that the educational approaches such as SDSA and EYD may have contributed to this. However, most recognised that the evidence doesn't exist to support this link, or to allow us to understand the significance of SDSA or EYD alongside other educational interventions, and wider factors which influence behaviour.

5.32 There are such a diverse range of factors influencing the types and number of accidents that it will be extremely difficult to establish any kind of causal link between individual young driver interventions and road traffic statistics. Any such evaluation would need to isolate the roles of other factors – such as wider educational work, social influences, car design advancements, changes to road engineering and the nature of local driving environments.

Reviewing approaches to delivery

5.33 This section provides an overview of how SDSA and EYD delivery compares across the case study areas, and explores perceptions of what worked well about the SDSA and EYD events considered in the case studies.

Targeting

5.34 The case study areas targeted their events at different age groups, and all appeared to respond flexibly to interest from schools in bringing along particular year groups. In the two SDSA case study areas we explored, the event was aimed at S4 pupils, but older pupils are also able to attend up to S6. EYD is aimed at S6 pupils, although some schools choose to take their S5 to the event. The extent to which decisions about targeting was based on research or evidence was not clear from this study.

Focus

5.35 We encountered different understandings of the scope of SDSA and EYD and in particular, the specific messages each event sought to promote and the extent to which it aimed to reach beyond driver behaviour to influence passenger, cyclist and pedestrian attitudes and behaviours.

5.36 We found that different road safety themes were explored in the case study events we reviewed. Commonly, the approaches focused on driving behaviours – but each area also promoted wider road safety messages to the young people as potential passengers, cyclists or pedestrians. In one SDSA discussion young people felt there could be more content for people in these different roles, and to make it more relevant to them. Topics included drink driving, speeding, wearing seat belts and peer pressure. In Tayside they also included information about motorcyclist behaviours.

5.37 Specific topics and road safety messages seemed to be selected to be relevant and interesting for young people. While the content did focus on issues of importance in road safety terms (such as wearing a seatbelt and speeding), the independent evaluation of SDSA Central suggests it may be useful to focus content on topics which young people are less aware of in advance – such as their vulnerability in a car with a young driver.

5.38 While it may be useful to tailor messages to local priorities, it seems there would be value in clarifying the specific behaviours or groups each event is aiming to bring about changes with, and tailor the content, approach and evaluation accordingly. It is hoped that the suggested outcomes set out in the accompanying evaluation framework will provide a structure for local partners to agree the focus and scope of their event, and for effective evaluation to be developed.

A partnership approach to planning and delivery

5.39 Each of the case study areas involved joint working between statutory services and organisations to plan and deliver the SDSA and EYD events. This suggests broad buy-in to the approach. The SDSA Central partnership group

has been constituted, to allow it to apply for a range of funding to support its approach.

5.40 Both SDSA case study areas had looked to other areas where the event was already established for inspiration in getting started. In both cases, the overall format, tone and delivery was preserved, but there were some changes made to the content to make the event more relevant to local audiences. In some cases, real life local accident footage was used for the film, and local young people were recruited to act in the films.

5.41 Planning for the event begins several months in advance, to ensure sufficient funding is in place and block bookings secured for the venues. Lead officers have at times found the process resource intensive within the confines of their wider roles.

Funding and costs

5.42 There were significant differences in cost between the three case study locations. EYD and SDSA Central estimated their costs last year to be around £18,000. In Tayside, the costs were estimated at almost double that, at £32,000.

5.43 The estimated average cost (based on average numbers and costs provided by case study areas) is just under £5 per pupil in both Edinburgh and Central. In Tayside the estimated cost is £16 per pupil.

5.44 The biggest cost outlays across all the events were for venue hire and transporting pupils to and from the events. Table 5.1 summarises costs and funding sources.

Table 5.1: Breakdown of costs and funding sources by case study area

	EYD	SDSA Central	SDSA Tayside
Total Cost	£18,000-£20,000	£18,844	£32,000
Funding sources	Local firm of solicitors, Road Safety Team	Transport Scotland, The Big Lottery, Fundraising	Angus Council, Dundee Council, Perth & Kinross Council, SFRS, NHS, tactran, Stagecoach, Fundraising

5.45 In Central region, there has been no financial input from local authorities since the introduction of the Scottish Fire and Rescue Service. The lead officer has undertaken as much fundraising as possible to ensure the continuation of SDSA. Funding in Central has recently come from grants from Transport Scotland and the Big Lottery.

5.46 SDSA Tayside plans and delivers their event through a partnership group including the three local authorities, Police Scotland, SFRS, Ambulance Service, the NHS, and Tayside and Central Scotland Transport Partnership (Tactran). All contribute to funding the project, although the majority of funding comes from the local authorities in the area.

5.47 In Edinburgh, the EYD event began with all partners (including NHS, Police Scotland, Scottish Fire and Rescue, City of Edinburgh Council and Road Safety) contributing to the cost of delivery. However for the past three years the event has been sponsored by a local solicitor’s firm and supported by the Council. It is expected that this arrangement will continue.

Levels of involvement

5.48 The leads for delivering both SDSA and EYD reported that in the past it has been challenging to get schools on board with the event and there has been much publicity to encourage participation. However, lead officers now report that once the school has attended for the first time, they return each subsequent year. EYD has been successful at engaging with secondary schools in Edinburgh, and this year (2015) will be the first year that every school in the local authority area will participate.

5.49 Table 5.2 provides an overview of the number of schools and pupils participating in each of the case study events during 2014/15.

Table 5.2: Total number of schools participating in 2014/15 and the number of sessions delivered in each case study area			
	EYD	SDSA Central	SDSA Tayside
Total Number of schools participating	33	18	20
Number of sessions delivered	8	11	3
Average number of pupils participating each year	4,000	4,000	2,000
Time of event	September	February	November

5.50 The timing for the events has been a consideration when trying to maximise participation and impact. EYD takes place in September just after the start of the term, while SDSA Tayside takes place in November so as to “fit with the curriculum”. SDSA Central host its events in February, which was reportedly to allow enough time for follow up work with the SDSA team and pupils in schools before the summer, although there has been no reported follow up so far.

5.51 In all three case study areas there have been discussions about carrying out preparatory or follow up educational work in schools to reinforce key messages. But to date, this hasn’t taken place.

Approaches to event design

5.52 The approaches to delivery within EYD and SDSA were similar in a number of ways. For example, all three case study areas hired DJs from a local radio station to ‘host’ the event with the intention of trying to better engage with the young people.

5.53 All three case study areas used talks from emergency workers, families, friends and victims of road traffic accidents to relate their personal stories and experiences.

- 5.54 There were, however, differences between EYD and SDSA in some aspects of the format and the tone used in the approach. In both Tayside and Central regions, SDSA used shocking, hard-hitting footage of accidents. In both areas this included footage from the local area depicting streets and locations the young people would be familiar with. Typical of the SDSA approach, both these case studies illustrated scenes of a graphic nature and 'real-life' content.
- 5.55 EYD aims to influence knowledge, attitudes and behaviours but through a live play performed by a youth theatre company. The play has few props in order to encourage the young people to use their imaginations. EYD also uses interactive games and activities during the event to reinforce key messages.

Views on tone

- 5.56 The graphic nature and at times shocking tone of SDSA events was generally perceived to be a strength of the approach. Tone was an important discussion point among those involved in this study. The pupils at the two SDSA case study schools had excellent recollection of the event, despite having attended between four and eight months previously. They felt the shocking tone had really 'hit home' with them, making sometimes well rehearsed messages more relevant.
- 5.57 EYD takes a different approach and chooses deliberately not to shock the young people with graphic images, but uses a play and more interactive methods to get similar road safety message across. They had a poor recollection of the event (which they attended 8 months previously), and spontaneously suggested that the event needed to be more hard-hitting and shocking in order to capture their attention. They also felt that the play format and style didn't appeal to their age group.
- 5.58 The views of the young people we spoke with suggest that the more hard-hitting tone of SDSA may be more effective than the softer approach taken by EYD – certainly the very small groups of young people we engaged felt this was the case. However, the small sample size and subjective nature of the views gathered makes it difficult to be conclusive about this. It is also possible that their negative reactions to the style of the play – rather than the tone – negatively influenced their views about its effectiveness.

Real life experiences

- 5.59 Both SDSA and EYD use presentations from victims of road traffic accidents and their families. Feedback from all three case study schools indicated that the talks given by those who had real life experiences of a road traffic collision (whether as a victim, perpetrator or family member) were effective elements of both the SDSA and EYD events. Pupils had very good recollection of the presentations and were appreciative of the frankness with which the families and victims spoke of their experiences. As with the shocking footage, the pupils felt this element really brought home the key messages in a personal and emotional way.

5.60 Equally, there was very positive feedback about the talks by the emergency services during the events, which further brought home the real life nature of the accidents being described.

5.61 Based on this feedback, it would seem that these elements would be worth retaining in the future.

Relevance to age group

5.62 SDSA events in Central and Tayside were aimed at S4 but were also open to those up to S6. Pupils and staff agreed that the messages were relevant and timely as many pupils were making arrangements to sit the theory element of their driving test and all had plans to learn to drive.

5.63 In Edinburgh, the EYD event is aimed at S6 pupils but can also be attended by pupils in S5. Some pupils reported that the content and style of the play needed to be updated to reach the older age group effectively.

Venue and profile

5.64 Pupils were asked if they thought the messages from SDSA and EYD events would have had as much or the same impact if they were delivered in their classroom setting in a different format. All agreed that the impact would not be the same, and that the messages were more hard-hitting when delivered by those with real experience of the events.

5.65 Pupils spoke about the high profile, theatre style format of the events creating a heightened interest. They felt that this format was more effective than alternative approaches – such as classroom based educational interventions, or online or televised content.

Additional tools

5.66 The EYD event uses a series of interactive games and activities to engage with young people. These focus on speeding, drink driving and distractions. The young people did recall these activities and were more positive about them than the drama element of EYD. We found they were able to understand the messages that the activities were trying to convey.

5.67 This feedback suggests that the inclusion of these types of activities in the SDSA content could be worthwhile and should be explored further.

Supporting work in school

5.68 This study suggests it may be useful to carry out some preparatory or follow-up work with schools to embed key messages. There were no examples of preparatory or follow up work being carried out in schools after the events. Schools said they offered the young people the chance to discuss any of the issues that had arisen from the events, but no pupils had taken this up with staff.

5.69 Pupils in one SDSA case study school said they would have appreciated the chance to talk as a group, in a more informal setting about what they had seen. This may have had the added advantage of reinforcing key messages.

5.70 Teachers were more inclined to state their preference was for more information in advance of the event so they could prepare their class, or advertise it around the school.

5.71 Some lead officers commented that they had intended to carry out follow up work, three and six months after events, but this does not seem to have happened.

Monitoring and evaluation

5.72 This section discusses the current and future evaluation of young driver interventions such as SDSA and EYD.

5.73 This study suggests there is currently a lack of robust evaluation of SDSA. Overall, we found quite variable approaches to evaluation. During the workshop with SDSA practitioners, those involved discussed their current approaches to evaluating the impact of SDSA and EYD. They identified three key sources of evidence:

- road safety statistics;
- driving offences among young people aged 17-25; and
- feedback from young people or teachers directly after the events.

5.74 All of the case study areas, Tayside, Central and Edinburgh have used questionnaires to capture participant views following the event. We reviewed the questionnaires used by Edinburgh and Central during this study. The questions used by the EYD event up until 2012 did include some outcome focused questions, and the Central questionnaires explore specific outcomes in relation to knowledge, attitudes and behaviours.

5.75 Those involved in gathering feedback through questionnaires had experienced challenges in managing these, and securing a good return rate. While some reported they gathered outcome based information through these (for example, to understand changes in their knowledge or attitudes), most gathered feedback on what worked well or could have been better about their events.

5.76 This review has highlighted that in a number of areas pupils who attend an SDSA event are encouraged to contribute their views and comments on social media. Each regional SDSA has its own Facebook page and pupils can share their views and comments on photographs of their events. According to those involved in using the approach in SDSA Central, the feedback received from pupils via social media has been overwhelmingly positive. This approach was seen as practical and successful by those involved in the delivery of SDSA, who felt this seems to be an obvious way to gather views from this age group. Although there are likely to be drawbacks of relying on social media as an evaluation tool, and these issues are discussed in the accompanying evaluation framework.

5.77 Some SDSA events also use innovative techniques – like film clips – to capture responses to the event.

5.78 Overall, this study has found strengths that can be built on, but a need to move towards a more structured and robust process for planning outcomes and evaluating change in young driver interventions. This was reinforced by practitioner views during the workshop with those involved in the development and delivery of SDSA. Workshop participants spoke of a lack of consistent outcome focused evaluation. Generally, they were supportive of any new monitoring and evaluation framework which would help them strengthen the evidence in relation to SDSA. In particular, they spoke of evaluation helping them to:

- demonstrate in a more robust way the impact of the events on those involved;
- understand the extent to which the event offers value for money; and
- gather learning to support the future development of their approaches.

5.79 This study and workshop discussions reinforce the need for any monitoring and evaluation framework to be:

- **Outcome focused** – Generally, there was support for having a shared set of outcomes to reflect the main priorities of the approaches. In particular, those involved want to be clear about and gather evidence in relation to the specific outcomes the programme might bring about for young people. The need for an outcome focused approach is further reinforced by the literature review.
- **Flexible** – This is important to allow local priorities, resources and approaches to be reflected.
- **Practical** – Those involved were keen that the framework would be short, and provide tools and techniques which they could use to support better evaluation.

5.80 Practitioners suggested the framework should provide advice about pre and post event surveys, and potentially more qualitative methods – such as discussion groups or innovative methods.

5.81 Those involved in the workshop highlighted the challenges of robustly evaluating the longer term impact of SDSA or other educational interventions, given the range of influences there are likely to be on driver behaviour and accident levels over time. They also highlighted trends that would affect road safety outcomes – for example, there are now fewer young people driving, car safety has improved, and second hand cars in particular (which young drivers are much more likely to use) have improved. Such factors are likely to make it very difficult to understand the impact of SDSA on accidents and offences.

5.82 However, using a logic model approach, which clearly sets out defined outcomes around which to plan and evaluate, allows those involved to gather evidence about shorter term outcomes (such as those relating to knowledge, awareness and attitudes) and consider the extent to which these may lead to longer term outcomes (particularly those relating to behavioural change). In addition, by gathering evidence over a longer period of time, it is possible to explore the extent to which any positive impacts are sustained.

5.83 While there was an appetite among practitioners for flexibility in any new framework, there was also support for sharing learning between areas. Those involved in the workshop found the session beneficial, as it brought people involved in SDSA together to discuss their approaches. They called for further opportunities to share lessons, and embed learning across Scotland.

6. Conclusions

This section of the report

- 6.1 This section of the report provides concluding comments in relation to this study. In particular, it summarises the evidence of the impact of SDSA and EYD, specifically in relation to Transport Scotland's current Road Safety Framework, and discusses implications for the future development and evaluation of young driver interventions such as SDSA and EYD.
- 6.2 In interpreting our findings, it is important to recognise that this was a small scale, qualitative study which aimed to gather views and experiences relating to the impact of SDSA, mainly to inform future evaluation work. The limitations of the study are discussed in detail in the methodology section of Chapter Two this report.

The impact of SDSA and EYD

- 6.3 This review considered qualitative evidence (perceptions of young people, teachers and SDSA and EYD coordinators) gathered during case studies and the limited existing evidence about the impact of SDSA.
- 6.4 Our study suggests that those involved in establishing SDSA and EYD sought to influence knowledge, attitudes and behaviours of young people in order to reduce accidents and fatalities associated with young drivers.
- 6.5 In relation to changing knowledge and awareness, SDSA demonstrated success, in relation to specific road safety messages. In particular, it appears to have enhanced participants' understanding of their vulnerability as road users, which is a key priority for Transport Scotland's Road Safety Framework.
- 6.6 In relation to changing attitudes, the case studies highlighted examples where young people felt they thought differently about driving after the event. And evidence from the independent evaluation of SDSA suggests that attitudes towards driving fast did improve, with a significant proportion changing their view that this was exciting as a driver or a passenger.
- 6.7 The independent evaluation study of SDSA Central suggests that the event was much less successful at changing knowledge, attitudes and behaviours in relation to other road safety messages. This seemed to relate to areas where attitudes were already positive and responsible in advance of the event, particularly in relation to breaking the law (wearing seatbelts and speeding) and aggressive driving behaviours.
- 6.8 Further evaluation would be needed to understand the extent to which any changes to knowledge and attitudes are sustained beyond the time frame this study explored.

6.9 Although these interventions ultimately aim to change driving behaviour, the small scale and limited nature of this study and a lack of existing evaluative evidence have made it difficult to explore long term, behavioural changes in driving practice. None of the young people we engaged or SDSA Central engaged in their independent evaluation had begun to drive. Although this study found that young people believed some of their behaviours may change, and SDSA Central's evaluation suggests some passenger behaviours may have improved as a result of that event, further evaluation is needed to understand:

- whether changes to driver behaviour can be observed;
- the extent to which these are sustained and over what time period; and
- the extent to which changes can truly be attributed to this specific intervention, in isolation from wider factors.

6.10 Future evaluation is discussed in more detail later in this section.

6.11 There is even more limited evidence about the impact of EYD, compared with SDSA. The views expressed in this study suggest that the EYD event we discussed with young people had little impact on their knowledge, attitudes and behaviours. However, it is important not to draw too much from the views of a very small group of young people. Their views may have been influenced by wider factors, and the style and format of the event (which they didn't like) may have been a key driver in their overall negative impression of the event.

6.12 It is important to recognise that this study's conclusions draw heavily on one independent, outcome focused evaluation of SDSA (in Central). Further evaluation work would be required to understand the extent to which that event's successes are shared by young driver interventions in other areas.

Effectiveness of SDSA compared with EYD

6.13 Based on the perceptions expressed in this study, and the independent evaluation work carried out for SDSA Central, the SDSA approach appears to have had a positive impact on the knowledge and attitudes of young people, in relation to certain road safety messages. In this sense it is supporting the aims of Transport Scotland's Road Safety Framework, which aims to influence young people's attitudes, target younger drivers with appropriate messages about safe driving, and increase their awareness and understanding of their vulnerability, and the dangers they face due to inexperience. In this sense, the approach appears to be successful.

6.14 It seems that SDSA events are reaching young people with some new messages, although some of the messages in the events (based on the SDSA Central independent evaluation study) may already be well understood by most young people. This suggests a need for better identification of the most important messages at the design stage, to avoid directing efforts towards messages which are already well understood or attitudes and behaviours which are already responsible.

6.15 There is also a need at the planning stage to be clear about the age group that would most benefit from the intervention. There does not appear to be existing evidence to inform this, but future evaluation could perhaps explore patterns in knowledge before the event and changes in attitude after the event (by age group) to help understand this.

6.16 Transport Scotland's Road Safety Framework specifically commits to promoting 'innovative ways to target younger drivers'. The perceptions expressed in this study suggest that the following elements of SDSA and EYD events are effective mechanisms at getting key messages across:

- The graphic nature, and hard-hitting (at times shocking) tone of SDSA events – which participants and teachers believed 'brought home' the consequences of particular behaviours.
- Materials based on local 'real life' stories, and inputs from those involved in serious road traffic accidents.
- Using a mix of innovative techniques – like using glo-sticks - to communicate messages about local statistics, and a young person's individual vulnerability.
- Using a range of wider techniques to explore experiences and key messages – such as those used at EYD to allow young people to experience collisions (at low speed), or the impact of drinking on their perceptions (using 'drunk goggles').
- Bringing large numbers of young people together, for a high profile event, which seemed to create a focus for the messages, and was viewed as a better approach than classroom based teaching or other resources.

Future development of young driver interventions such as SDSA and EYD

6.17 As discussed, this study suggests that these interventions could be further strengthened by a number of changes at the planning stage. In particular, we suggest coordinators and relevant partners should work together to:

- **Select specific outcomes** (potentially based on the logic model provided in the accompanying framework) which the event should focus on delivering. Where possible, these should be selected based on:
 - evidence of importance - informed by local intelligence and national priorities, and
 - evidence of the existing knowledge and attitudes of young people - based on previous evaluation work in their area, and with the target age group.
- **Clearly define the target group** for the intervention. Again, wherever possible, this should be based on evidence of the needs of this age group, or previous evaluation with this group.
- **Put in place an outcomes-focused evaluation process** for future events. This could helpfully follow the accompanying evaluation framework, which provides guidance and specific tools which can be adapted or changed to meet local needs.

- **Consider the links between SDSA or EYD and other road safety interventions** happening in the local area. It is important to consider, at a strategic level, the extent to which these interventions join up with or add value to other educational work in schools, awareness raising and promotion of road safety messages at school and beyond. This should usefully involve the selection of the most relevant outcomes, and the most appropriate techniques for key target groups. And it may be helpful to consider how to reinforce and embed key messages, once young people are qualified to drive.
- **Explore opportunities to test and evaluate additional ‘wrap around’ educational elements** to the interventions we reviewed. In particular, consideration might be given to work with schools in advance or after the event. Based on this study, we believe it would be worthwhile for SDSA coordinators to consider the use of the participative techniques such as those used in EYD, to allow further evaluation of these approaches.
- **Further evaluate of the format of EYD** - Based on feedback on the style, tone and impact of the EYD event, those involved could helpfully carry out further evaluative work as part of their next event to understand the extent to which these views are representative of most young people they engage with and evaluate any changes to the style and format.

Future evaluation of young driver interventions such as SDSA and EYD

6.18 The literature review undertaken by Transport Scotland highlights a number of important lessons in relation to understanding the impact of SDSA, and other educational interventions. In particular:

- evaluations of young driver interventions are often not undertaken and those which do exist tend to be of poor quality;
- there are a small number of reviews of Safe Drive Stay Alive (SDSA) that have shown short-term improvements in self-reported attitudes and behaviours. However, these improvements tend to have regressed over the longer term (for example, over a few months);
- the SDSA reviews available to Transport Scotland did not include baseline data, and were subject to sampling and methodological issues which means that there is very little reliable evidence available about the impact of SDSA roadshows in Scotland.

6.19 While some feedback is gathered from SDSA participants at the moment, there is a lack of routine outcome focused evidence gathering. Undoubtedly, the evaluation of SDSA could be improved with more robust, outcomes focused self evaluation. We encountered significant support from practitioners to improve the evidence of its impact, and for self evaluation tools to achieve this. They wanted to better understand the difference being made, illustrate impact beyond anecdotal reports, and use evidence to inform future decision making about this and their wider approaches to road safety education. In summary, future self evaluation of young driver interventions such as SDSA and EYD will be most useful if it:

- Involves key partners in the identification of specific outcomes, target groups and messages in advance of designing the event.
- Uses outcomes focused research tools (such as questionnaires, but potentially other methods) to gather information about participant knowledge, attitudes and behaviours, before and after the event, to allow for the extent of change to be determined.
- Considers opportunities to measure the impact of the interventions in relation to driving behaviours in the longer term – at least in a qualitative way.
- As far as possible, takes account of the role of wider factors and influences in determining outcomes experienced by participants, to ensure that changes are not attributed to this single intervention unless the evidence is robust. In particular, other educational work, social factors, and technological and engineering approaches may all shape attitudes and behaviours over time.

6.20 The evaluation framework alongside this report aims to provide advice and tools to support those involved in SDSA to put in place robust self evaluation of their local approaches.

6.21 However, this study and wider research highlight a number of important challenges in effectively evaluating SDSA. These are not at all unique to SDSA, and are likely to be shared by other educational interventions which aim to affect attitudes and behaviours. In particular, it is important to recognise:

- the range of factors influencing driver behaviours – particularly in the longer term;
- the range of factors influencing road safety and road traffic offences; and
- the potential impact of a range of educational interventions.

6.22 While improved self evaluation can strengthen the evidence base in relation to SDSA, it is unlikely to be able to isolate the impact of this programme from wider influences.

6.23 It is important that any future decisions about the evaluation of SDSA acknowledge these challenges, and take a robust but proportionate approach. Any future evaluation undertaken at a national level could usefully take a strategic approach to evaluating a range of educational interventions together, rather than evaluating the impact of one type of intervention in isolation – in particular, those that aim to impact on knowledge, attitudes and behaviours of young people. By taking a broader approach, it would be possible to compare different interventions, and understand how educational activities at different stages and in various settings complement one another.