

DEVELOPMENT AND EVALUATION OF A YOUNG DRIVER TRAINING PROGRAM

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EVALUATION OF A YOUNG DRIVER TRAINING PROGRAM

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Abstract:

One risk factor that appears to be unique to young drivers is the carrying of passengers. A number of studies have shown that young drivers were more likely to crash when passengers were present. The present project aims to train communication skills between young drivers and their passengers. The training program involved a two-hour facilitated discussion workshop, which aimed to fill some of the gaps in traditional driver education. In this pilot study, we have restricted our sample to only young male drivers, because they represent the highest risk group. To evaluate the effects of training, we compared the group of trained drivers, with a group of untrained drivers on various measures, including simulator driving behaviour, in-vehicle communication, and questionnaires. Thirty-one pairs of friends (one driver and one passenger) were tested in the Advanced Driving Simulator at Monash University. All participants were male, aged 18 to 21, and held probationary drivers licences. When tested in the driving simulator, trained participants adopted a longer headway to the lead vehicle than did untrained participants. Furthermore, when presented with an emergency vehicle turning across at an intersection (i.e., an unexpected hazard), trained participants approached this intersection at a slower speed than did untrained participants. These improvements in safe driving behaviour were accompanied by improved communication between drivers and passengers. In particular, trained passengers made more safe comments, and fewer unsafe comments, than did the untrained passengers. Trained and untrained participants also differed on their self-report of driving behaviour. Specifically, we found that a greater proportion of trained participants showed improvements (i.e., a reduction) in the frequency of mistakes and violations. Overall, the evaluation of the pilot program was promising, and confirms the conjecture that young passengers can be trained to become a more positive influence in the vehicle.

Key Words:

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Preface

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1. INTRODUCTION

It is well-known that young drivers are generally over-represented in road crash statistics (Williams, 2003). This elevated risk has been reported in many countries. For example, in European countries and in Australia, the rate of car crash fatalities in people aged 18 to 24 is about twice that of the general population (Australian Transport Safety Bureau, 2004). In the U.S., an 18-year-old is four times as likely to suffer a fatal crash compared to a person aged 45 to 64 (Mayhew & Simpson, 2002). Road crash is the major cause of death for people aged 15 to 24 in OECD countries (Organisation for Economic Co-operation and Development, 2006), including in Australia (Australian Institute for Health and Welfare, 2006). The development of effective strategies to address this problem will depend partly on the identification of risk factors that are specific to young drivers.

One of the most important risk factors for young drivers is the presence of passengers. This factor is well-recognised by road and traffic authorities. Many countries (including the U.S., New Zealand, and Australia) have introduced legal restrictions on the number and age of passengers that a young driver is allowed to carry. In the state of Victoria, for example, drivers who are within one year of having obtained their probationary licence will be allowed to carry at most one passenger aged 16 to 21 years. Legal restrictions on passenger carriage have made some improvements in safety for young drivers (see Williams, Ferguson, & McCartt, 2007, for a review).

The focus of the present study is on the effects of carrying passengers for young drivers. Before we discuss this topic in greater detail, we first describe two other risk factors that are relevant to young driver safety: hazard perception abilities, and risk attitudes.

1.1. HAZARD PERCEPTION ABILITIES

Why might young drivers be over-represented in crashes? One possibility is that because of their relative inexperience, young drivers lack the skills that older drivers have acquired, for example, in the handling of dangerous traffic situations. Consistent with this possibility, the risk of a crash for young drivers is particularly high during the first few months of obtaining their licence (Cooper, Pinili, & Chen, 1995; Mayhew, Simpson, & Pak, 2003; McCartt, Shabanova, & Leaf, 2003). This suggests that after a few months of independent driving experience, young drivers rapidly learn a set of key skills that substantially reduce their crash risk.

One key skill is hazard perception. Horswill and McKenna (2004) have argued that “of all the different components of driving skill, only hazard perception has been found to relate to accident involvement across a number of studies” (p.155). According to Underwood (2007), novice drivers learn to use, through experience, appropriate visual scanning strategies that allow them to detect and respond to potential hazards. This argument is supported by several empirical studies (e.g., Chapman & Underwood, 1998; Crundall & Underwood, 1998; Pradhan, Hammel, DeRamus, Pollatsek, Noyce, & Fisher, 2005), which have contributed to the development of training programs that seek to improve scanning behaviours in novice drivers (Chapman, Underwood, & Roberts, 2002; Pollatsek, Fisher, & Pradhan, 2006).

1.2. RISK ATTITUDES

In accident research, there is a consensus that young drivers engage in unsafe driving practices more often than do older drivers. For example, young drivers (in particular, young

male drivers) speed more often, are involved in more rear end collisions, adopt shorter headways, have a higher approach speed to traffic signals, have a shorter gap acceptance, and underestimate stopping distances (Boyce & Geller, 2002; Matthews & Moran, 1986; Porter & Whitton, 2002).

Harré (2000) pointed out that some unsafe practices by young drivers are probably not due to their relative inexperience, but instead to their risk attitudes. She proposed a useful typology that describes the various mechanisms by which young and older drivers may differ in risk attitudes (see also, Deery, 1999). In particular, young drivers may: (1) underestimate the danger of particular driving scenarios, (2) be overconfident in their driving abilities, and (3) actually enjoy risky activities.

Underestimation of danger. In one study, male and female drivers of different age groups were presented with a number of traffic scenes on slides (Tränkle, Gelau, & Metker, 1990). For each slide, the drivers were asked to rate the likelihood of an accident. Young male drivers (aged 18 to 21) gave lower ratings of accident likelihood than did young female drivers and middle aged drivers (aged 35 to 45). These findings are consistent with those from other studies (e.g., Brown & Groeger, 1988; Dejoy, 1992; Yagil, 1998), which suggest that young male drivers, compared to all other drivers, tend to view the road environment as less dangerous.

Overconfidence in ability. While young male drivers underestimate the dangers of driving, they remain relatively confident in their driving abilities. In a study by Matthews and Moran (1986), two groups of male drivers were compared: young drivers (aged 18 to 25), and older drivers (aged 35 to 50). Drivers were asked to make ratings on a series of questions relating to the probability of a traffic crash, and to driving performance. These questions were made for themselves, for their peer group, and for the other age group. Young drivers estimated that the chance of a crash occurring to them was much lower than for other young drivers, but was about the same as the chance for older drivers. Young drivers also viewed themselves as having the skills and abilities of older drivers. These ratings, however, are inconsistent with the bulk of research showing that the skills and abilities of young drivers are, in reality, inferior to those of older drivers. Thus, there is a mismatch in young drivers between their abilities and their perception of those abilities (see also, Finn & Bragg, 1986).

Enjoyment of risk taking. Finally, young males are also more likely to enjoy risky activities. In the personality literature, this trait is known as *sensation seeking* (Zuckerman, 2007). Many studies have shown that people who exhibit sensation seeking tendencies also engage in dangerous driving behaviour (see Jonah, 1997, for a review). Because late adolescents have the highest scores on sensation seeking, and males have higher scores than females, it is plausible that sensation seeking is partly responsible for the risky driving behaviours of young male drivers.

1.3. CARRYING PASSENGERS: NEGATIVE EFFECTS

According to Williams (2003), one risk factor that appears to be unique to young drivers is the carrying of passengers. A number of studies have shown that young drivers were more likely to crash when passengers were present (e.g., Doherty, Andrey, & MacGregor, 1998; Geyer & Ragland, 2005; Preusser, Ferguson, & Williams, 2003). One of the most-cited studies on this topic (Chen, Baker, Braver & Li., 2000) found that in the U.S., the incidence of fatal car crashes by young drivers (16 to 17 year-olds) increased as the number of passengers increased. However, the opposite effect was found for older drivers (30 to 59-year-olds), for

whom passengers had a protective effect. The researchers also found that young male passengers, in particular, posed the highest risk.

In the epidemiological studies cited above, relative risk estimates were calculated by examining crashed drivers only (i.e., comparing crashed drivers who had carried passengers against crashed drivers who had not carried passengers). Thus, those estimates do not address the question of whether carrying passengers actually increases the risk of a crash in a typical driver of the general population. This question was addressed in an Australian case-control study (Lam, Norton, Woodward, Connor, & Ameratunga, 2003), where rates of carrying passengers in crashed drivers were compared with those in a random sample of control drivers. For drivers under 25 years, carrying passengers (especially two or more passengers) was associated with an increased risk of crash, while no such association was observed for drivers who were 25 years and older.

There are many reasons why passengers can have a negative influence on young drivers. Williams et al., (2007) noted two of the most likely reasons: (1) that passengers are a source of distraction for drivers, and (2) that passengers can actively encourage risk taking behaviour.

Distraction. Many researchers have pointed out that passengers can have a distracting effect on drivers (Aldridge, Himmler, Aultman-Hall, & Stamatiadis, 1999; Baxter, Manstead, Stradling, Campbell, Reason, & Parker, 1990; Dillon & Dunn, 2005; Engstrom, Gregersen, Granstrom, & Nyberg, 2008; Geyer & Ragland, 2005; Lam et al., 2003; McEvoy, Stevenson, & Woodward, 2007; Preusser et al., 1998). Such distractions would have a more detrimental effect on younger drivers than on experienced drivers. Potential distractions could arise in many forms. For example, they may be visual (when drivers take their eyes off the road to look at passengers), auditory (when passengers adjust the radio), or cognitive (when drivers and passengers take part in an engaging conversation). The distracting effects of passengers are also acknowledged by teenagers themselves. In a survey of over 5,600 American teenagers, 65% of the respondents noted that it is unsafe when “the driver pays attention to the passengers because they are acting wild” (Ginsburg, Winston, Senserrick, Garcia-Espana, Kinsman, Quistberg et al., 2008).

Risk taking. In addition to being a potential distraction to drivers, passengers may also actively encourage risky behaviours such as speeding and tailgating. In a study by Simons-Morton, Lerner and Singer (2005), data were collected on vehicles that were leaving high school parking lots. Observers were positioned near the exit so that the number, gender, and approximate age of the vehicle occupants could be easily determined. The speeds and headways of these vehicles were recorded at nearby locations. The behaviour of the young (high school) drivers was then compared with the behaviour of other drivers in the surrounding traffic. In general, the young drivers drove faster and allowed shorter headways than drivers in general traffic (see also, Arnett, Offer, & Fine, 1997). For both male and female drivers, male passengers (relative to no passengers) were associated with shorter headways and faster speeds. This study offers clear evidence that the presence of young male passengers increases risky driving behaviours. It remains unclear whether the effect of passengers is intentional (e.g., the passenger urges the driver to drive faster) or unintentional (e.g., the driver feels that such behaviour is socially desirable).

1.4. CARRYING PASSENGERS: POSITIVE EFFECTS

The presence of certain types of passengers may actually decrease crash risk (Engstrom et al., 2008; Geyer & Ragland, 2005; Vollrath, Meilinger, & Kruger, 2002). In particular, older

passengers and female passengers tend to have a positive influence on driving behaviour. In one study, Rice, Peek-Asa, and Kraus (2003) compared the passengers in crashes where young drivers were culpable (as determined by police), with crashes in which young drivers were not culpable. The researchers examined the association between the presence of passengers and culpable crashes, where the age and gender of the passengers were accounted for. The presence of male teenage passengers increased crash risk, whereas the female teenage passengers slightly decreased crash risk. Moreover, the presence of young adult passengers (aged 20 to 29) increased crash risk slightly, but the presence of mature adults (aged 30 and over) greatly reduced crash risk. The researchers concluded that driving under adult supervision (while fairly uncommon) is markedly safer than driving alone or with teenage passengers. They advised that supervision by mature adults may reduce crash rates in young drivers (see also, Bingham, Shope, & Raghunathan, 2006).

Part of the motivation for the present study is the finding that some passengers can have a positive (i.e., protective) effect on drivers. In particular, an earlier report by Mitsopoulos, Regan, Anderson, Salmon, and Edquist (2005) identified the following three tasks in which passengers can act as an resource, rather than a risk factor, to the driver: (1) ensuring that the driver is fit to drive (e.g., is not drunk); (2) ensuring that the driver drives safely (e.g., avoid speeding); and (3) ensuring that hazards are detected and responded to appropriately.

Fit to drive. Approval from peers can have a strong motivational influence on driving behaviour, and this is especially true for young people. For example, drivers are less likely to drink and drive when their friends disapprove (Brown, 1998). More generally, drivers who believe that their peers would disapprove of dangerous driving behaviours (drink driving, speeding, tailgating, and dangerous overtaking) are less likely to report intentions to committing these violations (Parker, Manstead, Stradling, Reason, & Baxter, 1992). Furthermore, the influence of peers was considered to be more important for young drivers. Adolescents who are particularly susceptible to peer pressure are much more likely to be commit serious driving offences (Shope, Raghunathan, & Patil, 2003).

Safer Driving. The study by Simons-Morton et al. (2005) suggested that female passengers (unlike male passengers) can have positive effects on driving safety. They found that young female passengers, compared to no passengers, decreased speeding and tailgating behaviours in both male and female drivers. Baxter et al. (1990) found that drivers who carried older (and especially older female) passengers, drove more slowly than when travelling alone, or with younger passengers. They argued that: "If a driver is carrying an older female passenger then disapproval of speeding, whether the disapproval is implicit or explicit, may be a salient norm" (p.358).

Hazard detection. In a naturalistic study, Crundall Bains, Chapman, and Underwood (2005) recorded conversations between driver and passenger as they drove in both urban and rural environments. The twenty participants (ten pairs of driver and passenger) were almost all female, with an average age of 25 years, and an average 5 years driving experience. The number of utterances was counted for each conversation. The researchers found that both drivers and passengers modified their conversation in response to the demands of the road environment. In particular, the conversation can be suppressed when demands on the driver were excessive, and this occurred more often on urban roads than on rural roads. This study provides evidence that passengers are able to moderate the in-vehicle demands on the driver when environmental demands (such as potential hazards) are present.

1.5. TRAINING DRIVER-PASSENGER COMMUNICATION

The present project aims to train communication skills between young drivers and their passengers. This focus is a novel one, and has been largely ignored in traditional driver education. In fact, a recent meta-analysis has concluded that traditional driver education appears to have little effect on young driver safety (Ker, Roberts, Collier, Beyer, Bunn, & Frost, 2005). The researchers conducted a systematic review of randomised control trials that evaluated the benefits of post-licence driver education programs. This included 21 trials (3 for advanced drivers, and 18 for remedial drivers), with data from over 300, 000 participants. The analysis provided no evidence that such programs are effective in preventing road traffic injuries or crashes. Although most of the trials were conducted in the U.S., which limits its generality, the researchers concluded that, “the effectiveness of current driver education programmes is as yet unproven, an observation that casts doubt on the wisdom of placing undue emphasis on this approach in current road safety policy” (p. 312). Earlier systematic reviews have produced similar conclusions (e.g., Vernick, Li, Ogaitis, MacKenzie, Baker, & Gielen, 1999).

Mayhew and Simpson (2002) suggested three reasons why traditional driver education fails to reduce crashes. First, it does not emphasise high-risk situations (e.g., driving at night) and the skills that are necessary in those situations. Second, it does not address driver attitudes, so does not motivate students to engage in safe driving behaviours. And finally, it tends to foster overconfidence, so that drivers who attend advanced driving courses are more willing to drive under dangerous conditions. In contrast to traditional driver education, a handful of training programs that address these particular issues show some promising effects on young driver behaviour. These programs include: insight training (Gregersen, 1996), the Checkpoints Program (Simons-Morton, Hartos, Leaf, & Preusser, 2006), the “Speak Out!” campaign (Elvik, 2000), and the *You Hold the Key* program (King, Vidourek, Love, Wegley, & Alles-White, 2008).

Insight training. Gregersen (1996) investigated a method of training that involved helping young drivers to gain insight into their own limitations. In that study, an experiment was conducted on a closed driving practice area for skid training. All participants were learner drivers, and were between the ages of 18 and 24 years. Each participant was randomly assigned to one of two groups: the “skill” group, or the “insight” group. Both groups received 30 minutes of training. In the “skill” group, the participants were given explicit instructions on how to handle a critical situation by using braking and avoidance responses. An instructor in the passenger seat gave instructions on how to handle the situation. In the “insight” group, the participants were not given explicit instructions. Instead, the instructor gave comments about how suddenly obstacles appear, and how difficult it can be to handle them. The purpose of this insight training was to enable drivers to make more accurate estimate of their own abilities. One week after training, the two groups of participants were tested on the same critical situation from the training scenario. The test consisted of five trials of the critical situation. Before testing, participants were first asked to predict how many (out of five) trials that they would correctly complete. This prediction was then compared to their actual number of successful completions. The basic finding was that the skill group was poorly calibrated, while the insight group was well-calibrated: Although the two groups did not differ on actual performance, participants in the skill group overestimated their own abilities. On the basis of these findings, Gregersen argued that the teaching of insight and calibration could form an important component of young driver training, in addition to traditional skill training.

Checkpoints Program. In this program, reported by Simons-Morton et al., (2006), teens were recruited (with a parent) when they obtained their learner permit. The participants were

randomly assigned to an intervention group (the Checkpoints Program) or a comparison group. All participants were followed for one year, and over 3 700 families were available in the final sample. The families in the intervention group received a number of materials by mail including: a videotape, newsletters, and a driving agreement between parent and teen. This agreement was designed to encourage parents to place strict limits on their teen's driving privileges, such as driving late at night, or driving with multiple teen passengers. Teens and their parents were interviewed when the teens successfully obtained their licences, and also a year later. For example, the researchers asked the teens whether they had crashed in the last year, and how often they engaged in unsafe driving behaviours such as speeding, tailgating, and doing distracting tasks. Although there were no differences in the rate of crashes, the teens in the intervention group reported fewer unsafe driving behaviours than did the teens in comparison group. This was the first study to demonstrate the beneficial effect on driving outcomes of an intervention that encouraged parental management of teen driving.

“Speak Out!” This campaign was delivered to some high schools in Norway, and was targeted at teenagers between 16 and 19 years of age. The basic message behind the campaign was to encourage passengers to voice their disagreements with drivers when they were driving dangerously. The education material included videos, oral presentations, and promotional items such as T-shirts. This educational component of the campaign was accompanied by an increase in police enforcement, which targeted speeding and drunk driving in young drivers. Elvik (2000) evaluated the effectiveness of this program by analysing crash data before and after the program. He found that the number of teenagers (aged 16-19) who were killed or injured was reduced by about 10 percent. However, because the campaign consisted of both education and police enforcement, the resulting improvements in safety cannot be attributed to education alone.

You Hold the Key (YHTK). This 10-week training program aimed to increase safe driver and passenger behaviours among teens in high school, and included material on the role of the passenger. The effectiveness of this program was evaluated by King et al., (2008). The activities of the program included: interactive lessons, small-group discussions, and role plays. One of the unique features of the program was that students were exposed to the experiences of crash victims who had been victimised by unsafe drivers. A questionnaire was developed to assess the attitudes of the students immediately following the YHTK program, and also six months later. In the immediate follow-up, students reported as being more likely to engage in safe behaviours such as wearing seatbelts. Of particular relevance to our study, some of the behaviours were related to driver-passenger communication. For example, students felt more confident that they (as drivers) could say “no” to a friend who asked them to drive after they had been drinking, and similarly, that they (as passengers) could say “no” to riding with a friend who had been drinking and planned to drive. Many of the reported improvements were maintained even 6 months after the first evaluation. The researchers commented that one of the promising aspects of this program was that it focussed not only on the students' knowledge but also on their attitudes.

1.6. INTRODUCTION TO TEAMS

There has been a plethora of research regarding teams and teamwork over the past three decades, particularly in the aviation and military domains. Much research has been conducted in order to explore the nature of teamwork and its processes, the competencies required for efficient teamwork performance, and the ways in which teams can be trained to enhance their performance. In defining teams and teamwork, most definitions emphasise the notion of co-operative action (Stout et al., 1997). According to the literature there are a range of

characteristics that are indicative of a team. For example, Lenné (2003) reports that there are a number of characteristics that define teams, including meaningful task interdependency, shared and valued objectives and goals, hierarchical organisation of team members, specialised roles and responsibilities of team members, multiple information source usage, adaptive mechanisms of team members and intensive communication.

Teamwork refers to those instances where individuals interact or co-ordinate behaviour in order to achieve tasks that are important to the team's goals (i.e., behavioral, attitudinal, and cognitive responses coordinated with fellow team members), whilst taskwork (i.e., task-oriented skills) describes those instances where team members are performing individual tasks separate from their team counterparts. Teamwork comprises the following four key behavioural characteristics: performance monitoring; feedback, closed-loop communication; and back-up behaviour.

The processes that teams are required to perform have also been investigated. The most salient features of teamwork are communication and collaboration. Teamwork tasks require efficient communication and collaboration between team members in order to be performed effectively. Lenné (2003) reports that teams process information, make decisions, solve problems, and make plans. Teamwork comprises the following core components:

- Communication
- Team orientation
- Leadership
- Monitoring and Awareness
- Feedback
- Backup Behaviour
- Co-ordination

Klein (2000) identified a set of cognitive processes that are required during the performance of teamwork tasks. The team cognitive processes are:

- Control of attention - refers to the way a team engages in information management; for example, information seeking, information communication, and allocation of attention;
- Shared situation awareness - refers to the degree to which the members have the same interpretation of ongoing events;
- Shared mental models - refers to the extent that members have the same understanding of for the dynamics of key processes; for example, roles and functions of each team member, nature of the task, and use of equipment;
- Application of strategies and heuristics to make decisions, solve problems, and plan; and
- Metacognition - refers to the process of self-monitoring in terms of difficulties encountered and also the limitations and vulnerabilities of the team. Effective teams are able to self-monitor their performance and shift strategies as appropriate.

1.6.1. Driver and Passenger ‘Teams’

Considering driving as a team-based activity is a novel approach that has previously not been considered within the road transport domain. However, it is apparent that the interaction between passengers and drivers, in some instances at least, is characteristic of team-based activity. Whilst most driving tasks can be performed effectively by individual drivers acting in isolation, we argue that certain driving tasks (e.g. navigation, hazard detection and warning) can be performed more efficiently when drivers and passengers work together collaboratively as a team. The authors argue that in these instances, the driver-passenger cohort is representative of a team. Certainly, previous research (e.g. Regan and Mitsopoulos, 2001) indicates that, in some circumstances at least, driving can be considered as a team-based or collaborative endeavour. Most of the definitions of teams presented in the literature emphasise the notion of co-operative action (Stout, Salas & Fowlkes, 1997). Relating these team definitions to the driving task is a useful way of highlighting the role of team-based activity in the road transport domain. In most circumstances, drivers and passenger(s) form a group or team of actors who possess complementary skills and share a common set of goals. Drivers and passengers have often received, and graduated from, a similar form of driver training, and even unqualified passengers have experience of the road transport system as either a passenger or pedestrian. The driving ‘team’ also typically share the common goal of travelling safely and efficiently from a particular starting point to a desired end destination. Moreover, and particularly when referring to young drivers, the driving ‘team’ also typically share a social goal of some sort.

Characteristics of teams include meaningful task interdependency, coordination among team members, specialised member roles and responsibilities, and intensive communication. Meaningful task interdependency in the present context assumes that the driving task cannot be effectively completed without team members performing the component tasks required of them and also collaborating effectively with other members within the team. Whilst this is not always the case within the road transport domain, there are certainly instances where it is apparent, such as navigating in unknown areas (i.e. driver controls the vehicle whilst the passenger reads the map and passes on directional details to the driver). Examples of co-ordination and communication between actors within a driving team include passenger navigation (e.g. turn right here), hazard warning (e.g. watch out for the car on your inside) and speed monitoring (e.g. watch your speed, it is only a 60Kph limit on this road). Further research into team-based activity has identified two components of team behaviour, namely taskwork and teamwork. Teamwork represents those instances where individuals interact or co-ordinate their behaviour in order to complete the tasks that are important to the team’s goals, whilst taskwork describes those instances where individuals in the team are performing individual tasks separate from other team members. Relating the two classifications to the road transport domain, taskwork activities can be defined as vehicle control tasks (e.g. steering the vehicle, accelerator control etc) performed by the driver, whereas examples of teamwork tasks include navigational and safety-related tasks.

1.6.2. Team training

The increase of teams in complex sociotechnical systems has generated a greater need for effective team training programs. Team training programs are used to develop the knowledge, skills and abilities required for effective team performance. The primary goal of team training is to develop competencies to allow effective synchronisation, co-ordination, and communication between team members. Research into teams and team training over the past two decades has led to the identification of several key principles of team training, a summary of which are presented below (Salas & Priest, 2005):

- Team training should lead to teamwork skill development (e.g. leadership, adaptability, compensatory behaviour);
- Both process and outcome measures are needed for teamwork diagnosis;
- Simulations should allow team members to experience some alternate course of action;
- Response strategies, provided during training, should be linked to cues in environment and other team members;
- Team members should be provided sufficient opportunities to interact with novel environments (in order to develop adaptive mechanisms);
- Training should be theoretically based;
- Team training should be more than “Feel Good” intervention;
- Guided practice is essential;
- Training should establish a mechanism to foster teamwork;
- Team training is embedded in an organizational system;
- Creation of an appropriate transfer climate for teamwork is essential;
- Team training should be ongoing;
- Both teamwork and taskwork competencies are needed for effective team functioning.

Some of these principles will be incorporated into the development of the training program for young drivers.

1.7. THE CURRENT STUDY

The aim of this project was to develop and evaluate a pilot program to teach communication and teamwork skills in young drivers. The program involved a two-hour facilitated discussion workshop, which aimed to fill some of the gaps in traditional driver education (cf Mayhew & Simpson, 2002). In this pilot study, we have restricted our sample to only young male drivers, because they represent the highest risk group.

To evaluate the effects of training, we compared the group of trained drivers, with a group of untrained drivers on various measures. The use of multiple measures allows us to answer questions at different levels of analysis.

First, does training have an effect on real-world behaviour? Self-report of real-world driving behaviour was assessed using the Driver Behaviour Questionnaire (DBQ), which categorises unsafe driving behaviours in terms of violations, mistakes, and lapses. Previous research has shown a link between DBQ responses and involvement in vehicle accidents (Parker, Reason, Manstead, & Stradling, 1995; Reason, Manstead, Stradling, Baxter, & Campbell, 1990). We predicted that the trained group would report safer driving behaviour, after training, than would the untrained group.

Second, does the effect on driving behaviour also occur with a friend in the vehicle? Pairs of friends (one driver and one passenger) were tested in the Advanced Driving Simulator at Monash University. Driving performance was assessed using measures such as speed and headway (Simons-Morton et al., 2005). We predicted that the trained participants would driver more safety than would the untrained participants.

Finally, if there is an effect of training in the vehicle, is this because the passenger is encouraging more safe behaviour, or more helpful in detecting hazards? The conversations between driver and passenger in the simulator were recorded. We predict that the trained group would produce more safety-related conversations than would the untrained group.

2. METHOD

2.1. DEVELOPMENT OF TRAINING PROGRAM

2.1.1. Draft facilitator's training guide

A consultant from *Learning Systems Analysis* was engaged to develop a concept of training for this project. The scope of this training concept included strategies for the effective use of learning methods and media to achieve team training-related learning outcomes. The learning applicable to this concept included those preparatory activities, small group activities and facilitated small group discussion that currently comprise the Road Ready Plus program.

The review of team training undertaken and its potential relevance to young driver training indicated the following key learning outcomes and underpinning knowledge, skills and attitudes:

- Key Learning Outcomes:
 - An ability to detect threats to driving safety internal and external to own vehicle.
 - An ability to clearly communicate safety-related information as a passenger participant in an informal driving team.
 - An ability to positively influence the safe driving behaviour of others.
- Underpinning Knowledge, Skills and Attitudes:
 - The concept of teamwork and its benefits to safe driving.
 - The positive role that can be played by passengers.
 - Indicators of unsafe driving behaviour by self.
 - Indicators of unsafe driving behaviour by others.
 - Indicators of passenger behaviour that could threaten safe driving.
 - Performance of a driver 'support process' that can be employed by passengers.
 - Use of strategies to resolve personal disputes in relation to immediate safe driving behaviour.
 - A willingness to be assertive in relation to safe driving.
 - A willingness to constructively contribute to driving safety as a passenger participant in an informal driving team.

The current Road Ready Plus program has much in common with team training-concepts and a logical approach would be to employ the methods in this program rather than build new methods. Consequently, the general instructional method should involve a preparation activity followed by small group activities and facilitated discussion. Small group activities can make use of the types of instructional technologies noted by Mitsopolous et al. (2005) including video demonstrations and video games. Facilitated discussion should focus on learner involvement and only make use of materials that prompt, as distinct from replace, learner engagement.

On the basis of the learning outcomes and instructional method suggested, it was decided that the team training in this project would be delivered in an interactive facilitated group format. The learning outcomes were then used to provide the backbone for the draft facilitator's training guide. This outlined the sequence of objectives and activities that should occur during the training session to achieve the desired learning outcomes.

Table 2.1. Draft facilitator’s training guide

Concepts	Learning Principle	Knowledge/Exercise
PREPARATION	Subjects should perceive the benefits of communication through reflection on their own driving experiences.	Prompted discussion to draw out examples of unsafe driving where contributing factors include: <ul style="list-style-type: none"> • Poor communication between driver and passenger. • Distraction of driver by passengers. • Passenger behaviour that does not support safe driving. • Unsafe driving behaviour due to driver incapacitation. Note that the subjects may recall situations that they observed as passengers and not only as drivers.
1. PROVIDING INFO		
Teamwork – What is it?	<ul style="list-style-type: none"> • Establish Principle of Teamwork 	Example of a netball team
		What makes this a team?
		<ul style="list-style-type: none"> • Shared understanding of individual tasks and they feed into the overarching goal (to win the game)
		<ul style="list-style-type: none"> • Huge list of individual tasks, but through defining roles, etc, overall goal can be achieved
		<ul style="list-style-type: none"> • Agreement on common goal
Existing areas where teamwork is critical	<ul style="list-style-type: none"> • Teamwork Exemplars 	Teamwork is evident in many areas, e.g., aviation
		<ul style="list-style-type: none"> • Example of aviation case study – accident involving lack of communication (pilot-co-pilot hierarchy issues)
		<ul style="list-style-type: none"> • List of tasks/duties is huge, with the overall goal of landing the destination safely
	<ul style="list-style-type: none"> • Establish Principle of Resources 	<ul style="list-style-type: none"> • Accident caused because ‘resources’ not utilised. Concept of resources introduced here.
		<ul style="list-style-type: none"> • Talk about the introduction of aviation team training and what it sets out to achieve.

		'Resources' – what do we mean by this? In essence it means combining to use everyone's efforts to achieve the goal.
How to achieve teamwork?	<ul style="list-style-type: none"> • Resource Exemplars 	<p>Crew Resource Management in aviation</p> <ul style="list-style-type: none"> • this helps to optimise the use of resources, or in other words, helps to ensure that the combined efforts of the team are used to achieve the goal.
	<ul style="list-style-type: none"> • Principle of Communication 	<p>Communication is a key</p> <ul style="list-style-type: none"> • A key to achieving this is effective communication – meaning communicating in a timely fashion with clear and appropriate content for the person receiving the message/communication
	<ul style="list-style-type: none"> • Communication Exemplar 	<p>So what happens when communication is more effective?</p> <ul style="list-style-type: none"> • Better common understanding of the situation, benefit of someone else's efforts, opportunity to fill in gaps/prevent oversights that an individual might not perceive/act on.
2. INTERACTIVE – EXPERIENCE BASED		
How could teamwork benefit safe driving?	Subjects should critically analyse their own experiences.	Refer to earlier discussion of unsafe driving, or prompt discussion of further examples.
		<p>Open discussion</p> <ul style="list-style-type: none"> • How could the driver or passenger help to make this scenario safer? • What are some of the threats/everyday situations where you think a passenger could assist a driver? Note these can be in-vehicle or out-of-vehicle.
		<ul style="list-style-type: none"> • Introduce the concept of a driving team – drivers and passengers can work together to 'pool resources', drivers need to be receptive to this form of feedback.
		<ul style="list-style-type: none"> • Maybe draw on some crash stats to lead discussion on situations where passengers traditionally are indicators of increased risk.
	Subjects should apply the principles of communication.	Introduce an unfamiliar driving scenario with a driver/passenger(s) either within or external to vehicle.

Indicators of safe and unsafe driving by self and others		How do we recognise positive/negative driver and passenger behaviours?
		Prompt – introduce the three driving tasks as a context with which to refine discussion of these.
		<ul style="list-style-type: none"> • Ensuring driver is fit to drive • Ensuring the driver drives safely • Ensuring hazards are detected and appropriate action is taken
		Note that the passenger role can be positive or negative
		Introduce the support process and tool to support effective communication
3. SMALL GROUP DISCUSSION		Further discussion of driver/passenger safe and unsafe behaviours in the context of the driving tasks above.
	Subjects should apply the principles of communication to real world driving tasks	In small groups, practice using the support process in driver/passenger role plays

2.1.2. Final facilitator's training guide

A facilitator's guide (see Appendix C) was developed by expert trainers from *Norquay Training & Development* to provide a structured outline for a two-hour training session. The primary goal of the training workshop was to teach teamwork and communication skills to young drivers. The workshop began with an introduction to some facts about the risk factors for road accidents, including those risks that relate to the effects of carrying passengers. This was followed by group discussions about the important responsibilities of both the driver, and of the passenger. Participants were presented with possible obstacles to safe outcomes, and they suggested solutions to increase safety. Participants were also introduced to the concept of a team (e.g., having common goals), and how this concept could be applied to the driver-passenger relationship. Finally, participants were encouraged to discuss ways that passengers and drivers could positively influence each other and communicate this effectively.

Following the recommendations by Mitsopoulos et al. (2005), the following (positive) roles of the passenger were emphasised:

- ensuring the driver is fit to drive (e.g., not drunk or tired);
- ensuring the driver drives safely (e.g., not speeding, or distracted);
- ensuring hazards are detected and appropriate action is taken.

As was proposed by Salas & Priest (2005), participants were encouraged to practise their communication skills via role plays and simulations. During these role plays, participants implemented various strategies for dealing with difficult drivers or passengers (e.g., being assertive but not threatening). At the end of the training session, participants were given a "Reflection Sheet" comprising ten questions, which were designed to assess their understanding of the training material. A summary of these responses is presented in the Appendix A.

2.2. EVALUATION OF TRAINING PROGRAM

2.2.1. Participants

There were 62 participants (31 pairs of friends), who were all students at Monash University. The criteria for inclusion were: male drivers aged between 18 and 21 years who held a probationary drivers licence. Participant pairs were randomly assigned to a training or no-training condition.

2.2.2. Outcome measures

Driver Behaviour Questionnaire (DBQ). All participants responded to items from a modified version of the Driver Behaviour Questionnaire (Aberg & Nimmo, 1998). The questionnaire (see Appendix B) comprised 24 items: 8 relating to *violations* (e.g., "Deliberately exceed speed limit on main roads during low traffic"), 8 relating to *mistakes* (e.g., "Underestimate the speed of an oncoming vehicle when overtaking") and 8 relating to *lapses* (e.g., "Fail to notice when a traffic-signal turns green"). Participants were asked to reveal how often the described situation happened to them, by placing a cross on a visual analogue scale that was marked with verbal descriptors (Never, Very seldom, Seldom, Sometimes, Often, Very often). Some of items were reworded to suit the Australian driving context. The DBQ has been found to be relatively free from self-report biases such as social desirability (Lajunen & Summala, 2003).

Driving Simulator. Participants were tested in the Advanced Driving Simulator at the Monash University Accident Research Centre (MUARC). Scenarios were generated by a Silicon Graphics Onyx computer and projected by four BarcoGraphics 808 Projectors onto a display screen that subtended a visual angle of 180° horizontally and 40° vertically. The scenarios were displayed with a refresh rate of 30Hz and a resolution of 1280 × 768 (front panel) and 640 × 480 (front side panels). A Crystal River Engineering Audio Reality Accoustetron II audio system produced accurate, localised sound such as engine and road noise, and sound from other vehicles. Drivers viewed the scenario from within a 2003 Holden VX Calais sedan that was positioned on a motion platform, which displaced the vehicle according to the virtual dynamics of the car and environment. The motion platform allowed for up and down movements, and for pitch and roll rotations. Vehicle measures, such as speed and lane position, were collected at 30 Hz. The experimenter conducted the experiment from a separate control room that was located beside the simulator room. The control room contained a device that allowed two-way communication between the experimenter and the participants, as well as a video monitor for visual monitoring of the participant. Conversations between the participants in the simulator were recorded using a digital recorder.

2.2.3. Procedure

Half of the participants were randomly allocated to the training condition, in which they attended a two-hour workshop. (There were two workshops about one week apart - and each trained pair attended one of these workshops.) Testing in the simulator took place a few weeks following the workshop. At each simulator session, one pair of friends participated in the study. Upon arrival, one of the participants was randomly chosen (by a coin toss) to be the “driver”, and the other as the “passenger”. Before entering the simulator, all participants completed a Simulator Sickness Questionnaire (SSQ; Kennedy, Lane, Berbaum, & Lilienthal, 1993), a demographics questionnaire, and the DBQ. Before the two experimental scenarios, the driver was given a short practice scenario to familiarise them with the vehicle control dynamics.

The two experimental scenarios shared the following features. The drive lasted for approximately 5 min and occurred over a 6-km length of mainly straight arterial road. There were two or three lanes of traffic in each direction, intersections at every 300 to 600 m, and houses and factories on both sides of the road.

In the first scenario (“car following”), drivers were instructed to drive behind a lead vehicle at a safe distance, and to maintain that safe distance as the lead vehicle changed speed. The speed of the lead vehicle varied between 60 and 80 km/h (the speed limit was 80 km/h). The drivers were also asked to change lanes whenever the lead vehicle changed lanes. The primary measure of interest in this scenario was the mean headway during a specific data collection zone. This zone started approximately 100 metres after the lead vehicle started to vary in speed independently of the participant's vehicle, and terminated at a point approximately 1 km from the start of the zone.

In the second scenario (“emergency vehicle”), drivers were given similar instructions as in the first scenario. However, the primary measure of interest was the driver's speed upon approach to an intersection that involved an emergency vehicle. The participant's vehicle approached the intersection with a green traffic signal, and the emergency vehicle was heading toward the participant's vehicle from the opposite direction, and was programmed to turn across its path. The emergency vehicle was visible from about 110 m, with no other traffic to obscure it, and its siren was audible from 150 m. This scenario was adapted from a previous study (Lenné,

Triggs, Mulvihill, Regan, & Corben, 2008), to test the participants' abilities to detect an unexpected hazard and take an appropriately safe action.

Several months after the test sessions, a follow-up DBQ was mailed out to all participants. For the trained participants, we compared their follow-up DBQ responses to their DBQ responses at the training workshop. For the untrained participants, we compared their follow-up responses to their DBQ responses at the simulator testing session.

3. RESULTS

3.1. DRIVER BEHAVIOUR QUESTIONNAIRE (DBQ)

Each participant completed the DBQ on two occasions: once pre-treatment before the simulator test session, and once post-treatment when it was mailed out to them several months later. The responses on each item were coded as a number ranging from 0 (“Never”) to 5 (“Very often”). These numerical values are arbitrary in that they exhibit only ordinal, but not interval or ratio, properties. Statistical analysis of such data should be unaffected by rescaling of the numerical values (Svensson, 2001). For each questionnaire, we calculated the median, rather than the mean, of the item scores within each of the three factors (violations, mistakes, and lapses). For each participant, we then compared their pre-treatment median score on each of three factors with the corresponding post-treatment median score. The magnitude of differences between ordinal variables is not meaningful; for example, there is no reason to assume that the distance between “Never” and “Very seldom” is the same as the distance between “Very seldom” and “Seldom”. Thus, we simply noted whether each participant exhibited an improvement, that is, a post-treatment median score that was lower than the pre-treatment median score. The proportions of improved participants for the trained and untrained groups were compared by χ^2 tests.

Post-treatment questionnaires were returned by 23 of the trained participants, and 22 of the untrained participants. There were no significant differences in the pre-treatment scores of those participants who returned post-treatment questionnaires, and those who did not. For violations, a higher proportion of the trained participants (13 of 23) showed improvements, compared to the untrained participants (5 of 22) ($\chi^2(1) = 4.04, p < .05$). A similar result was found for mistakes: a higher proportion of the trained participants (11 of 23) showed improvements, compared to the untrained participants (4 of 22) ($\chi^2(1) = 4.64, p < .05$). For lapses, however, there were no significant differences in the proportion of trained (8 of 23) and untrained (7 of 22) participants who showed improvements.

3.2. SIMULATOR MEASURES

3.2.1. Scenario 1 (Car following)

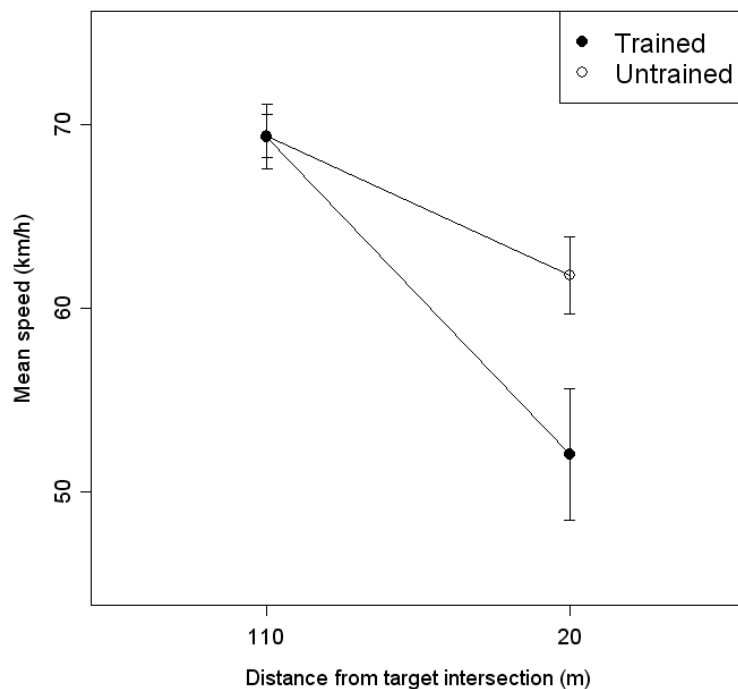
In this scenario, we were interested in two particular measures of deliberate risk-taking behaviour, headway and speed, as identified by Simons-Morton et al., (2005). For each driver, we calculated the mean headway (in distance) within the data collection zone, and also the maximum speed that was achieved across the entire scenario. The averages of these variables in the trained and untrained groups were compared by *t*-tests. The trained group maintained a mean headway ($M = 113$ m) that was longer than that of the untrained group ($M = 87.4$ m, $t(29) = 2.3, p < .05$). However, there was no significant difference between the maximum speed in the trained group ($M = 81.1$ km/h) and that in the untrained group ($M = 81.3$ km/h, $t(29) = 0.104$).

We also compared the two groups of drivers on the standard deviation of lateral position, which is a commonly used measure of steering control. This measure was calculated over a stretch a 1-km stretch of road where participants drove within a single lane and were not required to change lanes. There was no significant difference between the trained ($M = 0.36$ m) and the untrained ($M = 0.35$ m) groups ($t(29) = 0.46$).

3.2.2. Scenario 2 (Emergency vehicle)

In this scenario, the primary measure of interest was mean speed upon approach to the target intersection. Speed was analysed at two critical distances from the intersection: at 110 m, where the emergency vehicle was first visible, and at 20 m, where we expected the drivers to have slowed down. Training condition was analysed as a between-groups variable, and distance to intersection was analysed as a within-groups variable. The interaction between training and distance was significant ($F(1, 28) = 4.3, p < .05$). This interaction is plotted in Figure 3.1. While the two groups travelled at the same speed when the emergency vehicle was first visible, the trained group were slower to approach the intersection than were the untrained group.

Figure 3.1: Mean speed approaching intersection



3.2.3. Communication

The communications from several pairs of passengers were not available for analysis (e.g., technical malfunction). There were valid data from 12 trained pairs and 12 untrained pairs.

First, the audio transcripts were coded in terms of the percentage of time that pairs spent conversing in the vehicle, for both scenarios. On average, the trained group ($M = 49\%$) spent less time conversing than did the untrained group ($M = 69\%$, $t(25)=2.22, p<.05$). This result does not, however, indicate the content of the communication. In each of the two scenarios, we noted whether the passenger had promoted safe driving behaviour by discouraging violation or distraction behaviour. Similarly, we also noted whether a passenger had promoted unsafe driving behaviour by encouraging violation or distraction behaviour. The violations that were commented on (i.e., either encouraged or discouraged) included: speeding, running red light, and deliberate braking. The distractions that were commented on included: actual

and potential hazards, such as pedestrians and other road users. Coding was completed independently by two of the authors who were blind to the training condition of the pairs, and there was little disagreement on the allocation of codes. Any discrepancies were eventually resolved by mutual discussion.

Given two scenarios (car following and emergency vehicle) and two potential behaviours (violation and distraction), there were up to four opportunities to code a passenger as making *safe* comments. We gave each passenger a score between zero and four for their safe comments; for example, they scored a full four points only if they discouraged both violation and distraction behaviour in both of the scenarios. Similarly, there were up to four opportunities to code a passenger as making *unsafe* comments, so we gave each passenger a score between zero and four for their unsafe comments.

The trained passengers scored an average of 2.9 (out of 4) for safe comments and 1.2 for unsafe comments, whereas the untrained passengers scored an average of 2 for safe comments and 2.5 for unsafe comments. The differences between the two groups for both safe and unsafe comments were compared by two-sample t-tests. Compared to the untrained passengers, the trained passengers made significantly more safe comments ($t(22) = 2.1$, $p=.046$), and significantly fewer unsafe comments ($t(22) = 2.96$, $p= 0.007$).

4. DISCUSSION

In this report, we have described an evaluation of a pilot program, which was designed to develop communication and teamwork skills in young drivers. The content of the program was related to those of previous programs such as *Speak Out!* (Elvik, 2000) and *You Hold the Key* (King et al., 2008), which encouraged teenage passengers to voice their disagreements with drivers when they were driving dangerously.

Half of the participants were allocated to a two-hour facilitated discussion workshop session. Their responses during the workshop suggest that the training left a significant impression on their attitudes towards driving. On the whole, they appear to have understood and retained much of the material that was presented to them during training. This confirmed the viability of the facilitated discussion to encourage reflection about the importance of driver-passenger interaction. The next step in the project was to assess whether these attitudes translated into observable differences in behaviour. To address this issue, we collected data from a number of sources: simulator driving behaviour, in-vehicle communication, and questionnaires.

When tested in the driving simulator, trained participants adopted a longer headway to the lead vehicle than did untrained participants. Furthermore, when presented with an emergency vehicle turning across at an intersection (i.e., an unexpected hazard), trained participants approached this intersection at a slower speed than did untrained participants. These improvements in safe driving behaviour were supported by improved communication between drivers and passengers. In particular, trained passengers made more safe comments, and fewer unsafe comments, than did the untrained passengers. The content of these communications suggests that one reason that passengers increase risky driver behaviour is deliberate encouragement; for example, several passengers intentionally urged the driver to speed.

We have also found differences between the trained and untrained participants on their self-report of driving behaviour, using the DBQ. Specifically, we found that a greater proportion of trained participants showed improvements (i.e., a reduction) in the frequency of mistakes and violations. Previous research using the DBQ has shown that violations, but not mistakes, are predictive of accident involvement (Parker et al., 1995). As was discussed by Lawton, Parker, and Stradling (1997), this result has clear implications for road safety policy. In particular, it suggests that road safety campaigns should be directed at changing drivers' attitudes (relating to violations), rather than to focus exclusively on skills training (relating to mistakes).

4.1. LIMITATIONS & FUTURE DIRECTIONS

Although the workshop was tested on a relatively small sample size, we have nonetheless managed to produce measurable improvements in the attitudes and behaviours of young drivers. Because the present study was intended to be a pilot program, however, it was deliberately limited in its scope. For example, we decided to restrict the recruitment of participants to a specific demographic: male, university students, who were probationary drivers. The restriction to male drivers was motivated by the reasonable assumption that they would potentially benefit more than would female drivers from such training. In a previous study of teenage drivers, Simons-Morton et al., (2005) found that male passengers, but not female passengers, increased risky driving behaviour. In another study, Ulleberg (2004) found that females were more likely than males to speak out against the driver whenever they felt unsafe in the car. Whether the training described here would have similar effects on other populations (e.g., female drivers, learner drivers, and high school students) is an issue that

deserves further investigation. Furthermore, future evaluations should pursue follow-up for participants over a longer time-frame to assess the long-term effects of such training.

The present results open the possibility to an alternative view of young passengers. In current road safety research and policy, young passengers are viewed as a negative influence, and as a risk factor. In the present study, however, we have provided some evidence to suggest that young passengers can also act as a positive influence, and as a useful resource for the driver, as has been suggested previously (Mitsopoulos et al., 2005). Nonetheless, the enforcement of passenger restrictions for young drivers remains a sensible strategy. In Victoria, for example, probationary licence drivers are allowed to carry, at most, one passenger aged 16 to 21 years. As was shown by Williams (2003) and other (Chen et al., 2000; Lam et al., 2003), the crash risk for teenage drivers increases as the number of teenage passengers increases from one to two, and from two to three or more. Within the graduated licensing framework, advertising campaigns and training could be implemented in parallel with passenger restrictions, to provide further benefits. The novel aspect of such education would be to highlight the potentially positive contributions that teenage passengers can make to road safety, as has been shown in the present study. The presence of positive, helpful passengers would be particularly important for novice drivers (in the first few months of driving), for whom an additional resource would be most beneficial (McCartt et al., 2003). Of course, the present results do not diminish the importance of continued supervision of young drivers by experienced and responsible mentors such as their parents (Bingham et al., 2006; Rice et al., 2003; Simons-Morton et al., 2006).

A future challenge is how to introduce it into driver training. One existing program that uses facilitated discussion is *Road Ready Plus* (RRP), which is a voluntary program operating in the ACT. It is aimed at young drivers who have held their provisional licence for at least 6 months. The course has two components: pre-course activities, and a 3-hour facilitated discussion workshop. Participants are required to complete two pre-course activities before attending the workshop. These activities include, for example, searching web sites on youth accidents, and keeping a log of driving behaviours. The workshop involves small groups of inexperienced drivers, who participate in a facilitated discussion about their driving experiences. This component of RRP is very similar to that of the present program, although our workshop specifically highlighted the importance of communication and teamwork between driver and passenger.

An evaluation of the RRP program has found mixed results (Di Petrio, Hughes, & Catchpole, 2004). On one hand, the majority of participants reported that they had enjoyed the workshop, and achieved greater insight into their driving behaviour. On the other hand, when the researchers compared the RRP participants with non-participants, there was little difference in attitudes and self-reported driving behaviours. Moreover, there was no reliable evidence that participation in the RRP program reduced the likelihood of future traffic offences. It remains unclear what factors may be responsible for these mixed results.

The RRP program attracts young drivers by using the following incentives: after completion of the program, participants no longer have to display their P plates, and their allowance of demerit points increases from four to eight. While such incentives undoubtedly boost participation rates, they also negate the protective effects that are normally provided by graduated licensing. If young driver education programs are to be successful in improving safety, implementation issues such as these (e.g., how to attract participants to a voluntary program) must be resolved in an evidence-based fashion.

4.2. CONCLUSIONS AND RECOMMENDATIONS

The training and evaluation reported here produced promising, initial results. While some positive effects of training on driver behaviour were observed, even more encouraging was the change in the nature of the communications between driver and passenger, and the change in self-reported driving behaviour. Changes in team processes are known to underpin superior task performance by teams in many other domains, such as aviation and medicine. Importantly, this result also confirms the value in using the facilitated training session, including practical scenarios, as a means to develop enhanced communications in young drivers.

Communication skills are a key component of Crew Resource Management (CRM) activities. In aviation, for example, a key feature of CRM is the provision of training to aircrews to enhance communication to increase safety. This includes training on knowing when and how to communicate effectively in safety-critical situations. This concept has been captured in the pilot driver team training program that was developed as part of this project.

The present results suggest an alternative view of young passengers: that they can in some circumstances act as a positive influence and resource for their peers. Nonetheless, this alternative view does not deny the intrinsic and persistent risks associated with young drivers. The legal restrictions on carrying multiple passengers, and the encouragement of parental supervision, remain sensible strategies.

This pilot program was associated with safer behaviours in a small number of simulated scenarios. Therefore, before any strong conclusions can be drawn from this study, it may be worthwhile to repeat the evaluation on larger sample sizes, and on different groups of drivers (e.g., females, or high school students), and to assess long-term behavioural changes. The tools used for future evaluation need not be costly and time-consuming. For example, the DBQ appears to be a sensitive instrument for measuring changes in risky driving behaviour, even though it was not specifically designed to assess driver-passenger interactions. Future research may explore the potential development of questionnaires and other related measures that specifically target communication behaviour.

Finally, before such training is implemented more widely in the ACT, one critical issue that must be addressed is how to structure incentives. General acceptance of an education program by young drivers is important for its success. Incentives such as the removal of P plates, or the increase in demerit points, could be offering young drivers too much freedom at a stage when restrictions are critical to their safety; and such incentives may ultimately negate any potential benefits of education.

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APPENDIX A

At the end of the training session, participants were given a “Reflection Sheet” comprising ten questions, which were designed to assess their understanding of the training material. A summary of these responses is presented in Table 1.1. As a driver, “safety” was identified as the number one priority by most respondents. The main barrier to safety was “distraction”, but other barriers were also identified. The primary warning signal for a driver was “fitness to drive”. Whenever passengers are distracting or disturbing, all respondents said that as a driver, they would tell them to stop. If a passenger in the car felt that the driver was behaving in an unsafe way, all respondents said that, as a driver, they would want the passenger to tell them.

As a passenger, the main priorities identified were “to be aware” and “to assist the driver”. Specific examples are given below. The main barriers to achieving this are “alcohol and drugs” and “distraction”. The primary warning signal that a passenger should be aware of was the “ability of the driver”. If the driver is behaving irresponsibly, all respondents said that as a passenger, they would tell the driver. If the driver felt that the passengers were behaving in an unacceptable way, all respondents said that as a passenger, they would want the driver to tell them.

Table A.1. Responses to the Reflection Sheet

<i>Question</i>	<i>Responses</i>	<i>N</i>
		<i>(total = 32)</i>
1. <i>What do you now see as priority number one when getting into a vehicle as the Driver?</i>	<ul style="list-style-type: none"> ▪ Safety 24 ▪ Being responsible, focused, and aware 5 ▪ Ensuring that you’re in the best physical and psychological condition 3 	
2. <i>What are the main barriers to this being achieved successfully?</i>	<ul style="list-style-type: none"> ▪ Distraction 19 ▪ Fatigue 8 ▪ Alcohol/ drugs 7 ▪ Peer pressure 5 ▪ General unawareness/ lack of concentration 5 ▪ Over-confidence/ pride/ mood 5 ▪ Road/car conditions/ 5 	

	environment	4
	▪ Speed	
3. <i>What do you see as priority number one when getting into a vehicle as a Passenger?</i>	▪ To be aware	16
	▪ To assist the driver	13
	▪ Seat belts	1
	▪ Your own safety	1
4. <i>What are the main barriers to this being achieved successfully?</i>	▪ Alcohol/ drugs	10
	▪ Distraction	9
	▪ Over-confidence/ pride/ mood	7
	▪ Being too shy or unwilling to judge or ask the driver if he/she is ok to drive	6
	▪ General irresponsibility/ lack of experience	6
	▪ Fatigue	4
	▪ Peer pressure	2
	▪ Environment	1
5. <i>What are the warning signals you need to be aware of before getting into a car as the Driver?</i>	▪ Am I fit to drive	19
	▪ Condition of the passengers	11
	▪ Condition of the car	7
	▪ Environment- weather/ visibility/ traffic/ road	7
	▪ Being aware of destination	1
6. <i>What are the warning signals you need to be aware of before getting into a car as a Passenger?</i>	▪ Ability of the driver	27
	▪ Condition of the car	3
	▪ Who else will be in the car	2

	<ul style="list-style-type: none"> ▪ Condition of yourself 2 ▪ Environment- weather/ 2 traffic/ road
7. <i>As a passenger- how would you deal with a driver who is acting irresponsibly?</i>	<ul style="list-style-type: none"> ▪ All responses to this question 32 indicated that they would “tell the driver”
8. <i>As a driver- how would you deal with passengers who are interfering with your ability to drive safely?</i>	<ul style="list-style-type: none"> ▪ All responses (except one) to 31 this question indicated that they would “tell them”
9. <i>What would be the most successful way for someone to give you feedback about your driving that may at the time be stupid or dangerous?</i>	<ul style="list-style-type: none"> ▪ All responses to this question 32 indicated to inform me (the driver)
10. <i>What would be the most successful way for someone to give you feedback that your behaviour as a passenger needs to be modified or is just unacceptable?</i>	<ul style="list-style-type: none"> ▪ Again, all responses to this 32 question indicated to inform me (the passenger)

Table notes

- For response to Questions 2 and 4, the term “distraction” included specific distractions such as: music, other passengers and use of a mobile phone.
- In Question 3, “to assist the driver” included specific assistance such as: being quiet and not annoying or disturbing, being a positive influence, respectful, focused and prepared to improve the drivers alertness/ focus, let the driver know if he/ she is doing something wrong. Also in Question 3, “to be aware” included: knowing and trusting the driver, keep a lookout, making sure that the driver is fit and able to drive, that the car is in a safe condition and to value the driver’s situation.
- In Question 5, “am I fit to drive” included judgements of physical condition-fatigue/ intoxication, mental state/ mood.
- In Question 7, “tell the driver” included specific responses such as: tell them to stop and notify them of the consequences, a telling off, ask them to pull over and then tell them, warn them, some said to be blunt, clear and firm, others said to be subtle, to gently advise or give hints that you’re uncomfortable. Other suggestions were to be sincere, polite and calm and to convey that you will get out of the car if it continues, or if they don’t listen to your concern.
- In Question 8, most respondents (28) said that they would tell the passengers to behave, and ten of those said that if they do not listen they will be kicked out. One said that if they do not listen, I will not drive them again. Seven respondents said that they would pull over before saying anything. Two people reported that they would pull over and kick them out, with no warning. Two people said that they would tell them and also give a potential consequence/ reality check on what might happen. One person said that they would just “slow down and watch them”.
- In Question 9, 18 responses were to be direct/ blunt/ “straight up”. Four said to be subtle/ polite/ calm and make it clear that it is not an attack. One person said that the way in which someone should tell you will depend on how well they know you.

Another said “remind me that there’s someone waiting for me at home”. One person said to say it in a way that compares me to other, safer drivers. Two people said to remind them of the consequences, one of which referred to monetary consequences.

- In Question 10, 20 responses were to be direct/ blunt/ straight up. Five said to be subtle/ polite/ “keep cool”. One person said that it is better when the person has similar behaviour when they are a passenger. Another person said to “remind me of positions of power (they are the driver)”.

Upon completing the Reflection Sheet, participants were then asked to write down the most important ideas they had learnt from the session. These responses are summarised below:

- Communicate efficiently and safely.
- Assist the driver: identify hazards, keep the driver focused and/ or awake, be helpful
- Be respectful and considerate of the driver and recognise when they are unfit to drive; suggest alternative transport
- Convey unsafe/ reckless behaviour: consider consequences
- Don’t point things out in a risky situation
- Act as a peace maker in the car when dealing with distracting passengers
- Be patient and careful
- Understand that texting/ talking on the phone is dangerous
- Don’t eat while driving
- Don’t drive when tired or under the influence of alcohol or drugs
- Don’t slouch, it can limit the view
- Be responsible and aware
- Observe all traffic rules
- Assess your own ability to drive
- Pull over in bad weather
- Don’t give into peer pressure
- Deliver an ultimatum for distracting passengers- be clear and assertive
- Turn down the radio
- Try to know the driver’s background and choose to refuse rides with irresponsible drivers
- Reflect on the incident afterwards

APPENDIX B

Each of the 24 statements below is a situation in everyday driving. Your task is to state how often the described situation has happened to you. Please place a cross on the line provided. The line gives a scale from “never” on the left to “very often” on the right.

(1) Underestimate the speed of an oncoming vehicle when overtaking.

Never Very seldom Seldom Sometimes Often Very often

|_____||_____||_____||_____||_____||

(2) Deliberately park your car against parking rules in order to run an errand.

Never Very seldom Seldom Sometimes Often Very often

|_____||_____||_____||_____||_____||

(3) Misjudge your speed when you exit from a main road and have to slam on the brakes.

Never Very seldom Seldom Sometimes Often Very often

|_____||_____||_____||_____||_____||

(4) Fail to notice “green arrow” at traffic signal allowing you to turn.

Never Very seldom Seldom Sometimes Often Very often

|_____||_____||_____||_____||_____||

(5) Speed up at traffic lights at a green or yellow phase.

Never Very seldom Seldom Sometimes Often Very often

|_____||_____||_____||_____||_____||

(6) Cut into the opposing lane when driving around sharp bends.

Never Very seldom Seldom Sometimes Often Very often

|_____||_____||_____||_____||_____||

(7) Drive especially close to the car in front as a signal to its driver to go faster or get out of the way.

Never Very seldom Seldom Sometimes Often Very often

|_____||_____||_____||_____||_____||

(8) Fail to notice a traffic sign telling you that the road is temporarily closed.

Never Very seldom Seldom Sometimes Often Very often

|_____||_____||_____||_____||_____||

(9) Disregard speed limit to follow traffic flow.

Never Very seldom Seldom Sometimes Often Very often

|_____||_____||_____||_____||_____||

(10) Intend to drive to destination A, only to find yourself on the road to destination B (perhaps because the latter is your more usual destination).

Never Very seldom Seldom Sometimes Often Very often

|_____||_____||_____||_____||_____||

(11) Misjudge the road surface so that when braking, you find the distance required to stop to be longer than expected.

Never Very seldom Seldom Sometimes Often Very often

|_____||_____||_____||_____||_____||

(12) Deliberately turn onto a main road just in front of oncoming vehicle even though no other traffic is approaching.

Never Very seldom Seldom Sometimes Often Very often

|_____||_____||_____||_____||_____||

(13) Deliberately exceed speed limit on main roads during low traffic.

Never Very seldom Seldom Sometimes Often Very often

|_____||_____||_____||_____||_____||

(14) Misjudge the gap to oncoming vehicle on overtaking and is forced to just sweep in front of the vehicle you overtake.

Never Very seldom Seldom Sometimes Often Very often

|_____||_____||_____||_____||_____||

(15) Drive by mistake against a sign (e.g., drive through a STOP sign) because you didn't notice it before.

Never Very seldom Seldom Sometimes Often Very often

|_____||_____||_____||_____||_____||

(16) Miss your exit on a freeway.

Never Very seldom Seldom Sometimes Often Very often

|_____||_____||_____||_____||_____||

(17) Turn right onto main road into the path of an oncoming vehicle that you hadn't seen, or whose speed you misjudged.

Never Very seldom Seldom Sometimes Often Very often

|_____||_____||_____||_____||_____||

(18) Fail to notice when a traffic-signal turns green.

Never Very seldom Seldom Sometimes Often Very often

|_____||_____||_____||_____||_____||

(19) Deliberately exceed speed limit when overtaking.

Never	Very seldom	Seldom	Sometimes	Often	Very often

(20) Uncertain where you left your car in a parking lot.

Never	Very seldom	Seldom	Sometimes	Often	Very often

(21) Park against parking rules because you can't find a parking lot.

Never	Very seldom	Seldom	Sometimes	Often	Very often

(22) Misread signs and find yourself lost.

Never	Very seldom	Seldom	Sometimes	Often	Very often

(23) Misjudge the gap to oncoming vehicle when you are turning right and force the oncoming vehicle to slam on the brakes.

Never	Very seldom	Seldom	Sometimes	Often	Very often

(24) Overtake when the car in front is lowering its speed approaching a speed-limited area.

Never Very seldom Seldom Sometimes Often Very often

|-----|-----|-----|-----|

-- End of questionnaire --

APPENDIX C Facilitator's Guide

Communication Skills Workshop for Young Drivers



Who's at the wheel?

Or ... "Who's pulling the strings?"

An opportunity for young drivers to identify
who and **what** influences them
when they are behind the wheel,
and to develop strategies for responsible and safe behaviour

Facilitator



Some thoughts on the Subject

“Young drivers are often skilled and their reflexes are good but they are also

...

- Inexperienced
- Automated skills are underdeveloped and they experience information overload when they get into a car.
- Power and the excitement buzz encourage risky behaviour - speed, tail-gating, red-light dare, aggression.
- Have learnt bad habits.
- Young males often want to impress with risk taking.
- Young females often lack experience and confidence but then put themselves in social situations that require both.”

... and according to VicRoads (2005)

- The risk of P-plate drivers having a crash decreases over the first 6-12 months
- P-plate drivers are more likely to crash when driving with peer passengers
- Driving with a car full of peer passengers increases the fatal crash risk by four times compared with driving alone - and the more passengers the higher the risk
- **Examples of risky behaviour when carrying passengers** - *demanding conversations, *last minute directions, *attention directed to things outside the car, *driver wants to impress
- Night driving carries even more risks - * tiredness, *alcohol, *distractions (*e.g. music, mobiles, mood, mob mentality*) and also *darkness means diminished visibility,
- Use of SMS means the driver spends four times more time with their eyes off the road compared to drivers who are not distracted in this way

SO - IT IS TIME TO RAISE AWARENESS AND

take
with
plus
good

Control
Concentration
Careful driving and
Communication skills



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Questionnaire

Participants will be given these questions to fill out prior to or at the beginning of the workshop. They can be collected at the beginning of the workshop and then given back at the end to see if they would make any changes to their answers. Or they could be filled out by participants and then used as discussion points either in the large group or in pairs as part of the workshop itself.

- Are you aware when you are driving safely? *Never At times Often*
- Do you use the mobile when driving? *Never At times*
- Often*
- Do you use SMS when driving? *Never At times*
- Often*
- Do you drive with 2 or more friends in the car? *Never At times Often*
- Have you driven when under the influence of alcohol? *Never At times Often*
- Have you driven when you are really tired? *Never At times*
- Often*
- What transport arrangements do you make if you know you are going to drink?
- If you have had too much to drink (unplanned) what would you do about transport?
- The weather is bad (wind and rain and slippery roads) what changes would you make to your driving style?
- The car in front of you is traveling at a snail's pace - *what would you do?*
- *what would you be tempted to?*
- It's late, there is no traffic, the road is straight and wide - *how would you drive?*
- A group of friends in the car are urging you to drive in a risky way - (speed, race, tail-gate, change direction quickly, etc.) - *what would you do?*
- What is your most dangerous driving habit?
- What would your friends/family say is your most dangerous driving habit?
- What do you find most distracting while driving?
- Do you easily lose your 'cool' when driving?
- At night, what influences your driving most? - *Alcohol Tiredness Music Poor visibility*
- Are you easily distracted while driving?
- Do you get into a car and drive when in a bad mood?
- Are you comfortable refusing to travel with a drunk driver? *Yes No At times*
- Are you comfortable telling passengers to quiet down? *Yes No At times*
- Do you listen and change your behaviour when passengers tell you to slow down or stop drinking? *Yes No At times*
- What is your safest driving skill?



Part 1.

Purpose

To enable participants to get to know each other and have a sense of what is going to be covered during the session.

To explore the messages they have received about driving and be aware of the role of the driver and the passenger.

Requirements

Whiteboard or large sheets of paper and markers

Workbooks for each participant

Pens/pencils or textas for each person

Different size and colour balls

Masking tape or labels.

Introduction

- Have participants sit in a circle as this enables everyone to see each other easily and exchange good eye-contact.
- Facilitator(s) to introduce themselves and the program.
- Hand out the workbooks and allow time for the participants to name them and glance through them.
- Ask participants to introduce themselves to the rest of the group (either sitting or standing is okay) - providing the following information: *(Have these written on board or on large sheet of paper)*
 - Name
 - Vehicle they drive
 - How often they drive
 - Where and when they mostly drive
 - Their worst driving habit
 - Their best driving habit

Expectations and Responsibilities

A chance to look at the expectations and responsibilities we have on us when we enter a car. *“Thou Shalt Not”*

- Using the whiteboard (or, if unavailable, large sheets of paper) ask everyone to call out the most common negative comments or instructions they have heard from parents, authorities, etc. about what to do when they get in a car .
- Next, look at the things participants have to think about and be aware of when they get into a car as the **Driver**.
- This could either be as a large group discussion **or** nominate one person to take the role of the driver and for each thing called out the driver has to be given a ball to hold. Stress to the ‘driver’ that if they drop one of the balls (i.e. responsibilities) is to put themselves at risk of loss of license or control.
- Now look at the things people have to think about and be aware of when they get into a car as a **Passenger**.
- This would be a large group discussion with participants providing various responsibilities and awarenesses. These could be written on the whiteboard or large sheets of paper.



Part 2.

Purpose	Requirements
To prioritise responsibilities as both Driver and Passenger - to recognize barriers to carrying these out successfully and strategies for making positive changes.	Whiteboard or large sheets of paper and markers Pens/pencils or textas for each person

SETTING PRIORITIES

- Divide the large group into 2 smaller groups (or more if the numbers are high). One group will focus on the Driver and the other will focus on the Passenger.

- Ask the “**Driver**” Group to identify:
 - *What they see as the ‘priority one responsibility’ for the Driver when getting into a car.*
 - *What gets in the way of achieving a safe and positive outcome/arrival.*
 - *How can this be turned around, changed.*
 - *And to write these on a large piece of paper.*

- Ask the “**Passenger**” Group to identify:
 - *What they see as the ‘priority one responsibility’ for the Passenger when getting into a car.*
 - *What gets in the way of achieving a safe and positive outcome/arrival.*
 - *How can this be turned around, changed.*
 - *And to write these on a large piece of paper.*

- Then have both groups return to the larger group and share their findings. These can be recorded on the white board or the large sheets of paper collected from each group for recording.



Part 3.

Purpose

To identify and understand the risks involved when we allow unacceptable and dangerous habits/ behaviour to be present in a driving scenario.

Requirements

Whiteboard or large sheets of paper and markers
Pens/pencils or textas for each person
Scarves, bandages, ear plugs, blindfolds, toilet roll, sticky tape

Passenger Beware!

- Choose 4 – 5 individual participants for the next exercise.
- With the use of scarves, bandages, ear plugs, blindfolds, etc. disable (tie up, bind, etc.) each participant to represent the following:
 - *Someone with only one leg*
 - *Someone with only one arm*
 - *Someone without hearing*
 - *Someone without sight*
- In a large group discussion ask if they would be comfortable getting into a car (not a specially designed one) driven by someone in this condition. If not - why not?
- Explore how each of these disabling conditions could be represented in a normally able bodied driver. e.g. **drunk** (*legless*), **drugged**, **telephoning** (*one-armed*), **texting** (*blind*), a **drink in one hand**, **fondling someone**, **yelling**, **very loud music** (*deaf*), etc.
- Or how about getting into a car with the driver with a “**God**” complex. Someone who declares “*I’m indestructible - I can make this baby fly over this river/over this cliff!*” If not ... why not?
- Again explore with the large group what the equivalent would be in a normal person - e.g. the **egotist**, the **show-off**, the ‘**buzz junkie**’.

So what would you do?

- Discuss in the large group:

How would you handle the disabled situations?

- What would you do or say?
- Come up with some strategies.
- **Can you apply the same methods to the 2nd group - the behaviour based difficulties.**
 - What would you do or say?
 - Come up with some strategies.



Part 4.

Purpose

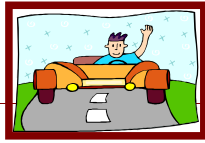
To look at what happens when we apply a Team-based approach to the driving experience.

Requirements

Whiteboard or large sheets of paper and markers
Workbooks for each participant
Pens/pencils or textas for each person

Team strategies

- Introduce the team concept by inviting a large group discussion around the following questions:
 - Who among the participants belongs to a sporting team?
 - What are the guidelines/rules that members are expected to follow?
 - Who is responsible for these being followed?
- As in life, teams are made up of individuals some of whom can, at times, be difficult to deal with - and this is worsened when their behaviour could put winning the final/cup at risk. In the workbook are questions about some of the types that might be encountered. Ask participants to take some time to respond to the questions and come up with useful strategies.
- Dealing with these types can be further complicated when the difficult person is a **close mate**, or is **influential in the peer group**, or is an **aggressive type** who may react badly. Ask participants to form small groups (2's or 3's) and discuss if the strategies they have already identified would be effective for these or if they would need to do something else.
- Have them bring their findings back to share with the large group.
- Facilitator to say: *“When you join a team you become part of a group with a common goal - and successful outcomes aren't luck they come about by having clear roles and all of those working together.*
*When you get into a car as a group you effectively become part of a **team** - you have a **common goal** (e.g. destination, cruise to check out the local talent, enjoyment of driving in a new car perhaps, etc.) and for it to be a safe and enjoyable experience it needs people to work together.”*
- There are many demands and situations influencing the driver - internal and external, predictable and unpredictable. For example: * weather *dog rushing out *a fight breaking out between passengers *someone throwing up *the driver getting sleepy, etc. While the major responsibility for safety lies with the driver, the passengers can provide support and be a positive influence (and role model) both for the driver and for the other passengers.
- Bearing this in mind have participants do the relevant exercise in the workbook naming 3 difficult situations for each of the categories of influence named. When they have finished have these break into small groups again and come up with realistic strategies that may bring about positive outcomes.
- Reform the large group to share strategies and to ask how they found the exercise.



Part 5.

Purpose

To understand and apply various techniques and tools for effective communication to take place - and for participants to recognize their own attitudes and needs when it comes to being communicated with.

Requirements

Whiteboard or large sheets of paper and markers
Workbooks for each participant
Pens/pencils or textas for each person

Communication

- Good communication skills are necessary in most situations - but what are they and which ones are appropriate to and valuable in the driving context.
- Talk about some of the common elements of Communication - e.g.
 - Learning styles - *audio, visual, kinaesthetic.*
 - Clarity
 - Non-judgemental attitude
 - Assertiveness
 - Non-threatening but consequential statements
 - Using “I Statements”
 - Setting limits
- Then a large group discussion exploring the following:
 - How passengers individually or collectively may positively influence a driver
 - How a driver may positively influence/control passenger behaviour
 - How would you as a driver like to be approached - what would work best for you?
 - How would you as a passenger like to be approached - what would work best for you?



Part 6.

Purpose An opportunity to bring all the information and exploration we have covered in the workshop in to an active and experiential exercise. To see if participants can identify what is happening and apply various strategies as individuals and as members of a team.	Requirements Whiteboard and markers Workbooks for each participant Pens/pencils or textas for each person Cards with specific roles identified Large sheets identifying driving situations
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Let's try it.

- Invite participants to take various roles to try out some of the strategies they have come up with. If time allows have them swap around to gain different experiences.
- Individuals are given cards but are told not share what is written on them with the others - this way the responses are more spontaneous. Emphasise the importance of getting right into the role.
- On the cards will be characters or behaviours such as:
 - * Drunk
 - * Argumentative
 - * Sexy piece
 - * Low self-esteem
 - * Fiddling with the radio
 - * The pointer
 - * Sleepy
 - * Dare-devil
 - * Egomaniac
 - * Feeling ill
 - * Dominator
 - * Peacemaker
- Using 4 or 5 chairs set them up to represent the inside of a vehicle and invite participants to take a seat - nominating one to be the driver and the others the passengers. Give out cards.
- During the exercise also introduce external and internal situations with the use of the large sheets - e.g. **weather conditions, dog rushing out, a fight breaking out between passengers, someone throwing up, the driver getting sleepy, etc.**
- Finish by asking participants for feedback on the experience.
 - How did you feel during the exercise
 - What did you do that worked
 - Did you feel helpless or out of your depth - at what point? And why?
 - What would you do next time to change this experience
- Facilitator to say: *“It is important to use an experience or an event as a learning tool - not just follow old response habits such as after an experience that involved some risk or a near miss we either thank our lucky stars that we got through it or kid ourselves that it was our skill that saved the day. ”*
- Quickly, refer to the **“Cycle of Learning”** in the workbook and explain it’s usefulness as a tool for reviewing almost any situation and making positive changes - whether a **driving incident** or **arguments with parents** or **an unsuccessful first date**, etc.



Part 7.

Purpose

For participants to recap the information and insight they have gained from the workshop and how they might apply these in driving experiences they may have in the future - whether as a Driver or as a Passenger.

Requirements

Whiteboard and markers
Workbooks for each participant
Pens/pencils or textas for each person
Commitment sheets
Envelopes

Recap and Closure

- Have participants fill in the “**Reflection and Commitment sheet**”.
- Have them put their name and address on an envelope.
- Collect these and inform them that you will hold them for 2 months and then return to them.
- In the large group ask participants to identify what had been the best part of the workshop for them and in what way it will influence them as drivers and passengers in the future.
- Close with a statement like the following:

“Remember this -

*When you do nothing about someone’s behaviour you could be handing them **power** over your*

physical well-being,

your future

and maybe even your life.

*Ask yourself this ‘**Who is in control here?**’ - and be sure you like the answer ...”*



Part 8.

(These sheets will be included in the participant's workbook to be filled in, removed from the book and collected by the facilitator - and will be returned to participants at a later date.)

“Reflection Sheet”

- What do you now see as priority number one when getting into a vehicle as the **Driver**?
.....
- What are the main barriers to this being achieved successfully?
.....
.....
- What do you see as priority number one when getting into a vehicle as a **Passenger**?
.....
.....
- What are the main barriers to this being achieved successfully?
.....
.....
.....
- What are the warning signals you need to be aware of before getting into a car as the **Driver**?
.....
.....
.....
- What are the warning signals you need to be aware of before getting into a car as a **Passenger**?
.....
.....
.....
- As a **Passenger** - how would you deal with a driver who is acting irresponsibly?
.....
.....
.....
- As a **Driver** - how would you deal with passengers who are interfering with your ability to drive safely?
.....
.....
.....
- What would be the most successful way for someone to give you feedback about your driving that may at the time be stupid or dangerous?
.....
.....
- What would be the most successful way for someone to give you feedback that your behaviour as a passenger needs to be modified or is just unacceptable?
.....
.....



My Commitment.

The following are three good ideas from the workshop that I found useful and/or interesting? And this is how I will undertake to apply them to my road use in the future.

1.

<p>The Idea:</p> <p>The application:</p>

2.

<p>The idea:</p> <p>The application:</p>

3.

<p>The idea:</p> <p>The application:</p>

Signed:

Date: