Safe Drive Stay Alive Evaluation

Greater Manchester and Surrey

12 Months
EVALUATION

Evaluation undertaken by:

roadsafetyanalysis

Contents

Executive Summary

‘Safe Drive Stay Alive’ (SDSA) is a series of emotionally-impactive live educational events aiming to reduce road casualties in young people, by increasing understanding of road risk and challenging unsafe attitudes and behaviour. SDSA was delivered in both Surrey and Greater Manchester (GM) in 2015, using similar approaches and materials. This independent evaluation measures these two schemes against their stated aims and objectives.

The evaluation has provided a unique insight into the efficacy of SDSA through the employment of large sample sizes; consistent monitoring over time; the use of a comparison group; and utilising an adolescent-based behaviour change model to measure against. Many evaluations of young and pre-driver education do not employ all or most of these elements.

The evaluation was conducted in three stages: before SDSA was delivered in November 2015; three months after attendance (February 2016); and twelve months after attendance (November 2016). Questionnaires were developed, based on the Prototype Willingness Model (PWM), which is an adolescent-based behaviour change theory, which seeks to explain what leads young people to engage in risky behaviours. The questionnaires were completed by a sample of students who experienced SDSA in Surrey and Greater Manchester and a comparison group from Surrey who did not attend SDSA (and whose responses should reflect what could be expected of the other groups if they had not attended SDSA).

Statistical tests were applied to the questionnaire responses and ‘success’ was measured against three observations:

- statistically significant differences before and after SDSA
- statistically significant differences between SDSA attendees and the comparison group
- similar responses before SDSA for both the comparison group and attending students.

There were no questions where the Greater Manchester intervention group met all three conditions. The comparison group were from Surrey and it could be that geographical differences between them and the Greater Manchester intervention group affected results. In many cases, the baseline for Greater Manchester was significantly lower than for both Surrey groups, suggesting that the Greater Manchester students held more positive views before attending SDSA. As such, the main results are focused on Surrey respondents. As the film and delivery of SDSA is similar in Surrey and Greater Manchester, the results for Surrey could reflect what we would expect to observe in Greater Manchester with the use of a local comparison group. Furthermore, findings in the 3-month report (using different tests) revealed similar results for both areas.

The findings provide some positive results. SDSA reduced the willingness of respondents to engage in certain risky driving behaviours:

- To use a mobile while driving
- To speed on motorways
- To speed on rural roads

It reduced the perceived likelihood of their friends to:

- Use a mobile while driving
- Speed on motorways
- Speed on rural roads
- Speed in towns
- Drink and drive

It reduced the perceived approval of their friends if the respondents:

- Exceeded the speed limit on motorways
- Exceeded the speed limit on rural roads
- Exceeded the speed limit in towns

The respondents' attitudes towards the following statements improved:

- If I am driving, I can handle a drink or two and still be safe
- If I drove sensibly, my friends would make fun of me

The results related to friends are important as subjective norms are thought to influence both behavioural willingness and behavioural intentions in the PWM. The improvements in social norms might suggest that they thought their friends had also been affected by the intervention (if they attended) and/or they no longer wanted their friends to be the types of people who would engage in these behaviours. Lastly, reporting friends' behaviours is often a reflection of the behaviour of the respondents themselves and therefore this could indicate a positive movement in their own disapproval and likelihood.

There were some behaviours where willingness to engage in the behaviour did not reduce. These include taking drugs or alcohol and driving, both of which had particularly low levels of willingness at the baseline stage. Additionally, willingness to speed in towns or not wear a seatbelt did not improve after SDSA by more than the comparison group.

There were also some behaviours related to social norms (friends' likelihood and approval), including taking drugs and driving or not wearing a seatbelt, which did not improve. These also had low levels at the baseline stage.

Attitudes towards certain behaviours did not improve to a statistically significant extent after SDSA. These included passenger related behaviours, such as challenging irresponsible behaviour; taking lifts from drink or drug drivers; understanding their responsibilities as a passenger; and seatbelt wearing. The strong driver focus in SDSA could mean that messages about passenger responsibility are not absorbed.

Lastly, the perceived vulnerability of respondents, where they feel more likely to be involved in a collision if they engage in risky behaviours, did not increase after SDSA. To increase vulnerability, highlighting the alternative consequences of risky behaviour could be effective, such as loss of freedom and mobility and the resulting social stigma. In addition to increasing perceived vulnerability, perceived efficacy could be explored. Credible coping mechanisms could be provided (either through SDSA itself or follow up lessons), with support to show attendees that they are capable of engaging in the safe behaviour.

The respondents, in general, provided positive feedback to SDSA 12 months after attendance. Over two-thirds thought that they had benefitted from attending SDSA. Whilst only one-sixth of Surrey's respondents reported that they still had their copy of the Young Drivers' Guide, this could be seen as positive 12 months after receiving it, especially as the 3-month evaluation revealed issues with distribution of the Guide.

It is recommended that consideration be given to:

- Increasing the passenger-related content
- Exploring ways to increase vulnerability through highlighting other consequences of risky behaviour
- Exploring ways to incorporate credible coping mechanisms into the intervention and ensure that the attendees believe they can engage in safe behaviours
- Promote the follow-up lessons to support SDSA
- Evaluate the follow-up lessons

Introduction

'Safe Drive Stay Alive' (SDSA) is a series of live educational performance events, based around a series of short and emotive films interspersed with live speakers from each of the emergency services. It also includes presentations from members of families whose lives have been affected by a serious road traffic collision.

SDSA is usually delivered as a partnership project, involving fire and rescue services, police, ambulance services, NHS trusts and local authorities and is provided to young people in various locations across the country. The key messages of SDSA, which are to highlight the increased collision risk of young people, are consistent in different regions, although the film content and focus on specific behaviours do differ to reflect local circumstances.

SDSA has been delivered in Surrey for over 10 years and has reached over 100,000 attendees. In 2013/14, a new set of films were funded, a film company commissioned and filming and editing were completed, ready for the public viewing of the new films at the November 2014 performances. The new films were also used in the inaugural year of Greater Manchester's Safe Drive Stay Alive in 2014.

Given the use of the same film in Greater Manchester and Surrey and the partnership that has developed between the two sets of SDSA performances, it was deemed appropriate that the areas should jointly commission an independent evaluation of the intervention. This report sets out the methodology and the results of the evaluation conducted in 2015-17.

Aims and Objectives

The main aim of SDSA in both areas is "to reduce the number of young people (16-25) who are killed or injured on the roads."

In Greater Manchester, the following objectives are specified:

"Through attendance at Safe Drive Stay Alive young people will be able to:

- Understand the risks which may lead to becoming a road casualty
- Understand the consequences and impact of risk taking on the roads
- Make a pledge about how they will keep themselves safe as road users
- Challenge unsafe attitudes and behaviour on the roads amongst their peers"

Logic Model

The logic model overleaf shows how the inputs and outputs of Safe Drive Stay Alive will lead to the desired outcomes/objectives and therefore the overall aim. The evaluation is designed to test whether the aims and objectives are met and is therefore an outcome, not a process evaluation.

Assumptions

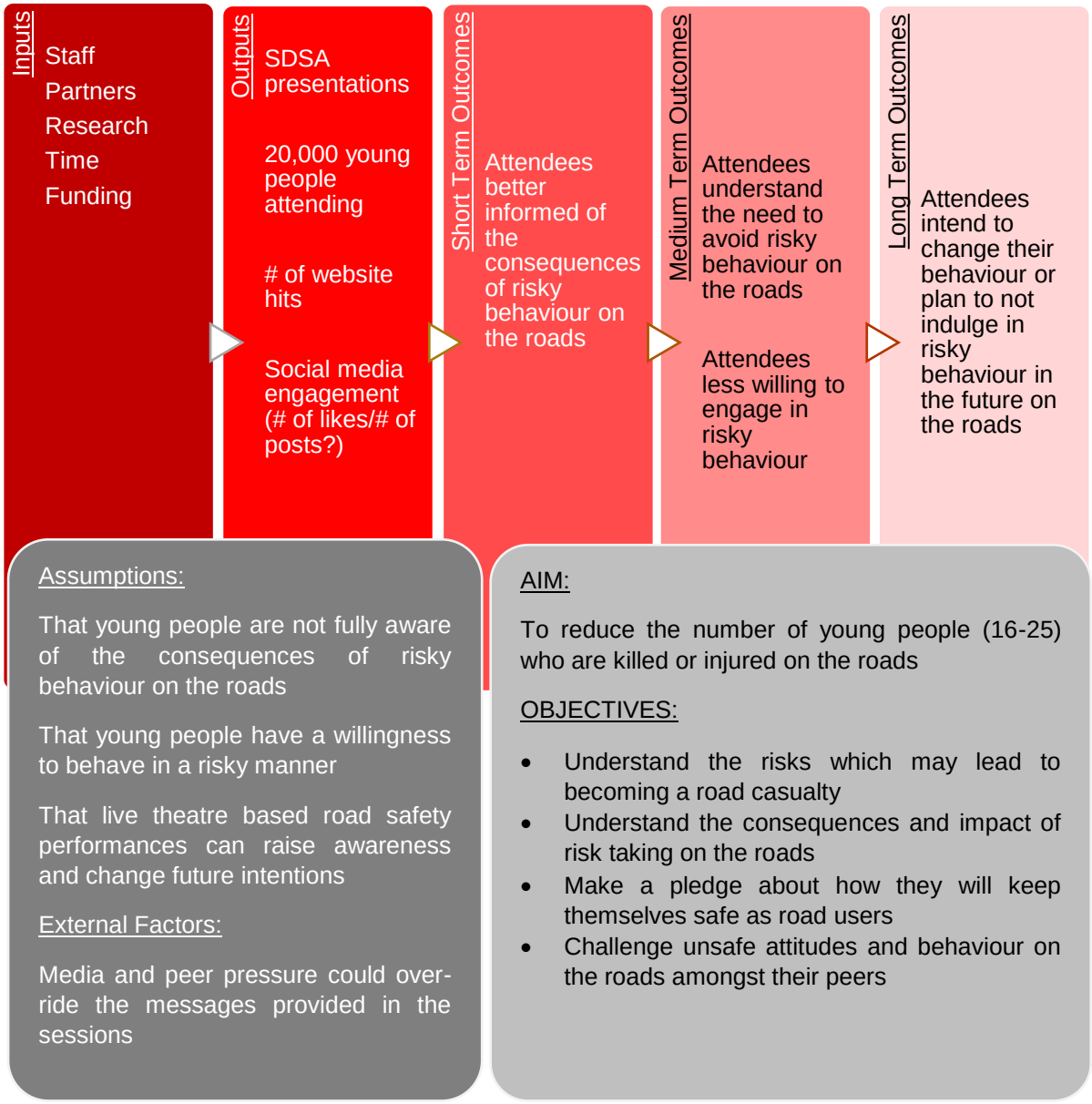
The logic model relies on the following assumptions being true for the inputs and outputs to lead to the desired outcomes:

- That SDSA attendees are not fully aware of the consequences of risky behaviour on the roads
- That young people have a willingness to behave in a risky manner
- That live theatre based road safety performances can raise awareness and change future intentions and willingness

If the above assumptions are not correct then SDSA will not be successful in meeting its objectives. These assumptions were tested within the baseline questionnaire in order to gauge awareness of the consequences of risky behaviour; the level of risky behaviour young people are willing to engage in; and how they feel towards young people who do engage in risky behaviours. Observed change post-intervention can test whether live theatre based road safety performances can raise awareness and change future intentions/willingness amongst attendees.

External Influences

There could be external factors which might limit the way the inputs and outputs of Safe Drive Stay Alive lead to the desired outcomes/objectives. The most obvious and possibly strongest of these is the way that the media and peer pressure could over-ride the messages provided in the sessions. To try to understand these external influences, questions have been included to understand social norms.



Behaviour Change Models

The approach adopted in this evaluation seeks to explore a behaviour change model specifically aimed at adolescents, called the Prototype Willingness Model (PWM)[1]. This model is explained fully in Appendix B – Prototype Willingness Model.

Evaluations of road safety schemes often focus on measuring behavioural intentions, as a predictor of likelihood to engage in the specific behaviour. The PWM suggests that intention is not always a good indicator of actual behaviour for adolescents as their behaviour, whilst willingly undertaken, is often not planned or intended. It is suggested that adolescents can find themselves in situations which facilitate risky behaviours and once in those situations, their willingness to engage in the behaviour will determine if they actually do it. Social norms and their views of the types of people who engage in risky behaviour shape their behavioural willingness as does their perceived personal vulnerability – whether or not they think they will be able to 'get away with it'. These concepts are the basis of the measures utilised to demonstrate the effectiveness of SDSA in Surrey and Greater Manchester.

Methodology

A 'quasi experimental pre- and post- intervention with comparison group' study has been employed. In this evaluation design, intervention and comparison groups are used but the participants are not randomly allocated to the groups. Random allocation of participants was not possible because of the nature of the administration of SDSA where all of the schools/colleges in the area are invited to attend. Comparison groups were therefore drawn from schools/colleges in other authorities or schools/colleges who did not attend SDSA in 2015. The comparison group schools and colleges were selected to reflect the composition of the intervention group in terms of age, gender, ethnicity and socio-demographic backgrounds. The closer the comparison and intervention groups are in terms of these factors, the greater the chance that differences between the two groups found in relation to the desired changes are due to the intervention and nothing else. This is because they are more likely to be subject to the same external factors.

The strengths of this evaluation design are due to its quasi experimental nature. Observed changes in the comparison group provide information on what may have occurred in the normal course of events without the presence of the intervention. Statistical tests have been conducted to assess the significance of any change achieved by the intervention.

This evaluation design is easier to conduct than a full randomised controlled trial (RCT) and is the strongest design available in this situation where randomising participants is not possible.

The chosen data collection method is a questionnaire. For Greater Manchester, this was accessed via the online survey platform, *Prometheus* for Stages 1 and 2. For Surrey (and Greater Manchester at Stage 3), it was decided to use paper versions of the same questionnaire, which were then inputted into *Prometheus*. Hand-delivery and completion of paper questionnaires has previously resulted in higher response rates.

In order to achieve a 95% confidence level and 5% margin of error for the 8,000 attendees for Greater Manchester and the 12,000 in Surrey, the evaluation required a minimum sample size of 370 participants in each area who complete the pre-and post- questionnaires.

Whilst a comparison group of the same size is not essential, a large sample size is beneficial.

[1] Gerrard et al, *A dual-process approach to health risk decision making: The prototype willingness model*, (Developmental Review 28 (2008) 29-61)

The questionnaire design for Surrey is shown in Appendix C – Questionnaire on page 50. The questionnaires in the Greater Manchester online version are identical in order and format for the pre-questionnaire. This is also the case for the post-questionnaire except that Q10, about the element of SDSA which has affected them the most, and Q11-Q14, about the Young Drivers Guide, were not included for Greater Manchester.

The questions themselves were designed to test elements of the Prototype Willingness Model as discussed in the Logic Model, Behaviour Change Models and Appendix B – Prototype Willingness Model sections. As can be seen from the questionnaire, there are questions asking about willingness to engage in different driver behaviours, if respondents were with a group of friends their age and could drive as they liked.

There are also four questions designed to test social norms, which explore family/parents' likelihood to engage in certain risk behaviours as well as their disapproval levels if the young person engaged in the behaviours themselves. The same likelihood and disapproval questions are asked about friends, to demonstrate any differences in how they think their friends think, compared to their family.

Understanding the influence of peers verses family members is particularly important for this age group. Research has shown that young drivers have increased collision risk when carrying same age-passengers or those in their 20s and early 30s whilst conversely, collision risk is reduced when carrying older passengers (35 years and over).[2]

"It is presumed that older passengers offer a protective effect through helpful co-piloting and encouragement of safer driving behaviours. For teen drivers with same-age passengers the reasons are thought to relate to what Allen and Brown (2008) call the 'perfect storm'. This involves age-related factors such as propensity to engage in risky behaviours, desire to please peers and in-group pressures combined with driver inexperience and associated risks such as poor hazard perception and calibration of actual and perceived demand."[3]

The questionnaire also asks respondents about personal vulnerability in the form of a question about likelihood to crash if they carried out certain behaviours. Their attitudes to these behaviours are also explored in a set of agree/disagree statements.

[2] Kinnear et al., *Novice drivers: Evidence Review and Evaluation – PPR673,* (Transport Research Laboratory, 2013), p.64
[3] *ibid.,* p.64

Findings

This section summarises the findings of the analysis of questionnaires completed by the target audience at three stages: before SDSA was delivered; three months after SDSA; and twelve months after SDSA. The questionnaires were completed by three groups: students from Greater Manchester who experienced SDSA; students from Surrey who experienced SDSA; and students from Surrey who did not experience SDSA.

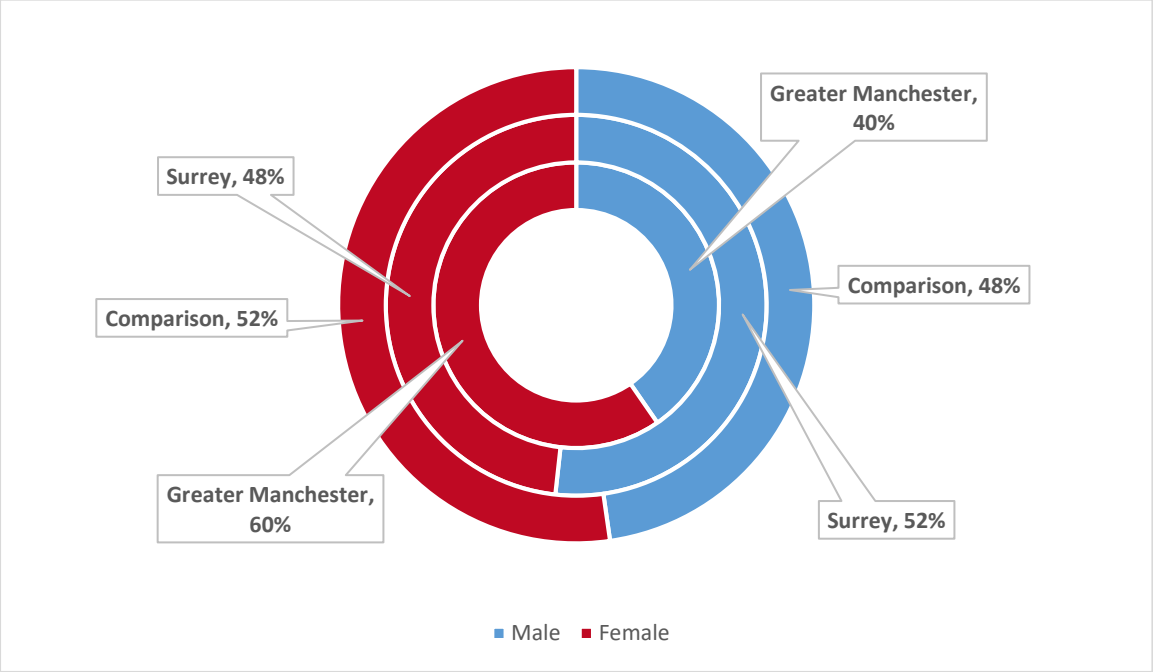
Sample Sizes

The evaluation achieved the following sample sizes:

Group	Pre	3 months	12 months
Surrey	1,257	946	728
Greater Manchester	909	963	368
Comparison	308	482	479

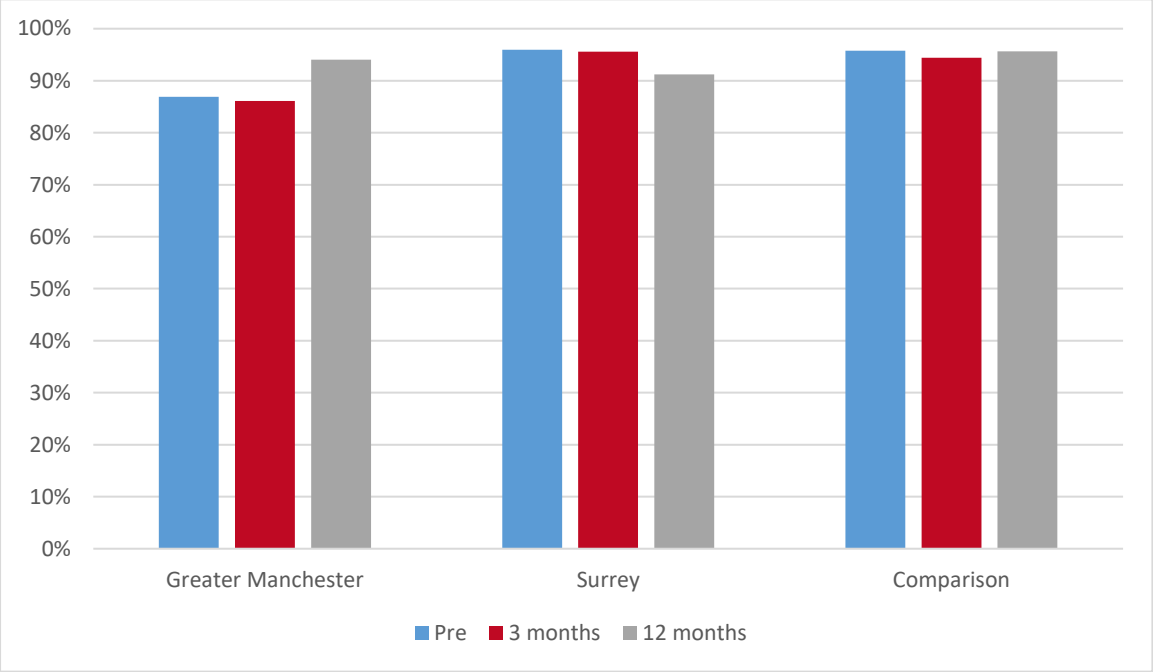
At the pre-stage, there were some gender differences between the three groups, with Greater Manchester having the lowest percentages of male respondents and Surrey the highest. This could have been due to differences in methodology (paper verses online questionnaires). At twelve months, 55% of the respondents from Greater Manchester were male, as were 54% of those from Surrey.

Figure 1 - Gender split of respondents at pre-stage



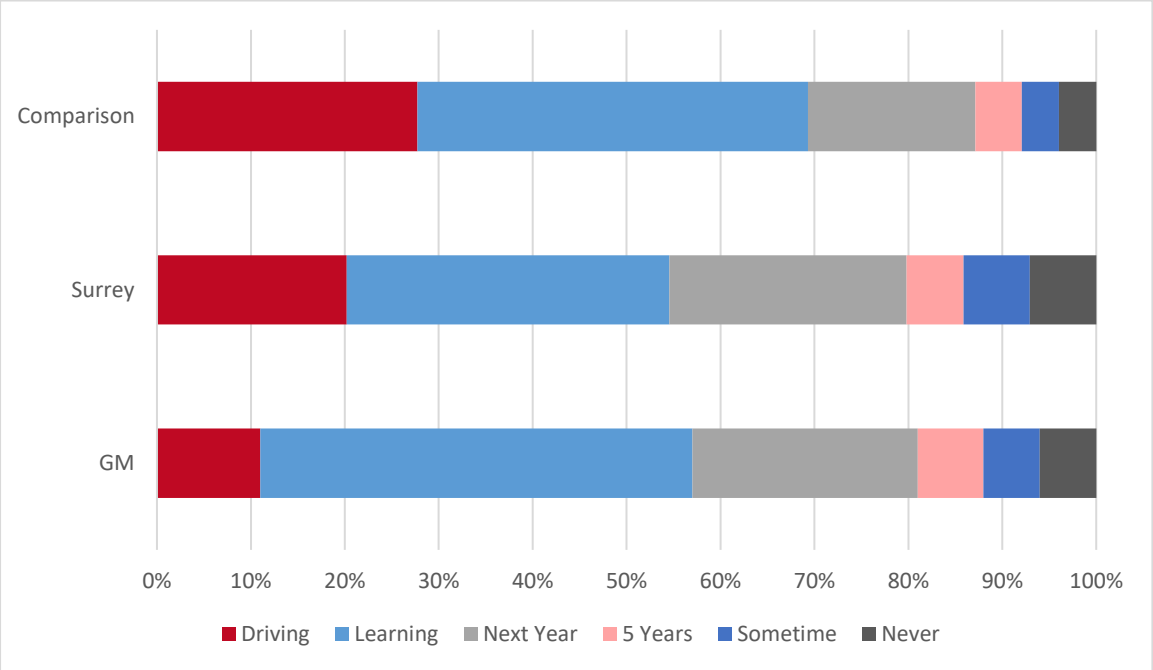
Over 85% of the respondents, at all three stages and in all three groups, were within the target audience age range of 16 or 17 years (for pre- and three months) and 17 or 18 years (for twelve months).

Figure 2- Percentage of respondents in target age group



Similar percentages of respondents were driving or learning to drive at twelve months, although the comparison group had a higher percentage of respondents who had passed their driving test already.

Figure 3 - Driving statuses of respondents



ANOVA tests

The one-way analysis of variance test (ANOVA)[4] has been used to analyse the results of this SDSA evaluation. This test is used to determine whether there are any statistically significant differences between the means of three or more independent groups. A post hoc test is used

[4] https://statistics.laerd.com/statistical-guides/one-way-anova-statistical-guide.php

to determine which specific groups differed from one another. In this case, Tukey's honestly significant difference (HSD)[5] post hoc test was used, which uses a number that represents the distance between groups, to compare every mean with every other mean.

Results

The results of the statistical testing can be found in tables in Appendix A - Results Data Tables on page 21. Items in column 'sig.' have been highlighted in yellow where there is a statistically significant difference between the baseline and the three month or twelve-month post stages and/or between the intervention and comparison groups. Statistically significant differences between the intervention and comparison groups at the baseline period are highlighted in blue. This is because differences at the baseline stage could affect subsequent post intervention results.

Whilst the tests were conducted on all nine groups, the appendix only shows results where relationships are relevant (for the three time periods for Surrey and Greater Manchester and both intervention groups against the comparison at each time period).

Positive Findings

'Success' is based on finding three conditions within the ANOVA tests:

1. That the baseline results for the intervention and comparison groups are NOT statistically significantly different (which indicates that the groups are starting from the same position)
2. That there is a statistically significant difference between the baseline and at least one of the post-stages for the intervention group
3. That there is a statistically significant difference between the intervention and comparison groups for at least one of the post-stages

There are no measures where the Greater Manchester intervention group meets all three conditions. The comparison group is based in Surrey and it could be that geographical diversity is responsible for differences between the Greater Manchester intervention group and the Surrey comparison group. In many cases, the baseline for Greater Manchester was significantly lower than for both Surrey groups. In addition, the methodology was changed from online questionnaires at baseline and three months post to paper versions at twelve months post. For several measures, there were increases at twelve months but this could also be due to the methodology change.

Given these uncertainties, the results are focused on Surrey interventions. As the film and delivery of SDSA is similar in Surrey and Greater Manchester, the results for Surrey could reflect what we would expect to observe in Greater Manchester, if a local comparison group and a consistent data collection method had been present. Furthermore, findings in the three-month report (using different tests) revealed similar results for both areas.

Willingness:

The three conditions were met for three out of the seven willingness measures

- Willingness to use mobile phone: Statistically significant reduced willingness at three and twelve months compared to baseline period and against comparison group at three months

[5] http://www.statisticshowto.com/post-hoc/

- Willingness to speed on motorways: Statistically significant reduced willingness at three and twelve months compared to baseline period and against comparison group at twelve months
- Willingness to speed on rural roads: Statistically significant reduced willingness at three and twelve months compared to baseline period and against comparison group at twelve months

Friends' Likelihood:
The three conditions were met for five out of the seven friends' likelihood measures

- Friends' likelihood to drink and drive: Statistically significant reduction in perceived likelihood of friends to drink and drive at three and twelve months compared to baseline period and against comparison group at twelve months
- Friends' likelihood to use mobile phone and drive: Statistically significant reduction in perceived likelihood of friends to use mobile and drive at three and twelve months compared to baseline period and against comparison group at twelve months
- Friends' likelihood to speed on motorways: Statistically significant reduction in perceived likelihood of friends to speed on motorways at three and twelve months compared to baseline period and against comparison group at twelve months
- Friends' likelihood to speed on rural roads: Statistically significant reduction in perceived likelihood of friends to speed on rural roads at three and twelve months compared to baseline period and against comparison group at twelve months
- Friends' likelihood to speed in towns: Statistically significant reduction in perceived likelihood of friends to speed in towns at three months compared to baseline period and against comparison group at twelve months

Friends' Approval:
The three conditions were met for three out of the seven friends' approval measures

- Friends' approval of speeding on motorways: Statistically significant reduction in perceived approval of friends if they speed on motorways at three and twelve months compared to baseline period and against comparison group at twelve months
- Friends' approval of speeding on rural roads: Statistically significant reduction in perceived approval of friends if they speed on rural roads at three and twelve months compared to baseline period and against comparison group at twelve months
- Friends' approval of speeding in towns: Statistically significant reduction in perceived approval of friends if they speed in towns at three and twelve months compared to baseline period and against comparison group at twelve months

Attitudes to Risky Behaviours:
The three conditions were met for two out of the eleven attitudes measures

- Can handle a drink or two and still be safe: Statistically significant reduction in agreement of being able to drink and drive at three and twelve months compared to baseline period and against comparison group.
- If I drove sensibly, my friends would make fun of me: Statistically significant reduction in agreement that friends would make fun of them at three and twelve months compared to baseline period and against the comparison group at three months

Other Measures

Willingness:
The three conditions were not met for four out of the seven willingness measures

- Willingness to drink alcohol and drive: Statistically significant difference to comparison group at three months but no statistically significant difference from baseline to post stages for intervention groups
- Willingness to take drugs and drive: No statistically significant differences over time or compared to comparison group but statistically significant differences at baseline to the comparison group. Both Greater Manchester and Surrey had lower willingness than the comparison before the intervention.
- Willingness to not wear seatbelt: No statistically significant differences over time for intervention groups but significant difference at three months between Surrey and comparison group.
- Willingness to speed in towns: No statistically significant differences over time for intervention groups but significant difference at twelve months between Surrey and comparison group. Reductions in willingness for Greater Manchester at three months but then increases at twelve months (although not significant).

Parental Likelihood:

The three conditions were not met for any of the seven parental likelihood measures

- There were no measures which met all three conditions for parental likelihood to engage in the risky behaviours. However, this is to be expected, given that the parents were not exposed to the intervention.

Friends' Likelihood:

The three conditions were not met for two of the seven friends' likelihood measures

- Friends' likelihood to take drugs and drive: No statistically significant differences over time or between intervention and comparison groups
- Friends' likelihood to not wear seatbelt: Statistically significant differences over time but not between intervention and comparison groups

Family Approval:

The three conditions were not met for any of the seven family approval measures

- There were no measures which met all three conditions for family approval to engage in the risky behaviours. However, this is to be expected, given that family members were not exposed to the intervention.

Friends' Approval:

The three conditions were not met for four of the seven friends' approval measures

- Friends' approval of drinking and driving: There were statistically significant reductions in perceived approval of friends if they drank and drove at three and twelve months compared to the baseline period and against the comparison group at twelve months. However, there was also a statistically significant difference between the baselines of the intervention and comparison group, with Surrey's intervention group reporting lower friends' approval at the pre-stage.
- Friends' approval of taking drugs and driving: There were statistically significant reductions in perceived approval of friends if they take drugs and drive at three and twelve months compared to the baseline period but no significant difference to the comparison group.
- Friends' approval of using mobile and driving: There were statistically significant reductions in perceived approval by friends if they use a mobile while driving at three and twelve months compared to the baseline period but no significant difference to the comparison group for Surrey. For Greater Manchester, there were significant differences at three months compared to the baseline and the comparison group, although approval at the baseline stage was particularly low.

- Friends' approval of not wearing a seatbelt: There were statistically significant reductions in perceived approval of friends if they don't wear a seatbelt at three and twelve months compared to the baseline period but no significant difference to the comparison group for Surrey. For Greater Manchester, there were significant differences at three months compared to the baseline and the comparison group, although approval at the baseline stage was particularly low.

Collision Vulnerability:

The three conditions were not met for any of the six collision vulnerability measures

There were no measures were all three conditions for collision vulnerability were met. This will be discussed later in the Passenger Behaviour

The measures which improved by a statistically significant amount all concentrate on driver behaviours, such as speeding, drinking and driving or using a mobile phone. Passenger related behaviours, such as challenging irresponsible behaviour; taking lifts from drink or drug drivers; understanding their responsibilities as a passenger; and seatbelt wearing did not improve by a statistically significant amount.

There is a strong focus in SDSA on the behaviours of drivers and given the age of the target audience (16 to 18 years), many will be pre-drivers. *It could be that the intervention should be adapted to include a passenger focus.*

- Vulnerability section. There were improvements in how likely they felt it was that they would be involved in a collision if they engaged in risky behaviours but these improvements were also observed amongst the comparison group.

Attitudes to Risky Behaviours:

The three conditions were not met for nine out of the eleven attitudinal measures

- 35mph in a 30mph is normally quite safe: There were statistically significant reductions in agreement at three and twelve months compared to the baseline period but no statistically significant difference to the comparison group
- It is never safe to use cannabis and drive: There were no significant increases in disagreement over time or against the comparison group. Greater Manchester had a more positive baseline than the comparison group.
- More likely to crash if I drive fast: No change in agreement over time or compared to the comparison group.
- I will sometimes use my mobile phone at the wheel: There were statistically significant reductions in agreement at three and twelve months compared to the baseline period but no significant difference to the comparison group
- Would accept a lift from drink/drug-driver as would feel I have no choice: There were no statistically significant reductions in agreement over time although there was a difference at three months with the comparison group for both Greater Manchester and Surrey.
- As a passenger, I could challenge someone who was driving a car irresponsibly: No change in agreement over time or compared to the comparison group.
- Understand have a responsibility to behave safely as a passenger: No change in agreement over time or compared to the comparison group. Baselines were more positive for both Surrey and Greater Manchester than the comparison group
- Don't wear a seatbelt for short journeys: There were statistically significant reductions in agreement at three and twelve months compared to the baseline period but no significant difference to the comparison group

- Driving whilst tired isn't very high risk: There were statistically significant reductions in agreement at three months compared to the baseline period but no significant difference to the comparison group

Passenger Behaviour

The measures which improved by a statistically significant amount all concentrate on driver behaviours, such as speeding, drinking and driving or using a mobile phone. Passenger related behaviours, such as challenging irresponsible behaviour; taking lifts from drink or drug drivers; understanding their responsibilities as a passenger; and seatbelt wearing did not improve by a statistically significant amount.

There is a strong focus in SDSA on the behaviours of drivers and given the age of the target audience (16 to 18 years), many will be pre-drivers. *It could be that the intervention should be adapted to include a passenger focus.*

Vulnerability

As discussed in Appendix B – Prototype Willingness Model, the adolescent-based model includes personal vulnerability as a predictor of both behavioural intentions and behavioural willingness. Personal vulnerability is the perceived risk that the individual believes they will be subjected to if they engage in the risky behaviour. The less conditional vulnerability they feel, the more willing they will be to engage in the risky behaviour.

Interventions such as SDSA could be effective by demonstrating the consequences (threat) of certain risky behaviours, and this demonstration then produces an emotional response and an increased awareness of the danger. Models such as the Extended Parallel Process Model (EPPM) explain how interventions such as SDSA might change the behaviour – through the perceived threat and their perceived efficacy.

- Perceived threat, which has two components:
  - Severity – beliefs about the magnitude of the threat
  - Susceptibility – beliefs about how likely the threat is to impact one *personally*.
- Perceived efficacy, which also has two components:
  - Response efficacy – beliefs about how effective the recommended behaviour will be
  - Self-efficacy – beliefs about one's own ability to perform the recommended behaviour (compare perceived behavioural control' in the Theory of Planned Behaviour) [6].

Three types of response are envisaged, based on the model. If the perceived threat and perceived efficacy are high, then the target audience may take steps to reduce the risk (as hoped for). If perceived efficacy is low, then the audience may instead seek to control the emotion (which is likely to be fear) by avoiding or ignoring the message or denying the personal relevance of the message. Lastly, if the perceived threat is low then there may be no response.

The results from the evaluation appear to indicate that one of the two perceived threat components could be missing: 'susceptibility'. If this is the case, then it could be that the response to the intervention is limited overall. The issue with susceptibility is not that young drivers (especially young men) are unaware of what would happen if they were involved in a collision, but that they believe it is unlikely. This presents an issue for communicating with them as "communications that challenge young male's own self-belief in their driving are likely

[6] Carey, R., McDermott, D. & Sarma, K., 2013. The impact of threat appeals on fear arousal and driver behavior: a meta-analysis of experimental research 1990-2011. *PLoS One,* 8 (5)(e62821)

to be ignored."[7] Some research has suggested that focusing on alternative threats might make the target audience feel more susceptibility. Instead of focusing purely on the physical threats of injury and death, threats can also be social, psychological or financial.[8] These threats could include losing their freedom or mobility or the social stigma related to that loss. It should be remembered that the risk needs to be one which they can relate to and is realistic to them – loss of freedom to attend university may have a greater personal impact on them than the threat of being sent to prison (as prison seems like an 'unlikely' scenario to them, based on their own self-belief).

In addition to the susceptibility component of the EPPM, perceived efficacy could be explored. Credible coping mechanisms could be provided (either through SDSA itself or via follow up lessons), with support to show attendees that they are capable of engaging in the safe behaviour. Coping mechanisms could include how to respond to peer pressure or techniques to reduce distraction levels.

Given the findings that SDSA does seem to influence social norms, an additional focus on alternative threats to death and injury, particularly related to social disadvantages, could potentially improve personal vulnerability. Credible coping mechanisms could be incorporated into SDSA to improve perceived efficacy to behave safely.

Feedback on SDSA

A number of questions were asked, requesting feedback on SDSA 12 months after attendance.

There were high levels of agreement with the following statements:

- I feel that I have benefited from attending a Safe Drive Stay Alive performance
  - 71% of Greater Manchester respondents agreed or strongly agreed
  - 66% of Surrey respondents agreed or strongly agreed
- I am now more aware of my responsibilities as a driver/future driver
  - 80% of Greater Manchester respondents agreed or strongly agreed
  - 68% of Surrey respondents agreed or strongly agreed
- For Surrey respondents, 48% felt that the family speakers had affected their behaviour in a car the most

Follow up work was discussed:

- For Surrey respondents, 5% reported doing follow up work after SDSA attendance and this mainly involved talks with tutors or participating in the evaluation
- A specific follow up lesson was available in Greater Manchester and 19% of respondents reported having this session.

The Young Driver's Guide is given to attendees in Surrey. Questions were asked about how useful they found it:

- 36% of the respondents reported receiving a copy of the Guide

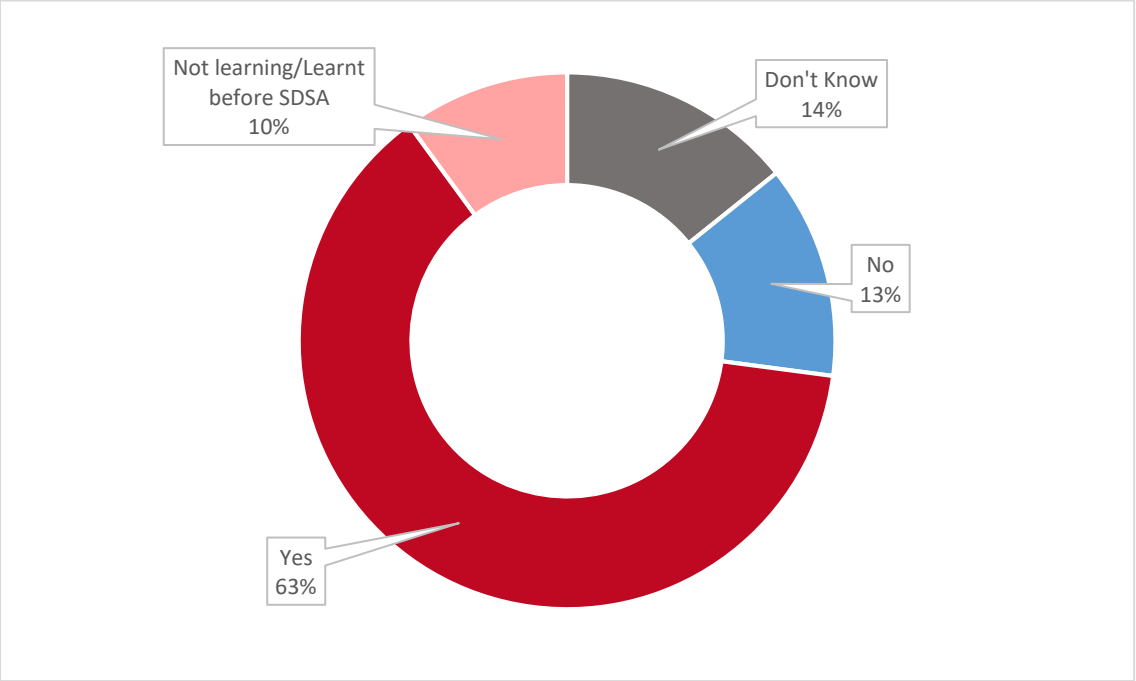
[7] Collins, E. et al., 2008. *Rural road safety: drivers and driving,* s.l.: Scottish Government Social Research.

[8] Lewis, I., Watson, B. & White, K. M., 2008. An Examination of Message-Relevant Affect in Road Safety Messages: Should Road Safety Advertisements aim to make us Feel Good or Bad?. *Transportation Research,* Volume 11, pp. 403-417.

- 18% of the respondents reported that they still had their copy of the Guide
- 9% of the respondents reported that their parents had looked at the Guide 'very often', 'quite often' or 'occasionally'
- 13% of the respondents reported that they had looked at the Guide 'very often', 'quite often' or 'occasionally'
- 12% of the respondents 'strongly agreed' or 'agreed' that their parents had found the Guide useful
- 14% of the respondents 'strongly agreed' or 'agreed' that they had found the Guide useful

For Greater Manchester respondents, there was a question about whether they thought that SDSA had affected their attitudes as they started to learn to drive. Sixty-three percent of respondents agreed that it had.

Figure 4 - Greater Manchester: Do you feel that attending SDSA affected your attitudes as you start to learn to drive?



A free text question was asked of both sets of attendees. For Surrey, the question asked if the respondents had any comments/suggestions for the SDSA team and for Greater Manchester, the respondents were asked what their lasting impressions of SDSA were.

For Surrey, there were 41 comments and suggestions, although several were about participating in the evaluation. Comments related to SDSA itself included:

The family speakers had a very big impact

Very helpful. Made me realise safety is very important

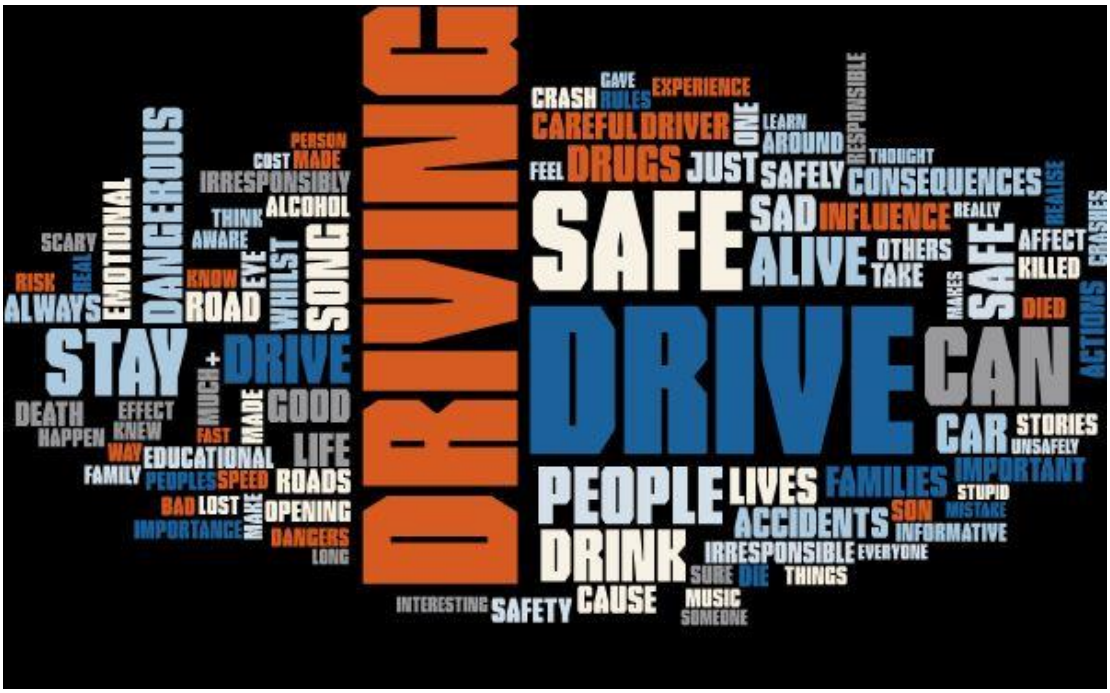
You are doing a wonderful job and a great service.

Some of the respondents did not like the loud music at the beginning and one suggested that people should be given a more emphasised option to leave the room. Another respondent thought that more emergency services stories should be included and another suggested that

an interactive exhibition would be a useful addition. Figure 5 shows a Word Cloud of the Surrey respondents' comments and suggestions.

Figure 5 - Surrey respondents' comments and suggestions

Figure 6 - Greater Manchester respondents' lasting impressions of SDSA



For Greater Manchester, there were 219 respondents who answered the question asking for their lasting impressions of SDSA. Figure 6 is a Word Cloud of these responses. Many of the comments related to the song as well as simply saying 'safe drive stay alive'. There were also many comments about drink-driving, taking drugs and driving, and speeding. Comments included:

To be careful as not everybody is safe on the roads, one mistake could cost a life.

It's not just down to how you drive, everyone needs to take responsibility for their own actions before, during and after driving

The families who came up and talked about their only children who had been killed in accidents due to unsafe driving

It was a very emotional experience and made me think differently about how to drive

Being safe when driving is extremely important because if you're driving unsafely and something happens e.g. a crash and someone gets seriously hurt/killed it's not only affecting the driver and passengers in both cars, but also the families, emergency departments etc.

The smallest things can cause devastation. Twenty seconds on the phone can be the difference between life and death.

That if I drive irresponsibly it is not only my life I put at risk. It has made me look at driving as a bigger responsibility and on my lessons I stay aware of all the danger and try to drive as safe as possible.

Conclusions

This evaluation has provided a unique insight into the efficacy of Safe Drive Stay Alive through the employment of large sample sizes; consistent monitoring over the long term; the use of a comparison group; and utilising an adolescent-based behaviour change model. Many evaluations of young and pre-driver education do not employ all or most of these elements.

The findings provide some positive results. SDSA reduced the willingness of respondents to engage in certain risky driving behaviours; improved some attitudes; and appeared to affect social norms, through reducing the likelihood of their friends to participate in risky behaviours or approve if the respondent themselves engaged in the behaviours. This latter finding is important as subjective norms are thought to influence both behavioural willingness and behavioural intentions in the Prototype Willingness Model. The improvements in social norms might suggest that they thought that their friends had also been affected by the intervention (if they attended) and/or they no longer wanted their friends to be the types of people who were engaging in these behaviours. Lastly, reporting friends' behaviours is often a reflection of the behaviour of the respondents themselves and therefore this could indicate a positive movement in their own disapproval and likelihood.

There were some measures where no or limited statistical significance was observed. Unsurprisingly, this included the likelihood of their parents to engage in risky behaviours or to have changed their approval levels if the respondent acted in a risky manner. As the parents and family members were not exposed to the intervention, it is unlikely that their behaviour would have changed.

There were some behaviours where willingness to engage in the behaviour did not reduce. These include taking drugs or alcohol and driving, both of which had particularly low levels of willingness at the baseline stage. However, willingness to speed in towns or not wear a seatbelt did not improve, over and above the comparison group, after SDSA.

There were also some behaviours related to social norms (friends' likelihood and approval), including taking drugs and driving and not wearing a seatbelt which did not improve. These also had low levels at the baseline stage.

Attitudes towards some behaviours also did not improve to a statistically significant extent (over and above changes observed amongst the comparison group). These included passenger related behaviours, such as challenging irresponsible behaviour; taking lifts from drink or drug drivers; understanding their responsibilities as a passenger; and seatbelt wearing. The strong driver focus could mean that messages about passenger responsibility are not absorbed and this could be something to consider in the future.

Lastly, the perceived vulnerability of respondents did not increase after SDSA. Personal vulnerability is where the target audience feel that they are more likely to be involved in a collision if they engage in the risky behaviours. Behaviour change models seek to explain how interventions such as SDSA might work and these could be explored to increase perceived vulnerability. Incorporating alternative consequences to risky behaviour, including loss of freedom and mobility and the resulting social stigma could be effective. In addition to increasing perceived vulnerability to negative consequences, perceived efficacy could be explored. Credible coping mechanisms could be provided (either through SDSA itself or follow up lessons), with support to show attendees that they are capable of engaging in the safe behaviour.

The respondents, in general, provided positive feedback to SDSA twelve months after attendance. Over two-thirds thought that they had benefitted from attending SDSA and free text feedback included positive comments. Whilst only one-sixth of Surrey's respondents reported that they still had their copy of the Young Drivers' Guide, this could be seen as positive 12 months after receiving it, especially as the 3-month evaluation revealed issues with distribution of the Guide.

Finally, it is recommended that consideration be given to:

- Increasing the passenger-related content
- Exploring ways to increase vulnerability through highlighting other consequences of risky behaviour
- Exploring ways to incorporate credible coping mechanisms into the intervention and ensure that the attendees believe they are able to engage in safe behaviours
- Promote the follow-up lessons to support SDSA
- Evaluate the follow-up lessons

Appendix A - Results Data Tables

Multiple Comparisons

Alcohol Willingness

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	-.020	.037	1.000	-.13	.09
	12GM	-.121	.040	.059	-.24	.00
	PreC	-.246*	.043	.000	-.38	-.11
3GM	3C	-.228*	.044	.000	-.37	-.09
12GM	12C	-.081	.047	.738	-.23	.07
PreS	3S	.072	.029	.254	-.02	.16
	12S	.065	.032	.504	-.03	.16
	PreC	-.086	.043	.552	-.22	.05
3S	3C	-.159*	.038	.001	-.28	-.04
12S	12C	-.107	.040	.161	-.23	.02

*. The mean difference is significant at the 0.05 level.

Drug Willingness

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	-.009	.030	1.000	-.10	.08
	12GM	-.077	.032	.292	-.18	.02
	PreC	-.153*	.035	.000	-.26	-.04
3GM	3C	-.072	.036	.565	-.18	.04
12GM	12C	.009	.039	1.000	-.11	.13
PreS	3S	-.029	.024	.953	-.10	.05
	12S	-.008	.026	1.000	-.09	.07
	PreC	-.132*	.036	.006	-.24	-.02
3S	3C	-.031	.031	.986	-.13	.07
12S	12C	-.041	.033	.948	-.14	.06

*. The mean difference is significant at the 0.05 level.

Mobile phone Willingness

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.081	.052	.825	-.08	.24
	12GM	-.115	.056	.505	-.29	.06
	PreC	-.266*	.061	.000	-.45	-.08
3GM	3C	-.172	.063	.135	-.37	.02
12GM	12C	.089	.067	.922	-.12	.30
PreS	3S	.206*	.041	.000	.08	.33
	12S	.228*	.045	.000	.09	.37
	PreC	-.149	.061	.272	-.34	.04
3S	3C	-.179*	.054	.025	-.35	-.01
12S	12C	-.137	.056	.272	-.31	.04

*. The mean difference is significant at the 0.05 level.

Motorway Speeding Willingness

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.084	.064	.925	-.11	.28
	12GM	-.131	.070	.629	-.35	.09
	PreC	-.435*	.075	.000	-.67	-.20
3GM	3C	-.359*	.078	.000	-.60	-.12
12GM	12C	-.129	.083	.827	-.39	.13
PreS	3S	.205*	.051	.002	.05	.36
	12S	.263*	.055	.000	.09	.44
	PreC	-.199	.076	.175	-.43	.04
3S	3C	-.244*	.067	.008	-.45	-.04
12S	12C	-.287*	.070	.001	-.50	-.07

*. The mean difference is significant at the 0.05 level.

Rural Speeding Willingness

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.136	.059	.335	-.05	.32
	12GM	-.195	.064	.061	-.39	.00
	PreC	-.380*	.069	.000	-.59	-.17
3GM	3C	-.388*	.072	.000	-.61	-.17
12GM	12C	-.137	.076	.680	-.37	.10
PreS	3S	.176*	.047	.006	.03	.32
	12S	.229*	.051	.000	.07	.39
	PreC	-.143	.070	.509	-.36	.07
3S	3C	-.191*	.061	.048	-.38	.00
12S	12C	-.324*	.065	.000	-.52	-.12

*. The mean difference is significant at the 0.05 level.

No Seatbelt Willingness

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.106	.059	.689	-.08	.29
	12GM	-.110	.063	.706	-.30	.08
	PreC	-.129	.066	.581	-.33	.08
3GM	3C	-.185	.060	.052	-.37	.00
12GM	12C	.119	.064	.630	-.08	.32
PreS	3S	.068	.040	.728	-.05	.19
	12S	.129	.043	.067	.00	.26
	PreC	-.152	.059	.187	-.33	.03
3S	3C	-.171*	.051	.025	-.33	-.01
12S	12C	-.143	.054	.171	-.31	.03

*. The mean difference is significant at the 0.05 level.

Town Speeding Willingness

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.078	.054	.884	-.09	.25
	12GM	-.164	.059	.121	-.35	.02
	PreC	-.394*	.064	.000	-.59	-.20
3GM	3C	-.334*	.066	.000	-.54	-.13
12GM	12C	-.218*	.070	.049	-.43	.00
PreS	3S	.089	.044	.507	-.05	.22
	12S	.059	.047	.942	-.09	.21
	PreC	-.200	.065	.052	-.40	.00
3S	3C	-.151	.057	.158	-.33	.02
12S	12C	-.247*	.059	.001	-.43	-.06

*. The mean difference is significant at the 0.05 level.

Parental Likelihood Alcohol

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	-.082	.050	.780	-.24	.07
	12GM	-.076	.054	.895	-.24	.09
	PreC	-.125	.058	.436	-.30	.06
3GM	3C	-.152	.060	.218	-.34	.03
12GM	12C	-.155	.064	.274	-.35	.04
PreS	3S	.000	.040	1.000	-.12	.12
	12S	.060	.043	.897	-.07	.19
	PreC	.076	.059	.932	-.11	.26
3S	3C	-.033	.052	.999	-.19	.13
12S	12C	-.090	.054	.772	-.26	.08

*. The mean difference is significant at the 0.05 level.

Parental Likelihood Drugs

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	-.081	.038	.463	-.20	.04
	12GM	-.075	.042	.690	-.20	.05
	PreC	-.009	.045	1.000	-.15	.13
3GM	3C	-.003	.046	1.000	-.15	.14
12GM	12C	.035	.049	.999	-.12	.19
PreS	3S	-.084	.031	.133	-.18	.01
	12S	-.041	.033	.946	-.14	.06
	PreC	-.036	.045	.997	-.18	.10
3S	3C	-.027	.040	.999	-.15	.10
12S	12C	-.025	.042	1.000	-.16	.10

Parental Likelihood Mobile Phone Use

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.059	.063	.991	-.14	.26
	12GM	-.028	.069	1.000	-.24	.19
	PreC	-.076	.074	.983	-.31	.15
3GM	3C	-.115	.077	.860	-.35	.12
12GM	12C	-.057	.082	.999	-.31	.20
PreS	3S	.179*	.051	.012	.02	.34
	12S	.307*	.055	.000	.14	.48
	PreC	.218	.075	.088	-.01	.45
3S	3C	.059	.066	.993	-.15	.26
12S	12C	-.098	.069	.890	-.31	.12

*. The mean difference is significant at the 0.05 level.

Parental Likelihood Motorway Speeding

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	-.012	.069	1.000	-.23	.20
	12GM	-.095	.075	.941	-.33	.14
	PreC	-.318*	.081	.003	-.57	-.07
3GM	3C	-.216	.084	.199	-.48	.04
12GM	12C	-.227	.089	.212	-.50	.05
PreS	3S	.197*	.055	.011	.03	.37
	12S	.264*	.060	.000	.08	.45
	PreC	.040	.082	1.000	-.21	.29
3S	3C	-.067	.072	.991	-.29	.16
12S	12C	-.229	.076	.063	-.46	.01

*. The mean difference is significant at the 0.05 level.

Parental Likelihood Rural Speeding

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.022	.065	1.000	-.18	.22
	12GM	-.153	.071	.434	-.37	.07
	PreC	-.324*	.076	.001	-.56	-.09
3GM	3C	-.304*	.079	.004	-.55	-.06
12GM	12C	-.228	.084	.140	-.49	.03
PreS	3S	.155	.052	.071	-.01	.32
	12S	.169	.056	.067	-.01	.34
	PreC	.025	.077	1.000	-.21	.26
3S	3C	-.087	.068	.933	-.30	.12
12S	12C	-.201	.071	.108	-.42	.02

*. The mean difference is significant at the 0.05 level.

Parental Likelihood No Seatbelt

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.011	.051	1.000	-.15	.17
	12GM	-.095	.056	.748	-.27	.08
	PreC	-.017	.060	1.000	-.20	.17
3GM	3C	-.085	.062	.915	-.28	.11
12GM	12C	.063	.066	.990	-.14	.27
PreS	3S	-.010	.041	1.000	-.14	.12
	12S	.060	.045	.919	-.08	.20
	PreC	.019	.061	1.000	-.17	.21
3S	3C	-.027	.054	1.000	-.19	.14
12S	12C	-.055	.056	.988	-.23	.12

Parental Likelihood Speeding Towns

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	-.060	.062	.988	-.25	.13
	12GM	-.116	.068	.738	-.33	.09
	PreC	-.222	.073	.057	-.45	.00
3GM	3C	-.205	.075	.141	-.44	.03
12GM	12C	-.277*	.080	.016	-.53	-.03
PreS	3S	.070	.050	.896	-.08	.22
	12S	.089	.054	.777	-.08	.26
	PreC	.067	.073	.992	-.16	.30
3S	3C	-.046	.065	.999	-.25	.16
12S	12C	-.192	.068	.108	-.40	.02

*. The mean difference is significant at the 0.05 level.

Friends Likelihood Alcohol

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.092	.058	.810	-.09	.27
	12GM	-.020	.063	1.000	-.22	.17
	PreC	-.311*	.068	.000	-.52	-.10
3GM	3C	-.237*	.070	.021	-.45	-.02
12GM	12C	-.160	.074	.436	-.39	.07
PreS	3S	.175*	.046	.005	.03	.32
	12S	.250*	.050	.000	.09	.41
	PreC	-.138	.069	.538	-.35	.08
3S	3C	-.147	.060	.262	-.33	.04
12S	12C	-.257*	.063	.002	-.45	-.06

*. The mean difference is significant at the 0.05 level.

Friends Likelihood Drugs

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.036	.054	.999	-.13	.20
	12GM	-.068	.059	.966	-.25	.11
	PreC	-.183	.063	.090	-.38	.01
3GM	3C	-.091	.065	.901	-.29	.11
12GM	12C	.048	.070	.999	-.17	.26
PreS	3S	.020	.043	1.000	-.11	.15
	12S	.116	.047	.242	-.03	.26
	PreC	-.147	.064	.344	-.35	.05
3S	3C	-.040	.056	.999	-.21	.13
12S	12C	-.100	.059	.751	-.28	.08

*. The mean difference is significant at the 0.05 level.

Friends Likelihood Mobile Phone Use

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.232*	.064	.010	.03	.43
	12GM	.011	.070	1.000	-.21	.23
	PreC	-.184	.075	.261	-.42	.05
3GM	3C	-.115	.078	.866	-.36	.13
12GM	12C	.015	.083	1.000	-.24	.27
PreS	3S	.315*	.052	.000	.15	.47
	12S	.416*	.056	.000	.24	.59
	PreC	-.065	.076	.995	-.30	.17
3S	3C	-.079	.067	.962	-.29	.13
12S	12C	-.270*	.071	.004	-.49	-.05

*. The mean difference is significant at the 0.05 level.

Friends Likelihood Motorway Speeding

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.142	.065	.403	-.06	.34
	12GM	-.038	.070	1.000	-.26	.18
	PreC	-.321*	.076	.001	-.56	-.09
3GM	3C	-.242	.079	.053	-.49	.00
12GM	12C	-.177	.083	.456	-.44	.08
PreS	3S	.235*	.052	.000	.07	.40
	12S	.220*	.056	.003	.05	.39
	PreC	-.177	.077	.335	-.41	.06
3S	3C	-.190	.067	.110	-.40	.02
12S	12C	-.291*	.071	.001	-.51	-.07

*. The mean difference is significant at the 0.05 level.

Friends Likelihood Rural Speeding

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.137	.063	.423	-.06	.33
	12GM	-.083	.068	.952	-.30	.13
	PreC	-.258*	.074	.014	-.49	-.03
3GM	3C	-.275*	.076	.010	-.51	-.04
12GM	12C	-.201	.081	.238	-.45	.05
PreS	3S	.202*	.050	.002	.05	.36
	12S	.196*	.055	.010	.03	.37
	PreC	-.080	.075	.978	-.31	.15
3S	3C	-.162	.065	.242	-.37	.04
12S	12C	-.303*	.069	.000	-.52	-.09

*. The mean difference is significant at the 0.05 level.

Friends Likelihood No Seatbelt

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.117	.060	.582	-.07	.30
	12GM	-.060	.066	.992	-.26	.14
	PreC	-.225*	.071	.039	-.44	-.01
3GM	3C	-.152	.073	.488	-.38	.07
12GM	12C	.133	.078	.742	-.11	.37
PreS	3S	.201*	.048	.001	.05	.35
	12S	.312*	.052	.000	.15	.47
	PreC	-.121	.072	.756	-.34	.10
3S	3C	-.132	.063	.477	-.33	.06
12S	12C	-.135	.066	.516	-.34	.07

*. The mean difference is significant at the 0.05 level.

Friends Likelihood Speeding Towns

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.088	.062	.889	-.10	.28
	12GM	-.067	.067	.986	-.28	.14
	PreC	-.307*	.072	.001	-.53	-.08
3GM	3C	-.222	.075	.075	-.45	.01
12GM	12C	-.209	.080	.177	-.46	.04
PreS	3S	.181*	.050	.008	.03	.33
	12S	.141	.054	.178	-.03	.31
	PreC	-.152	.073	.491	-.38	.08
3S	3C	-.160	.064	.239	-.36	.04
12S	12C	-.261*	.068	.004	-.47	-.05

*. The mean difference is significant at the 0.05 level.

Family Approval Alcohol

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	-.004	.037	1.000	-.12	.11
	12GM	-.052	.040	.930	-.18	.07
	PreC	-.196*	.043	.000	-.33	-.06
3GM	3C	-.208*	.045	.000	-.35	-.07
12GM	12C	-.073	.047	.836	-.22	.07
PreS	3S	-.024	.029	.997	-.11	.07
	12S	.040	.032	.940	-.06	.14
	PreC	-.104	.043	.288	-.24	.03
3S	3C	-.097	.038	.218	-.21	.02
12S	12C	-.073	.040	.674	-.20	.05

*. The mean difference is significant at the 0.05 level.

Family Approval Drugs

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	-.019	.032	1.000	-.12	.08
	12GM	-.041	.034	.961	-.15	.07
	PreC	-.076	.037	.507	-.19	.04
3GM	3C	-.117	.038	.060	-.24	.00
12GM	12C	-.015	.041	1.000	-.14	.11
PreS	3S	-.040	.025	.810	-.12	.04
	12S	-.027	.027	.986	-.11	.06
	PreC	-.082	.037	.410	-.20	.03
3S	3C	-.102	.033	.051	-.20	.00
12S	12C	-.034	.035	.986	-.14	.07

*. The mean difference is significant at the 0.05 level.

Family Approval Mobile

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.101	.045	.377	-.04	.24
	12GM	.009	.049	1.000	-.14	.16
	PreC	-.179*	.052	.019	-.34	-.02
3GM	3C	-.124	.054	.362	-.29	.05
12GM	12C	.034	.058	1.000	-.15	.21
PreS	3S	.137*	.036	.004	.03	.25
	12S	.245*	.039	.000	.12	.37
	PreC	-.049	.053	.991	-.21	.12
3S	3C	-.030	.047	.999	-.18	.11
12S	12C	-.072	.049	.867	-.22	.08

*. The mean difference is significant at the 0.05 level.

Family Approval Motorway Speeding

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.070	.050	.904	-.09	.23
	12GM	-.012	.055	1.000	-.18	.16
	PreC	-.256*	.059	.000	-.44	-.07
3GM	3C	-.261*	.061	.001	-.45	-.07
12GM	12C	-.114	.065	.705	-.31	.09
PreS	3S	.106	.040	.170	-.02	.23
	12S	.223*	.044	.000	.09	.36
	PreC	-.040	.059	.999	-.22	.14
3S	3C	-.081	.052	.827	-.24	.08
12S	12C	-.133	.055	.271	-.30	.04

*. The mean difference is significant at the 0.05 level.

Family Approval Rural Speeding

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.094	.048	.567	-.05	.24
	12GM	.003	.052	1.000	-.16	.16
	PreC	-.167	.056	.067	-.34	.01
3GM	3C	-.289*	.058	.000	-.47	-.11
12GM	12C	-.144	.061	.316	-.33	.05
PreS	3S	.083	.038	.414	-.03	.20
	12S	.174*	.041	.001	.05	.30
	PreC	.011	.056	1.000	-.16	.19
3S	3C	-.101	.050	.519	-.25	.05
12S	12C	-.136	.052	.182	-.30	.03

*. The mean difference is significant at the 0.05 level.

Family Approval No Seatbelt

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.049	.042	.964	-.08	.18
	12GM	.020	.045	1.000	-.12	.16
	PreC	-.137	.049	.113	-.29	.01
3GM	3C	-.119	.051	.315	-.28	.04
12GM	12C	.005	.054	1.000	-.16	.17
PreS	3S	.083	.033	.249	-.02	.19
	12S	.171*	.036	.000	.06	.28
	PreC	-.080	.049	.794	-.23	.07
3S	3C	-.096	.044	.401	-.23	.04
12S	12C	-.089	.046	.580	-.23	.05

*. The mean difference is significant at the 0.05 level.

Family Approval Town Speeding

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.075	.046	.787	-.07	.22
	12GM	-.050	.050	.986	-.21	.11
	PreC	-.219*	.054	.002	-.39	-.05
3GM	3C	-.275*	.056	.000	-.45	-.10
12GM	12C	-.121	.059	.513	-.31	.06
PreS	3S	.062	.037	.766	-.05	.18
	12S	.126*	.040	.043	.00	.25
	PreC	-.028	.054	1.000	-.20	.14
3S	3C	-.071	.048	.868	-.22	.08
12S	12C	-.107	.050	.460	-.26	.05

*. The mean difference is significant at the 0.05 level.

Friends Approval Alcohol

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.132	.051	.188	-.03	.29
	12GM	-.041	.056	.998	-.21	.13
	PreC	-.409*	.060	.000	-.59	-.22
3GM	3C	-.308*	.062	.000	-.50	-.12
12GM	12C	-.087	.066	.926	-.29	.12
PreS	3S	.167*	.041	.001	.04	.29
	12S	.298*	.044	.000	.16	.43
	PreC	-.190*	.060	.043	-.38	.00
3S	3C	-.124	.053	.312	-.29	.04
12S	12C	-.207*	.056	.006	-.38	-.03

*. The mean difference is significant at the 0.05 level.

Friends Approval Drugs

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.080	.049	.780	-.07	.23
	12GM	-.018	.053	1.000	-.18	.15
	PreC	-.241*	.057	.001	-.42	-.06
3GM	3C	-.146	.059	.252	-.33	.04
12GM	12C	.001	.063	1.000	-.20	.20
PreS	3S	.127*	.039	.033	.01	.25
	12S	.195*	.042	.000	.06	.33
	PreC	-.145	.058	.229	-.32	.03
3S	3C	-.097	.051	.613	-.25	.06
12S	12C	-.117	.054	.421	-.28	.05

*. The mean difference is significant at the 0.05 level.

Friends Approval Mobile Phones

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.260*	.053	.000	.10	.42
	12GM	.033	.058	1.000	-.15	.21
	PreC	-.299*	.062	.000	-.49	-.11
3GM	3C	-.284*	.064	.000	-.48	-.08
12GM	12C	.051	.069	.998	-.16	.26
PreS	3S	.306*	.043	.000	.17	.44
	12S	.406*	.046	.000	.26	.55
	PreC	-.096	.063	.846	-.29	.10
3S	3C	-.126	.055	.353	-.30	.05
12S	12C	-.119	.058	.514	-.30	.06

*. The mean difference is significant at the 0.05 level.

Friends Approval Motorway Speeding

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.197*	.055	.011	.03	.37
	12GM	.006	.061	1.000	-.18	.20
	PreC	-.352*	.065	.000	-.55	-.15
3GM	3C	-.304*	.067	.000	-.51	-.10
12GM	12C	-.104	.072	.881	-.33	.12
PreS	3S	.225*	.044	.000	.09	.36
	12S	.314*	.048	.000	.16	.46
	PreC	-.135	.066	.506	-.34	.07
3S	3C	-.114	.058	.559	-.29	.07
12S	12C	-.194*	.061	.038	-.38	-.01

*. The mean difference is significant at the 0.05 level.

Friends Approval Rural Speeding

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.197*	.054	.009	.03	.36
	12GM	.006	.060	1.000	-.18	.19
	PreC	-.330*	.064	.000	-.53	-.13
3GM	3C	-.316*	.066	.000	-.52	-.11
12GM	12C	-.144	.071	.512	-.36	.07
PreS	3S	.238*	.044	.000	.10	.37
	12S	.298*	.047	.000	.15	.44
	PreC	-.085	.064	.923	-.29	.11
3S	3C	-.113	.057	.551	-.29	.06
12S	12C	-.192*	.060	.036	-.38	-.01

*. The mean difference is significant at the 0.05 level.

Friends Approval Seatbelt

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.182*	.052	.012	.02	.34
	12GM	-.005	.057	1.000	-.18	.17
	PreC	-.260*	.061	.001	-.45	-.07
3GM	3C	-.259*	.063	.001	-.45	-.06
12GM	12C	.082	.067	.952	-.13	.29
PreS	3S	.247*	.041	.000	.12	.38
	12S	.368*	.045	.000	.23	.51
	PreC	-.083	.061	.916	-.27	.11
3S	3C	-.147	.054	.140	-.31	.02
12S	12C	-.113	.057	.547	-.29	.06

*. The mean difference is significant at the 0.05 level.

Friends Approval Town Speeding

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.193*	.053	.009	.03	.36
	12GM	-.021	.059	1.000	-.20	.16
	PreC	-.311*	.063	.000	-.51	-.12
3GM	3C	-.322*	.065	.000	-.52	-.12
12GM	12C	-.119	.070	.742	-.33	.10
PreS	3S	.229*	.043	.000	.10	.36
	12S	.287*	.046	.000	.14	.43
	PreC	-.082	.063	.933	-.28	.11
3S	3C	-.128	.056	.344	-.30	.05
12S	12C	-.198*	.059	.022	-.38	-.02

*. The mean difference is significant at the 0.05 level.

Collision Vulnerability Alcohol

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	-.009	.067	1.000	-.21	.20
	12GM	.073	.072	.985	-.15	.30
	PreC	-.075	.078	.989	-.32	.17
3GM	3C	.050	.081	1.000	-.20	.30
12GM	12C	.061	.086	.999	-.20	.33
PreS	3S	.100	.053	.631	-.07	.26
	12S	.187*	.058	.033	.01	.37
	PreC	-.041	.079	1.000	-.28	.20
3S	3C	-.025	.069	1.000	-.24	.19
12S	12C	-.018	.073	1.000	-.24	.21

*. The mean difference is significant at the 0.05 level.

Collision Vulnerability Drugsl

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.002	.069	1.000	-.21	.22
	12GM	.117	.075	.827	-.12	.35
	PreC	.146	.081	.676	-.10	.40
3GM	3C	.230	.084	.129	-.03	.49
12GM	12C	.202	.089	.360	-.07	.48
PreS	3S	.057	.055	.983	-.11	.23
	12S	.189*	.060	.041	.00	.37
	PreC	.014	.082	1.000	-.24	.27
3S	3C	.043	.072	1.000	-.18	.27
12S	12C	-.003	.075	1.000	-.24	.23

*. The mean difference is significant at the 0.05 level.

Collision Vulnerability Mobile Phone

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.066	.062	.979	-.13	.26
	12GM	.128	.067	.609	-.08	.34
	PreC	-.144	.072	.553	-.37	.08
3GM	3C	-.029	.075	1.000	-.26	.20
12GM	12C	.092	.080	.965	-.15	.34
PreS	3S	.182*	.049	.007	.03	.34
	12S	.340*	.054	.000	.17	.51
	PreC	-.088	.073	.956	-.31	.14
3S	3C	-.090	.064	.896	-.29	.11
12S	12C	-.065	.068	.990	-.27	.15

*. The mean difference is significant at the 0.05 level.

Collision Vulnerability Motorway Speeding

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.154	.066	.323	-.05	.36
	12GM	.094	.072	.928	-.13	.32
	PreC	-.146	.077	.623	-.39	.09
3GM	3C	-.149	.080	.646	-.40	.10
12GM	12C	-.006	.085	1.000	-.27	.26
PreS	3S	.156	.053	.080	-.01	.32
	12S	.256*	.057	.000	.08	.43
	PreC	-.038	.078	1.000	-.28	.20
3S	3C	-.043	.069	1.000	-.26	.17
12S	12C	-.060	.073	.996	-.29	.16

*. The mean difference is significant at the 0.05 level.

Collision Vulnerability Rural Speeding

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.166	.065	.213	-.04	.37
	12GM	.110	.071	.826	-.11	.33
	PreC	-.047	.076	1.000	-.28	.19
3GM	3C	-.128	.079	.794	-.37	.12
12GM	12C	-.055	.084	.999	-.32	.21
PreS	3S	.173*	.052	.025	.01	.34
	12S	.272*	.056	.000	.10	.45
	PreC	.055	.077	.999	-.18	.29
3S	3C	-.034	.068	1.000	-.24	.18
12S	12C	-.115	.071	.803	-.34	.11

*. The mean difference is significant at the 0.05 level.

Collision Vulnerability Town Speeding

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
11	12	.125	.064	.560	-.07	.32
	13	.106	.069	.840	-.11	.32
	31	-.094	.074	.940	-.33	.14
12	32	-.106	.077	.908	-.34	.13
13	33	-.069	.082	.996	-.32	.19
21	22	.094	.051	.654	-.06	.25
	23	.203*	.055	.007	.03	.37
	31	-.005	.075	1.000	-.24	.23
22	32	.016	.066	1.000	-.19	.22
23	33	-.077	.070	.974	-.29	.14

*. The mean difference is significant at the 0.05 level.

Attitudes 35mph in a 30mph

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.222*	.064	.015	.02	.42
	12GM	.175	.070	.239	-.04	.39
	PreC	-.232*	.075	.049	-.46	.00
3GM	3C	-.233	.078	.068	-.47	.01
12GM	12C	-.139	.084	.771	-.40	.12
PreS	3S	.279*	.051	.000	.12	.44
	12S	.315*	.056	.000	.14	.49
	PreC	-.016	.076	1.000	-.25	.22
3S	3C	-.075	.067	.972	-.28	.13
12S	12C	-.063	.071	.994	-.28	.16

*. The mean difference is significant at the 0.05 level.

Attitudes Cannabis is never safe when driving

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.122	.085	.885	-.14	.39
	12GM	.170	.094	.680	-.12	.46
	PreC	.278	.100	.120	-.03	.59
3GM	3C	-.062	.104	1.000	-.39	.26
12GM	12C	-.099	.112	.994	-.45	.25
PreS	3S	.036	.069	1.000	-.18	.25
	12S	.017	.075	1.000	-.21	.25
	PreC	.346*	.101	.018	.03	.66
3S	3C	.092	.090	.984	-.19	.37
12S	12C	.122	.094	.935	-.17	.41

*. The mean difference is significant at the 0.05 level.

Attitudes Can handle a drink or two

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.045	.065	.999	-.16	.25
	12GM	-.222*	.071	.047	-.44	.00
	PreC	-.378*	.076	.000	-.61	-.14
3GM	3C	-.408*	.079	.000	-.65	-.16
12GM	12C	.025	.085	1.000	-.24	.29
PreS	3S	.244*	.052	.000	.08	.41
	12S	.344*	.056	.000	.17	.52
	PreC	-.107	.077	.899	-.35	.13
3S	3C	-.336*	.068	.000	-.55	-.13
12S	12C	-.271*	.072	.005	-.49	-.05

*. The mean difference is significant at the 0.05 level.

Attitudes More likely to crash if drive fast

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	-.035	.061	1.000	-.22	.15
	12GM	.101	.067	.851	-.11	.31
	PreC	.189	.071	.168	-.03	.41
3GM	3C	.140	.074	.620	-.09	.37
12GM	12C	.025	.080	1.000	-.22	.27
PreS	3S	.011	.049	1.000	-.14	.16
	12S	.010	.053	1.000	-.15	.17
	PreC	.179	.072	.242	-.04	.40
3S	3C	.085	.064	.923	-.11	.28
12S	12C	.106	.067	.819	-.10	.31

Attitudes Friends will male fun if drive responsibly

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.118	.056	.473	-.06	.29
	12GM	-.004	.062	1.000	-.20	.19
	PreC	-.180	.066	.145	-.39	.03
3GM	3C	-.260*	.069	.005	-.47	-.05
12GM	12C	-.003	.074	1.000	-.23	.23
PreS	3S	.182*	.045	.002	.04	.32
	12S	.240*	.049	.000	.09	.39
	PreC	-.100	.067	.864	-.31	.11
3S	3C	-.244*	.059	.001	-.43	-.06
12S	12C	-.167	.062	.157	-.36	.03

*. The mean difference is significant at the 0.05 level.

Attitudes Will sometimes use mobile at wheel

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.117	.062	.627	-.08	.31
	12GM	-.017	.068	1.000	-.23	.20
	PreC	-.205	.073	.110	-.43	.02
3GM	3C	-.162	.076	.446	-.40	.07
12GM	12C	.140	.081	.729	-.11	.39
PreS	3S	.322*	.050	.000	.17	.48
	12S	.473*	.054	.000	.30	.64
	PreC	-.028	.073	1.000	-.26	.20
3S	3C	-.191	.065	.083	-.39	.01
12S	12C	-.172	.069	.228	-.39	.04

*. The mean difference is significant at the 0.05 level.

Attitudes No choice but to take lift

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.093	.048	.586	-.06	.24
	12GM	-.053	.053	.986	-.22	.11
	PreC	-.180*	.056	.038	-.35	-.01
3GM	3C	-.218*	.059	.006	-.40	-.04
12GM	12C	-.062	.063	.987	-.26	.13
PreS	3S	.102	.039	.174	-.02	.22
	12S	.073	.042	.719	-.06	.20
	PreC	-.131	.057	.339	-.31	.05
3S	3C	-.179*	.051	.012	-.34	-.02
12S	12C	-.140	.053	.178	-.31	.03

*. The mean difference is significant at the 0.05 level.

Attitudes Challenge as a passenger

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.026	.068	1.000	-.19	.24
	12GM	-.018	.076	1.000	-.25	.22
	PreC	-.032	.081	1.000	-.28	.22
3GM	3C	-.203	.084	.269	-.46	.06
12GM	12C	-.161	.090	.692	-.44	.12
PreS	3S	-.002	.055	1.000	-.17	.17
	12S	-.085	.060	.891	-.27	.10
	PreC	.126	.082	.834	-.13	.38
3S	3C	-.016	.072	1.000	-.24	.21
12S	12C	.065	.076	.995	-.17	.30

*. The mean difference is significant at the 0.05 level.

Attitudes Aware of passenger responsibilities

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.161	.059	.137	-.02	.34
	12GM	.082	.065	.943	-.12	.28
	PreC	.275*	.069	.002	.06	.49
3GM	3C	.082	.072	.970	-.14	.31
12GM	12C	.112	.077	.878	-.13	.35
PreS	3S	.058	.048	.951	-.09	.21
	12S	.036	.052	.999	-.12	.20
	PreC	.251*	.070	.011	.03	.47
3S	3C	.160	.062	.199	-.03	.35
12S	12C	.134	.066	.515	-.07	.34

*. The mean difference is significant at the 0.05 level.

Attitudes Sometimes don't wear seatbelt

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.356*	.082	.001	.10	.61
	12GM	.166	.088	.625	-.11	.44
	PreC	.096	.092	.982	-.19	.38
3GM	3C	-.204	.084	.270	-.47	.06
12GM	12C	.205	.090	.359	-.07	.48
PreS	3S	.217*	.055	.003	.05	.39
	12S	.387*	.060	.000	.20	.57
	PreC	-.048	.081	1.000	-.30	.20
3S	3C	-.209	.072	.092	-.43	.02
12S	12C	-.160	.076	.475	-.40	.08

*. The mean difference is significant at the 0.05 level.

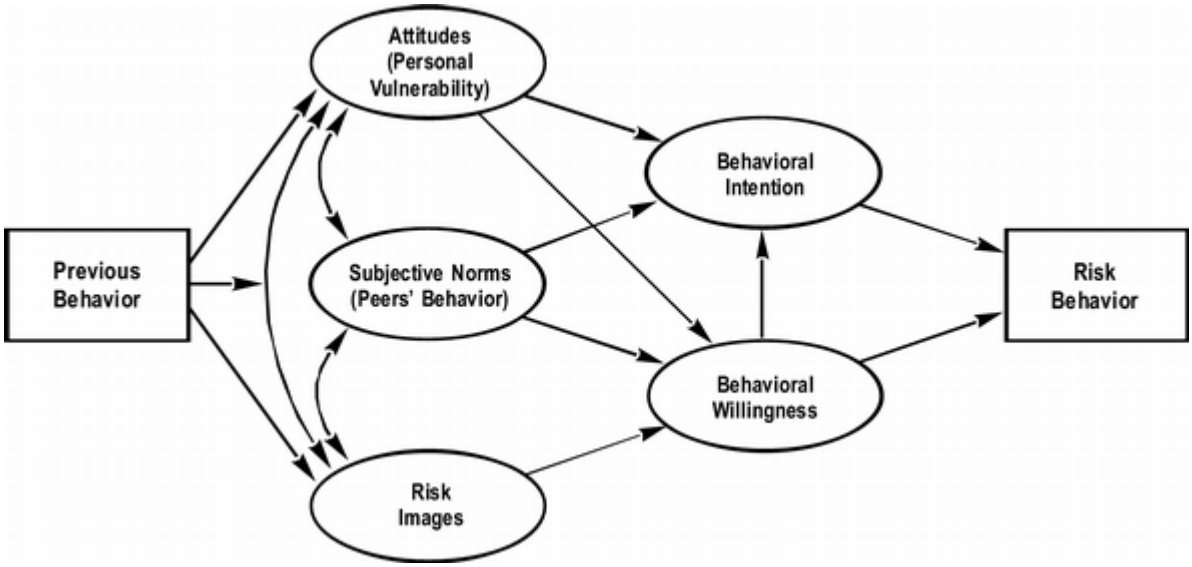
Attitudes Driving tired isn't high risk

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PreGM	3GM	.120	.061	.557	-.07	.31
	12GM	.045	.067	.999	-.16	.25
	PreC	-.094	.071	.926	-.32	.13
3GM	3C	-.156	.074	.475	-.39	.07
12GM	12C	-.015	.080	1.000	-.26	.23
PreS	3S	.169*	.049	.016	.02	.32
	12S	.139	.053	.178	-.03	.30
	PreC	-.053	.072	.998	-.28	.17
3S	3C	-.164	.064	.201	-.36	.03
12S	12C	-.068	.068	.985	-.28	.14

*. The mean difference is significant at the 0.05 level.

Appendix B – Prototype Willingness Model

Many road safety interventions are founded on the Theory of Planned Behaviour, which works as a model to explain behaviour as the result of a decision-making process, founded on attitudes. It suggests that risk behaviour is intentional and premeditated. There is evidence that the relationship between intentions and behaviour is weaker amongst younger subjects. "For example, Beck and Ajzen (1991) suggested that few young children intend to engage in some risk behaviours (e.g. use illicit drugs), and thus, the low variance in intention restricts the usefulness of the intention construct as a predictor of future behaviours."[9] Given the findings of previous evaluations in Thames Valley, where SDSA respondents had positive intentions towards risky driving behaviours, both before and after the intervention, it would seem that using intentions alone to measure effectiveness of SDSA might not reflect actual subsequent behaviour.



Source: Gerrard et al, *A dual-process approach to health risk decision making: The prototype willingness model* (Developmental Review 28 (2008) 29-61)

The prototype willingness model (PWM) is a dual-processing model which is based on an assumption that there are two types of decision making involved in health behaviour: a reasoned path (similar to that described in the Theory of Planned Behaviour) "which involves more analytic processing; and a social reaction path that is image-based and involves more heuristic processing. The social reaction path was hypothesised in an attempt to explain adolescents' unintended behaviour, specifically their unplanned decisions to start, continue, or stop behaviours that can put their health at risk. It incorporates two new constructs: *risk prototypes*, which are images of people who engage in risky behaviours (e.g. the typical smoker), and *behavioural willingness* – an openness to engaging in risky behaviour."[10]

The first basic assumption is that adolescent risk behaviour is usually undertaken willingly but that it is often not planned or intended. It is often the case that when they are asked, as in Thames Valley's SDSA evaluation 2013, if they intend to engage in risky behaviour in the

[9]Gerrard et al, *A dual-process approach to health risk decision making: The prototype willingness model*, (Developmental Review 28 (2008) 29-61) p.34

[10] *ibid.,* p. 35

future, most will say no, even if they have engaged in that behaviour in the past. "This discrepancy between intentions and behaviour is not a misrepresentation or lack of awareness of their intentions. Instead, it is a reflection of the nature of their risk behaviour and the decision making involved: rather than being premeditated or reasoned, much of it is a reaction to common risk-conducive situations."[11] It suggests that adolescents find themselves in situations which facilitate, although do not demand, risky behaviours. Once in these situations, it is frequently not a reasoned decision making process which determines their behaviour, but it is instead based on their willingness to undertake the behaviour.

"The second major assumption of the model is that children and adolescents have clear cognitive representations or social images (prototypes) of the *type* of person their age who engages in specific risk behaviours, e.g. the "typical" smoker or drinker their age. Although some of these images have a visual component, they are primarily characterological, e.g. the type of person your age who smokes cigarettes… Adolescents realise that if they engage in the behaviours in public or with friends, they will acquire aspects of the image themselves – they would be seen by others as being a drinker, or a smoker, or a drug user. These images are related to adolescents' willingness to engage in risk behaviours, and their subsequent behaviour, i.e. the more favourable their image, the more willing they are to accept the social consequences associated with the behaviour, including being seen by others as someone who engages in the behaviour."[12]

Within the diagram of the model shown at the beginning of this appendix, 'Attitudes (personal vulnerability)' are also shown to affect willingness. It is the perceived risk – the perception of the extent to which the person is vulnerable to the various risks associated with the behaviour. "In the prototype model, this construct is a *conditional* perception of vulnerability, measured in the subjunctive, e.g. "If you were to drink and drive what are the chances that *you* would have an accident?", rather than an absolute assessment, e.g. "How dangerous is it to drink and drive?" The less conditional vulnerability an adolescent feels, the more willing s/he will be to engage in the risk behaviour."[13]However, this relationship doesn't appear to be based on a lack of information – instead, high willingness adolescents are likely to be optimistic about their ability to get away with risky behaviours compared to others and are also more likely to process risk information in a superficial manner by focusing on the gains and not the possible losses. "The more willing a young person is to engage in risk behaviours, the less likely s/he is to think about the consequences associated with that behaviour."[14]

Elsewhere in the model, subjective norms or perceptions of what others are doing are associated with both greater intention and greater willingness, in the same way that positive attitudes towards a risk behaviour are associated with more intention and willingness to engage in the behaviour. Analysis indicated that "social influence factors (e.g. friends' use) were significantly stronger predictors of willingness than intention, reflecting their position in the social reaction path. Conversely, parenting style (e.g. communication with one's children about substances) and, interestingly, parental use, were both antecedent to intention, but not willingness."[15]

Given the evidence that suggests a combination of factors affect the likelihood of adolescents to engage in certain risk behaviours, the Prototype Willingness Model has been used to create questions for the SDSA evaluation. It incorporates questions on willingness, intentions,

[11] *ibid*., p. 36
[12] *ibid*., p. 37
[13] *ibid*., p.39
[14] *ibid*., p. 39
[15] *ibid*., p. 44

attitudes, subjective norms and behaviour to see if SDSA has any effect on any of these elements of the model. As stated before, intentions are often positive in young people but willingness, vulnerability, social norms and attitude could be better indicators of likelihood to engage in risky behaviour.

Appendix C – Questionnaire

Pre-Questionnaire

We need your help! We are interested in finding out your thoughts on various driving and passenger behaviours so please take a few minutes to answer the questions in this survey.

We will not find out who you are or share your answers with anyone else so please answer all the questions on your own and as honestly as possible.

Please answer these questions regardless of whether or not you have a full driving licence. For some of these questions, we are interested in your thoughts on how you would drive if you did have a licence. Please read each question carefully and if you don't understand any of them, please ask your tutor.

1 Suppose you were with a group of people your age and you could drive how you liked. How willing would YOU be to do the following things? Please select the most appropriate response for each statement

	Very Willing	Quite Willing	Not Sure	Not Very Willing	Not at all Willing
Drink alcohol before driving	☐	☐	☐	☐	☐
Use your mobile to make calls or message while driving	☐	☐	☐	☐	☐
Take drugs and drive	☐	☐	☐	☐	☐
Not wear your seatbelt	☐	☐	☐	☐	☐
Exceed the speed limit in towns	☐	☐	☐	☐	☐
Exceed the speed limit on motorways	☐	☐	☐	☐	☐
Exceed the speed limit on rural roads	☐	☐	☐	☐	☐

2 How likely are YOUR PARENTS to do the following while driving? Please select the most appropriate response for each statement

	Extremely Unlikely	Unlikely	Not Sure	Likely	Extremely Likely
Drink alcohol before driving	☐	☐	☐	☐	☐
Use their mobile to make calls or message while driving	☐	☐	☐	☐	☐
Take drugs and drive	☐	☐	☐	☐	☐
Not wear their seatbelt	☐	☐	☐	☐	☐
Exceed the speed limit in towns	☐	☐	☐	☐	☐
Exceed the speed limit on motorways	☐	☐	☐	☐	☐
Exceed the speed limit on rural roads	☐	☐	☐	☐	☐

3 How likely are YOUR FRIENDS to do the following while driving? Please select the most appropriate response for each statement

	Extremely Unlikely	Unlikely	Not Sure	Likely	Extremely Likely
Drink alcohol before driving	☐	☐	☐	☐	☐
Use their mobile to make calls or message while driving	☐	☐	☐	☐	☐
Take drugs and drive	☐	☐	☐	☐	☐
Not wear their seatbelt	☐	☐	☐	☐	☐
Exceed the speed limit in towns	☐	☐	☐	☐	☐
Exceed the speed limit on motorways	☐	☐	☐	☐	☐
Exceed the speed limit on rural roads	☐	☐	☐	☐	☐

4 If you were to do the following things while driving, what are the chances that YOU would have a collision? Please select the most appropriate response for each statement

	Extremely Unlikely	Unlikely	Not Sure	Likely	Extremely Likely
Drink alcohol before driving	☐	☐	☐	☐	☐
Use your mobile to make calls or message while driving	☐	☐	☐	☐	☐
Take drugs and drive	☐	☐	☐	☐	☐
Exceed the speed limit in towns	☐	☐	☐	☐	☐
Exceed the speed limit on motorways	☐	☐	☐	☐	☐
Exceed the speed limit on rural roads	☐	☐	☐	☐	☐

5 What would YOUR FAMILY think if YOU did the following while driving? Please select the most appropriate response for each statement

	Strongly Approve	Approve	Not Sure	Disapprove	Strongly Disapprove
Drink alcohol before driving	☐	☐	☐	☐	☐
Use your mobile to make calls or message while driving	☐	☐	☐	☐	☐
Take drugs and drive	☐	☐	☐	☐	☐
Not wear your seatbelt	☐	☐	☐	☐	☐
Exceed the speed limit in towns	☐	☐	☐	☐	☐
Exceed the speed limit on motorways	☐	☐	☐	☐	☐
Exceed the speed limit on rural roads	☐	☐	☐	☐	☐

6 What would YOUR FRIENDS think if YOU did the following while driving? Please select the most appropriate response for each statement

	Strongly Approve	Approve	Not Sure	Disapprove	Strongly Disapprove
Drink alcohol before driving	☐	☐	☐	☐	☐
Use your mobile to make calls or message while driving	☐	☐	☐	☐	☐
Take drugs and drive	☐	☐	☐	☐	☐
Not wear your seatbelt	☐	☐	☐	☐	☐
Exceed the speed limit in towns	☐	☐	☐	☐	☐
Exceed the speed limit on motorways	☐	☐	☐	☐	☐
Exceed the speed limit on rural roads	☐	☐	☐	☐	☐

7 How much do you agree with the following? Please select the most appropriate response for each statement

	Strongly Agree	Tend to Agree	Neither Agree or Disagree	Tend to Disagree	Strongly Disagree
If I am driving, I can handle a drink or two and still be safe	☐	☐	☐	☐	☐
As a driver, I will sometimes use my mobile phone at the wheel	☐	☐	☐	☐	☐
It is never safe to use cannabis and drive	☐	☐	☐	☐	☐
I sometimes don't wear a seatbelt for short journeys	☐	☐	☐	☐	☐
I understand that I have a responsibility to behave safely as a passenger	☐	☐	☐	☐	☐
I think 35mph in a 30mph limit is normally quite safe	☐	☐	☐	☐	☐
Driving whilst tired isn't very high risk	☐	☐	☐	☐	☐
If I was offered a lift by someone who I knew had taken drugs or had been drinking, I would accept as I would feel I have no choice	☐	☐	☐	☐	☐
I'm more likely to crash if I drive fast	☐	☐	☐	☐	☐
As a passenger, I could challenge someone who was driving a car irresponsibly	☐	☐	☐	☐	☐
If I drove sensibly, my friends would make fun of me	☐	☐	☐	☐	☐

8 About You

Do you plan to learn to drive?

I have already passed my test ☐ Yes, I am currently learning ☐ Yes, in the next 12 months ☐ Yes, In the next 5 years ☐ Maybe at some point, but not yet ☐ No, Never ☐

I am: Female ☐ Male ☐

Date of birth: ☐☐ ☐☐ ☐☐☐☐

Home Postcode ☐☐☐☐☐☐☐☐

Please check that you have answered all the questions before returning this survey to your tutor. Thank you!

Post-Questionnaire

We need your help! We are interested in finding out your thoughts on various driving and passenger behaviours so please take a few minutes to answer the questions in this survey.

We will not find out who you are or share your answers with anyone else so please answer all the questions on your own and as honestly as possible.

Please answer these questions regardless of whether or not you have a full driving licence. For some of these questions, we are interested in your thoughts on how you would drive if you did have a licence. Please read each question carefully and if you don't understand any of them, please ask your tutor.

1 Suppose you were with a group of people your age and you could drive how you liked. How willing would YOU be to do the following things? Please select the most appropriate response for each statement

	Very Willing	Quite Willing	Not Sure	Not Very Willing	Not at all Willing
Drink alcohol before driving	☐	☐	☐	☐	☐
Use your mobile to make calls or message while driving	☐	☐	☐	☐	☐
Take drugs and drive	☐	☐	☐	☐	☐
Not wear your seatbelt	☐	☐	☐	☐	☐
Exceed the speed limit in towns	☐	☐	☐	☐	☐
Exceed the speed limit on motorways	☐	☐	☐	☐	☐
Exceed the speed limit on rural roads	☐	☐	☐	☐	☐

2 How likely are YOUR PARENTS to do the following while driving? Please select the most appropriate response for each statement

	Extremely Unlikely	Unlikely	Not Sure	Likely	Extremely Likely
Drink alcohol before driving	☐	☐	☐	☐	☐
Use their mobile to make calls or message while driving	☐	☐	☐	☐	☐
Take drugs and drive	☐	☐	☐	☐	☐
Not wear their seatbelt	☐	☐	☐	☐	☐
Exceed the speed limit in towns	☐	☐	☐	☐	☐
Exceed the speed limit on motorways	☐	☐	☐	☐	☐
Exceed the speed limit on rural roads	☐	☐	☐	☐	☐

3 How likely are YOUR FRIENDS to do the following while driving? Please select the most appropriate response for each statement

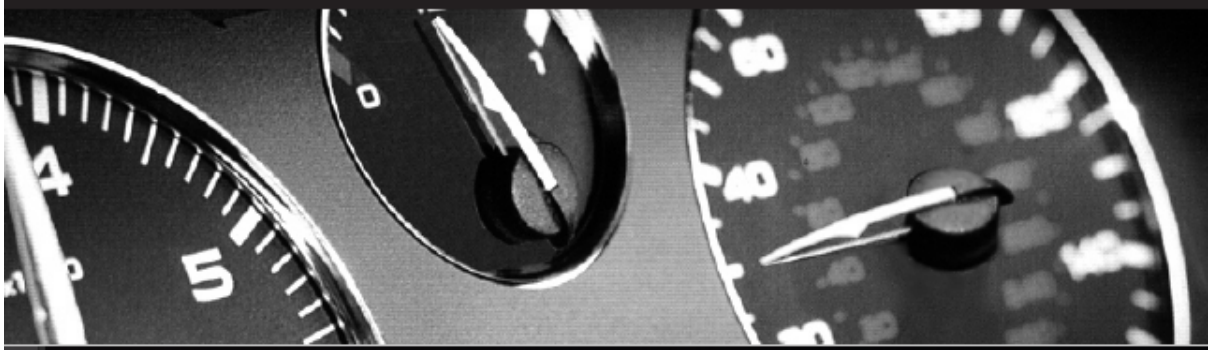
	Extremely Unlikely	Unlikely	Not Sure	Likely	Extremely Likely
Drink alcohol before driving	☐	☐	☐	☐	☐
Use their mobile to make calls or message while driving	☐	☐	☐	☐	☐
Take drugs and drive	☐	☐	☐	☐	☐
Not wear their seatbelt	☐	☐	☐	☐	☐
Exceed the speed limit in towns	☐	☐	☐	☐	☐
Exceed the speed limit on motorways	☐	☐	☐	☐	☐
Exceed the speed limit on rural roads	☐	☐	☐	☐	☐

4 If you were to do the following things while driving, what are the chances that YOU would have a collision? Please select the most appropriate response for each statement

	Extremely Unlikely	Unlikely	Not Sure	Likely	Extremely Likely
Drink alcohol before driving	☐	☐	☐	☐	☐
Use your mobile to make calls or message while driving	☐	☐	☐	☐	☐
Take drugs and drive	☐	☐	☐	☐	☐
Exceed the speed limit in towns	☐	☐	☐	☐	☐
Exceed the speed limit on motorways	☐	☐	☐	☐	☐
Exceed the speed limit on rural roads	☐	☐	☐	☐	☐

5 What would YOUR FAMILY think if YOU did the following while driving? Please select the most appropriate response for each statement

	Strongly Approve	Approve	Not Sure	Disapprove	Strongly Disapprove
Drink alcohol before driving	☐	☐	☐	☐	☐
Use your mobile to make calls or message while driving	☐	☐	☐	☐	☐
Take drugs and drive	☐	☐	☐	☐	☐
Not wear your seatbelt	☐	☐	☐	☐	☐
Exceed the speed limit in towns	☐	☐	☐	☐	☐
Exceed the speed limit on motorways	☐	☐	☐	☐	☐
Exceed the speed limit on rural roads	☐	☐	☐	☐	☐



6 What would YOUR FRIENDS think if YOU did the following while driving? Please select the most appropriate response for each statement

	Strongly Approve	Approve	Not Sure	Disapprove	Strongly Disapprove
Drink alcohol before driving	☐	☐	☐	☐	☐
Use your mobile to make calls or message while driving	☐	☐	☐	☐	☐
Take drugs and drive	☐	☐	☐	☐	☐
Not wear your seatbelt	☐	☐	☐	☐	☐
Exceed the speed limit in towns	☐	☐	☐	☐	☐
Exceed the speed limit on motorways	☐	☐	☐	☐	☐
Exceed the speed limit on rural roads	☐	☐	☐	☐	☐

7 How much do you agree with the following? Please select the most appropriate response for each statement

	Strongly Agree	Tend to Agree	Neither Agree or Disagree	Tend to Disagree	Strongly Disagree
If I am driving, I can handle a drink or two and still be safe	☐	☐	☐	☐	☐
As a driver, I will sometimes use my mobile phone at the wheel	☐	☐	☐	☐	☐
It is never safe to use cannabis and drive	☐	☐	☐	☐	☐
I sometimes don't wear a seatbelt for short journeys	☐	☐	☐	☐	☐
I understand that I have a responsibility to behave safely as a passenger	☐	☐	☐	☐	☐
I think 35mph in a 30mph limit is normally quite safe	☐	☐	☐	☐	☐
Driving whilst tired isn't very high risk	☐	☐	☐	☐	☐
If I was offered a lift by someone who I knew had taken drugs or had been drinking, I would accept as I would feel I have no choice	☐	☐	☐	☐	☐
I'm more likely to crash if I drive fast	☐	☐	☐	☐	☐
As a passenger, I could challenge someone who was driving a car irresponsibly	☐	☐	☐	☐	☐
If I drove sensibly, my friends would make fun of me	☐	☐	☐	☐	☐

8 About You

Do you plan to learn to drive?

I have already passed my test ☐ Yes, I am currently learning ☐ Yes, in the next 12 months ☐ Yes, In the next 5 years ☐ Maybe at some point, but not yet ☐ No, Never ☐

I am:

Female ☐ Male ☐

Date of birth: ☐☐ ☐☐ ☐☐☐☐

Home Postcode ☐☐☐☐☐☐☐☐

9 As you recently attended the Safe Drive Stay Alive production, we have a few questions to ask you about the event. Please select the most appropriate response to the following statements:

	Strongly Agree	Tend to Agree	Neither Agree or Disagree	Tend to Disagree	Strongly Disagree
I feel that I have benefitted from attending a Safe Drive Stay Alive performance	☐	☐	☐	☐	☐
I am now more aware of my responsibilities as a driver/future driver	☐	☐	☐	☐	☐
A theatre style venue, away from school or college, provides the best environment to 'experience' a Safe Drive Stay Alive performance	☐	☐	☐	☐	☐

10 From the performance of Safe Drive Stay Alive that I attended, the thing that has affected my behaviour in a car the most was: (Please choose 1 option)

The films ☐ The emergency service speakers ☐ The family speakers ☐ None in particular ☐

11 I received a copy of the Young Driver's Guide

Yes ☐ No ☐ ***If no, go to Question 15***

12 How often have you and your parents looked at the Young Driver's Guide since you received it?

	Very Often	Quite Often	Occasionally	Hardly at all	Not at all
Since I received it, I have looked at the guide….	☐	☐	☐	☐	☐
My parents have looked at the guide….	☐	☐	☐	☐	☐

13 I still have my copy of the Young Driver's Guide

Yes ☐ No ☐

14 How much do you agree with the following statements?

	Strongly Agree	Tend to Agree	Neither Agree or Disagree	Tend to Disagree	Strongly Disagree
The guide has been useful to me	☐	☐	☐	☐	☐
My parents found the guide useful	☐	☐	☐	☐	☐

15 I would like to add the following comment/suggestion for the Safe Drive Stay Alive Team.

16 Have you done any work in school/college as a follow up to Safe Drive Stay Alive?

Yes ☐ No ☐ ***If so, what did you do?***

Please check that you have answered all the questions before returning this survey to your tutor. Thank you!