Parental communication and involvement with young drivers

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with

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CERTIFICATION

I, Mary A. Papakosmas, declare that this thesis, submitted in fulfilment of

the requirements for the award of Masters by Research, in the School of

Management and Marketing, University of Wollongong, is wholly my own

work unless otherwise referenced or acknowledged. The document has not

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ABSTRACT

This research aims to contribute to young driver safety strategies by focussing on the role of parents, that is, their influence on and communication with novice drivers. In the ongoing efforts to address the issue of young driver safety, parents are a vital resource as, in the majority of cases, they assume the role of supervising driver when their children formally obtain a learner's permit. A qualitative methodology was adopted in order to effectively gather data and explore the issues. A series of focus groups was conducted to document the experiences of parents and the sons and daughters they were teaching to drive.

The study found parents modelled negative behaviour in the years leading up to the learner's permit and during the learning phase, which conflicted with the safe driving habits they attempted to teach the novice. Parents' efforts to communicate with young drivers about safety were largely unsuccessful. Research findings also highlighted parental teaching issues, specifically confidence and competence.

In terms of young drivers, the research found dissonance in relation to two areas: when under parental supervision they drove with less risk than when driving solo or with peers; and the safety information they admitted needing was different to indications they gave their parents. They also had poor driving competence after licensing, yet regarded their licence as a major social milestone which, when reached, gave them a strong sense of maturity and independence.

The findings are discussed in terms of their application to social marketing theory's principle of positive behaviour change for social benefit. This discussion highlighted a

number of practical interventions designed to promote safe driving practices among

novice drivers. The interventions utilise both upstream and downstream strategies. They

include enhancing driver training and testing in order to address skill and behaviour

deficiencies, interventions to address parental driving behaviour, and support for parents

as driving teachers. Finally, the implications for further research are also addressed.

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Dedication

for

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1. Introduction

1.1 Situational Overview

In New South Wales (NSW) the road toll has steadily declined since 1945, despite a doubling of the state's population and the presence of 13 times more vehicles on the roads (RTA Crash Statistics, 2008). A disturbing component of this trend is the number of young drivers who die each year. While also in decline, the figures are still starkly disproportionate: those aged between 17 and 25 make up 15% of licence holders, yet are 25% of drivers and motorcyclists involved in fatal crashes (RTA, 2006; note, the statistical statement for 2007 is not yet available at the time of writing). One third of the speeding drivers involved in fatal crashes were males aged 17 to 25, 6% were female (ibid).

A number of initiatives have been launched in order to address the issue of young driver safety, notably the Graduated Licensing Scheme in July 2000 that restructured training and licensing requirements. In November 2004 the NSW government launched a discussion paper entitled "Improving Safety for Young Drivers" and in November 2006 established an advisory panel to devise strategies to save young drivers' lives. The initiatives that came into effect in July 2007 included limits on peer passengers, automatic suspension for speeding drivers, a ban on mobile phone use and the requirement for novices to complete 120 hours of supervised driving.

Still, legislators, researchers and the community remain focussed on improving what is commonly referred to as an "unacceptably high" fatality rate. The figures for NSW are part of a trend that extends across Australia and internationally. In 2006 in Victoria 23% of all fatalities involved young 17-25 year old drivers despite them accounting for only

14% of all Victorian licence holders (TAC, 2007). In the United States, 15-20 year old drivers accounted for only 6.6% of the nation's licensed drivers but were involved in 14.8% of all fatal crashes in 2000 (NSC, 2004). In fact 38% of all deaths among 16-19 year olds in 2004 were related to motor vehicle crashes (National Centre for Injury Prevention and Control, 2004) while motor vehicle crashes are the leading cause of death for young people in the U.S. (Subramanian, 2006, cited in Hutchens et al., 2008). A similar picture emerges in the United Kingdom where 17-20 year old male drivers are over six times more likely than 40-59 year-old males to be injured while driving and almost ten times more likely to be killed or seriously injured (ABI, 2005). Despite various interventions such as major social advertising campaigns, changes to legislation and traffic laws, and the introduction of graduated licensing schemes (GLS) these rates of death and injury amongst young drivers have, at worst, remained constant, or, as in the UK, increased steadily since 2000 (ABI, 2005).

1.2 Research Aim

More than any other group in Australia, parents take on the role of supervising driver when their sons and daughters become learner drivers. They also provide a significant model of driver behaviour in the years leading up to a novice driver's application for a learner's permit. As such parents are a dynamic influence on a young driver's ensuing skill development and behaviour. This project aims to investigate the nature of parental influence on and communication with novice drivers within the NSW environment in order to understand the challenges experienced by both groups and how this information can be used to contribute positively to improving young driver safety.

1.3 The Role of Social Marketing

This research project has been carried out with a view to a practical application of its findings. Specifically, the goal is to apply the findings to an effective social marketing intervention in order to bring about positive behaviour change. The findings have added to awareness of the parent-young driver dynamic and the formative influences on young drivers. As such the information could be useful in understanding and then addressing relevant factors within the environment of young drivers.

1.4 Thesis Structure

This thesis has been structured in six sections, as the following overview shows. Chapter 2 provides a comprehensive review of the extant field of relevant literature. The evaluation also examines the young driver's learning process, with particular reference to the relationship between driving skill and driving behaviour and the implications for current training regimens. The chapter also addresses the influences on young driver behaviour including that of parents during learning and post-license. This review identifies the current shortfall in research in relation to parental influence on and communication with young drivers and thus places this project within the existing range of literature.

Chapter 3 documents the research methodology for this project, which is exploratory in nature and thus qualitative by design. This section explains how qualitative methodology facilitates exploratory research and outlines the recognised advantages of a qualitative approach. Three phases of focus groups were conducted in order to find "the range of opinion and feelings about a subject" (Kruger & Casey, 2000, p201). The focus group research methodology used in this project is detailed including the

sampling and data collection processes. Analysis was a continuous system of data reduction that involved the identification of emergent themes and their exploration in subsequent focus group phases. Once information gathering ceased the entire body of information was analysed for patterns that were developed, grouped and confirmed into themes.

Chapter 4 discusses the research findings, beginning with the three major themes revealed after data analysis: Risk Topography, Young Driver Topography, and Parental Topography. Each theme is composed of a series of contributing components and characteristics such as, in the case of parental topography, teaching issues, parental behaviour and risk communication. However it is shown that parental and young driver topography, the characteristics, behaviours and inter-relationships of these two groups, have the greatest impact on the nature of parental involvement.

The research findings are then applied to social marketing theory in Chapter 5, which begins with an overview of this evolving form of marketing philosophy. The focus of social marketing is on positive behaviour change within society. When applied to the issue of young driver behaviour, a social marketing intervention could address the social environment of the young driver and the environmental factors of parental behaviour and communication. These components contribute to achieving the larger goal of promoting safe driving behaviour.

The thesis concludes with Chapter 6. This section observes the limitations of the project in terms of focus group composition and location, and the implications for upstream and downstream social marketing interventions. This chapter also discusses the implications

for further research. A number of strategies have been suggested based on these

research findings; both the findings and the strategies themselves present opportunities

for further, long term, study.

2. Literature Review

2.1 Introduction

This review is designed to provide an overview of relevant literature, both nationally and internationally, and place this project within the body of extant academic literature. There is a wealth of information relating to driving behaviour in general and young drivers in particular, much of it motivated by the desire to understand why young people figure so prominently in accident statistics. Interestingly, and sadly, this extensive body of material does not yet appear to have contributed to a reversal of the trend in road-related death and injury of young people. Teenage drivers, while safer than they were ten years ago, are still involved in twice as many crashes, fatal and non-fatal, as drivers aged 30-59 (Ferguson, Teoh, & McCartt, 2007).

A comprehensive evaluation of the extant literature will examine the relationship between driving skill and driving behaviour during the young driver's learning process. The chapter begins by examining literature that focuses on the manner in which young people learn to drive, then explores driving skill, the primary focus of novice training, and the vital, but under-rated, development of driver behaviour. The chapter also addresses the range of influences that shape young driver behaviour. Integral to this is a discussion of the role of parents during learning and post-licensure, particularly in the first six months of increased accident likelihood. The review closes by examining the significant strategies that have been implemented in order to support parents' positive intervention in novice driver safety.

2.2 The Process of Learning to Drive and Obtaining a Licence

Last year in NSW 176,239 people applied for a permit to learn to drive (RTA, 2007). In doing so they actively committed to developing the skills and knowledge required to legally drive a car unsupervised. These two components are tested when applying for a license. However, research shows (Deery, 1999; Ulleberg & Rundmo, 2002) that behaviour will also have a significant impact on how effectively a driver will control their vehicle on the road. Behaviour is not taught during the instructional phase, nor tested in any current driver licensing assessment; the focus is on knowledge and recall of the road rules accompanied by an ability to manoeuvre and control the vehicle.

Driving is categorised as a manual task that is learnt largely through practical experience. Smith (1992, p31) cites Kolb's (1984) definition of learning as "the process whereby knowledge is created through the transformation of experience". This description is especially apt when applied to young drivers who, under the guidance of their supervising driver, understand, learn and develop the practical skills required behind the wheel. According to Kolb this experiential learning cycle consists of four phases, which are represented in Figure 2.1. Concrete experience, in this case a driving session, is followed by a period of reflective observation during which those experiences and their significance are absorbed. A period of abstract conceptualisation then follows in which understanding transforms into a theory, which explains the experience, and finally an active experimentation phase occurs during which new theory is put into practice in order to improve the situation.

Figure 2.1 The Experiential Learning Cycle (Kolb, 1984)

When learning to drive the novice observes demonstrated driving behaviour, under the guidance of their supervising driver, and then practices the correct sequence of actions behind the wheel. This development is consistent with the process by which adults learn a complex motor, or physical, skill. In the case of driving, skill is ultimately assessed during the driving test, which specifies mastery of a range of specific competencies.

2.2.1 Gaining the Skills

Fitts and Posner (1967) suggest the development of a new and complex skill, such as driving, occurs in three phases that merge gradually from one to the next without a clear transition or turning point. This process is represented in Figure 2.2. Stage 1 is the early or cognitive phase in which the learner understands the task, the sequence of manoeuvres and absorbs information from the instructor. In stage 2, the intermediate or associative phase, the learner driver is trying their own patterns of behaviour and gradually eliminating errors. By stage 3, the final or autonomous phase, driving

behaviour becomes increasingly independent and requires less skill processing. This enables the driver to engage in dual tasks such as talking or listening to music.

Figure 2.2 The Phases of New Skill Development (Fitts & Posner, 1967)

During each of these three stages a young driver is absorbing information about road rules, gaining experience, and gradually increasing in confidence, thus honing the skills that will be assessed during the driving test required for licensure. Deery (1999) makes an important and useful distinction between the types of skill used while driving. He claims the *basic* skill of vehicle handling and knowledge of traffic regulations is developed relatively quickly, perhaps after only 15 hours of driving experience. This is a view supported in the literature by Hall and West (1996). The more *complex* perceptual and cognitive skills required to safely travel in the driving environment are developed at a significantly slower rate. Crash statistics would indicate that these relatively low levels of higher order perceptual and cognitive skill and experience can be lethal when combined with novice drivers' poor risk assessment skills.

Carcary, Power and Murray (2001) suggest the driving test will occur towards the end of stage 2 before transition into stage 3. Their study of a group of young drivers in the

three months post licensure, when they note they are most vulnerable to accident involvement, found they had lower self-perceived skills and felt less safe while driving. In contrast Deery (1999) states the propensity of young drivers to overestimate their skill and underestimate the level of risk results in their particularly high accident rates. Katila et al. (2004) agree on the connection between accidents and confidence - particularly that which is skills based - but suggest it is overly simplistic to say increased accidents are the inevitable result of overconfidence.

It appears it is the type of skills training which provides the key to understanding the effect of confidence on novice driver safety. Senserrick and Swinbourne (2001) agree increasing vehicle handling skills can result in the over-confidence that contributes to increased crash rate. By contrast, they specify training that enhances risk awareness and driver attitudes effects positive behavioural change that is likely to reduce accident involvement. Deery (1999) and Jonah (1986) refer to the "young driver paradox", a term used by Warren and Simpson (1976) to describe the difficulty of developing hazard and risk perception, normally acquired through years of experience, without exposing novices to crash risk. Deery (1999) is critical of driver training which traditionally fails to address problematic novice driving elements, such as hazard perception.

Despite gaining the necessary skills to pass a license test, research shows that novice drivers have an extremely high crash rate in the first year of driving (Simons-Morton, 2007), particularly in the period immediately after licensure (Gregerson et al., 2000; McCartt, Shabanova, & Leaf, 2003). This has been explained by the disproportionately high rate of risk young drivers are exposed to when driving in the first few months of

licensure (Sagberg, 1998). In other research, Mayhew, Simpson and Pak (2003) suggest that crash rates during this danger period, while high, drop dramatically in the first six months. These findings indicate the need for safety strategies that focus on this specific timeframe and support the graduated licensing scheme (GLS) as a method of providing young drivers with a structured approach to improve their driving while gaining experience. Details of the GLS in Australia, its history and application are discussed later in this chapter.

2.2.2 Developing Driver Behaviour

Skill level is only one of the relevant elements to be examined when discussing the process of learning to drive and the phenomena of new driver road statistics. Several researchers (Elander, West & French, 1993; Deery & Love, 1996; Deery & Fildes, 1999) have distinguished between driving skill, or performance, and driving style, or behaviour. An example of driving skill is the time taken to respond to traffic hazards that have been encountered. By contrast, driving behaviour relates more strongly to driving choices and acquired habits such as speeding, risky behaviour such as drink-driving and aggressive action such as tailgating. Driving skill is expected to improve with practice over time as young drivers have more opportunity to refine and develop their techniques, as is the case with any complex motor skill.

The current learning process that is prevalent in many countries around the world, including Australia, emphasises road rules and driving skill but does not teach or formally emphasise positive driving behaviour. This may be a significant omission in current driver training. Studies have found (Clarke, Ward & Truman, 2005; Clarke et

al., 2006) that a large percentage of accidents are due to drivers' voluntary risk behaviour, not skill deficit.

Within the literature it seems there is a lack of understanding of how behavioural elements can be effectively integrated into driver training. Although this is an important part of training, programs do not appear to emphasise behaviour based components. As a result, skills based intervention programs have not had the desired impact on statistics. Mayhew and Simpson (2002) argue for empirically based education and training programs that incorporate a driver behaviour element. These researchers also highlight the lack of current understanding of novice driver behaviour. Carcary, Power and Murray's (2001) study of learner and novice drivers supported this view and called for further investigation of how behavioural predispositions are formed. This research found behavioural intentions and attitudes are formed before a young driver comes to the task of learning to drive. Their conclusions would suggest the years leading up to licensure could critically influence not just novices' performance of skills related aspects of driving but also the judgements and limits they apply to their actions behind the wheel, that is, their driving behaviour.

2.2.3 Influences on Young Drivers

As learner drivers prepare for licensure they focus on developing their skill level for formal assessment. As described previously, young drivers learn through the process of supervision and acquiring experience-based knowledge. Due to the costs involved in securing an accredited, professional driving instructor, the role of driving instructor is undertaken, in the vast majority of cases, by parents who concentrate on ensuring the young driver is knowledgeable about the rules of the road and is developing skill behind

the wheel. In contrast, the particular driving behaviour of the learner driver is not taught; it is acquired and shaped by a number of factors. The extant literature suggests an individual's driving behaviour is influenced by such factors as:

- individual personality

- peers

- circumstance

- parenting practices

- parental driving habits.

2.2.3.1 Personality

A number of researchers have investigated the link between personality and driving behaviour. Deery and Fildes (1999) concluded that novice drivers are not a homogeneous group. They identified five subtypes, ranging from an emotionally and behaviourally well-adjusted cluster to a high risk or deviant behavioural group characterised by aggression, speed and sensation seeking (see Table 2.1 below). The authors caution against blanket strategies to address the safety problems of young drivers, preferring a more targeted approach, although financial and logistical realities make this suggestion hard to implement.

Table 2.1 Novice Driver Personality Subtypes (from Deery & Fildes, 1999)

The impact of personality has been discussed further in terms of its effect on attitudinal determinants of driving behaviour. Ulleberg (2002) identified six personality subtypes including two high-risk clusters that exhibited driver aggression, a risk taking attitude, a risky driving style and a high degree of accident involvement. Ulleberg and Rundmo (2003) found high levels of sensation seeking, normlessness and aggression were associated with risk taking attitudes and risky driving behaviour. Patil et al. (2006) also linked personality factors to driving records and accident involvement, finding a competitive attitude, risk taking and hostility contributed to incidents. Research has shown these attitudes are measurable well before novice drivers gain their learner's permit. Waylen and McKenna's (2008) study of 11 to 16 year olds found their attitudes towards risky driving behaviour were present from early adolescence and were strongest around 14 years of age.

In an Australian context, Palamara and Stevensons's (2000) study of young drivers and speed found those with a high level of risk taking and "driver confidence-adventurousness" had the highest risk of receiving a speeding infringement notice in their first 12 months of licensure. More recent Australian research in this field (Vassallo et al., 2007) found young drivers with a tendency toward risky driving differed from others on aspects of temperament style, behaviour problems, social competence, school adjustment and interpersonal relationships.

These various researchers have contributed to the body of evidence that supports the use of personality classifications in safety campaigns that aim to modify risk taking attitudes and thus dangerous driving behaviours. This is the "segmentation" strategy used in many social advertising campaigns designed to address the current death and injury level amongst young drivers. Ulleberg (2002) has concluded that a significant limitation to this approach is that those who are least responsive to these social advertising and safety communication campaigns, that is the risk takers, are in fact those who are most in need.

2.2.3.2 Peers

Another factor that shapes the behaviour of novice drivers is the influence of their peers. This influence may take a range of forms: distractions created by peers while passengers in the vehicle; pressure exerted by peer groups to drive in a particularly risky manner; or the impact of peers on young drivers' decisions to drive under the influence of drugs and/or alcohol. Doherty, Andrey and McGregor (1998) make a link between the presence of passengers and high accident rates. They found that accident rates of 16 to

19 year olds with passengers in the car were approximately twice as high as those without; accident rates increased significantly with two or more passengers present.

These findings add weight to earlier work (Rolls & Ingham, 1992; Arnett, Offer & Fine, 1997) that also suggests young drivers' behaviour can be affected by who is in the car, as they drove faster when alone or with peers, than with parents. Regan and Mitsopoulos (2001) also found young drivers would be more careful with a parent in the vehicle compared to the risk taking behaviour likely if peers were present. Preusser, Ferguson and Williams (1998) also point to passengers as being likely to induce risk taking behaviour by young drivers and providing a distraction at a time when novice drivers should be concentrating on and refining driving skills. Fergusson, Swain-Campbell, and Horwood (2003) and Simons-Morton, Lerner and Singer (2005) indicate risk taking behaviour is greatest among male teenage drivers when in the car with male passengers. Neyens and Boyle's (2007) research into the link between distractions and teenage driver crash types examined the effects of passengers, along with cognitive, mobile phone and in-vehicle distractions. Their findings suggested that each distraction type had different effects on teenage driver crash type and specifically that drivers distracted by passenger and cognitive factors were more likely to be involved in rear-end and angular collisions.

The debate on the effect of passengers is extended by research that indicates novice drivers feel their peers can be a positive influence as passengers, warning of speeding and approaching hazards (Regan & Mitsopoulos, 2001). Keating (2007) sums up a conundrum for road safety researchers and legislators, describing peers as the primary mediators of cultural attitudes towards safe or risky driving. That is, peers are the filters

through which novice drivers absorb the defining attitude that influences their developing driving style. As authority figures in this context peers are important keys in disseminating the road safety message.

2.2.3.3. Circumstance

The situation, or circumstance, in which novice drivers find themselves appears to be another determinant of accident rates. Doherty, Andrey and McGregor (1998) found figures for 16-19 year old drivers were higher than those of 20-24 or 25-59 year olds and disproportionately high on weekends and at night. The authors were unable to suggest a reason for these findings although the issue appears to be addressed in research by Laapotti et al., (2006) which highlighted differences between age groups and their reasons for driving. The authors concluded that night driving and driving for fun or leisure was more typical for young drivers; driving to and from work was more typical for middle-aged drivers. The research also found that night driving was over-represented in young drivers' fatal and self-reported accidents, compared to their share of driving at night, adding to evidence that night driving is a danger time for novices.

2.2.3.4 Parenting Practices

Parents can also significantly shape novice driver behaviour. Shope et al. (2001) connected poor parenting, namely low levels of discipline, nurturing, and involvement, with a higher risk of serious driving offences and crashes. Hartos et al. (2000) and Hartos, Eitel and Simons-Morton (2002) found that low levels of parental involvement and lenient restrictions are significantly related to high rates of risky driving behaviour and motor vehicle crashes. Research by Beck et al. (1999) and Beck, Shattuck and Raleigh (2001) reached a similar conclusion, finding that low parental supervision

levels and a lack of awareness of the risky driving being undertaken correlated with high levels of risk behaviour such as speeding. Discord between parents and young drivers, particularly male, about set driving restrictions also contributed to a higher level of risky behaviour (Beck, Hartos & Simons-Morton, 2005).

2.2.3.5 Parental Driving Behaviour

The impact of parents has been examined within the literature predominantly in terms of how children model their parents' driving style. The research suggests that this influence will be felt significantly in the years leading to driver training, during the learning phase when parents act as supervising drivers and, to a varying degree, after licensing.

Research indicates strongly that the years spent being exposed to parental habits will have an impact and that parents' risky driving style will be repeated when their children take the wheel of the car. Ferguson et al. (2001) found the relationship between parental and novice driving history is particularly strong in the first few years of licensure with parental crashes and violations strong predictors of their children's records. Bianchi and Summala (2004) and Wilson et al. (2006) extended the discussion on the link between parent-child driving styles. They found children's incidents of dangerous driving, crashes and violations would be related to the same behaviour by their parents. Similarly a study (IIHS, 1999) on crashes and violations of teens and their parents found teens whose parents had three or more violations in five years were 38% more likely to have accrued violations than those whose parents had no violations.

A key feature of these studies is their dominant focus on a negative parental driving influence. An exception to this approach is that of Taubman-Ben-Ari, Mikulincer and Gillath (2005) who found that not only anxious and reckless driving styles, but also a careful parental driving style, were reflected in the driving style of their children. (It should be noted that the "offspring sample" in this study consisted of drivers aged 18-33, mean age 22.33 years, compared with the much lower age of young drivers involved in other studies.) The authors found the most significant associations emerged between fathers and sons, and mothers and daughters.

The results of all these studies indicate that elements of novice driver safety campaigns, to be truly effective, need to be directed at reshaping parental driving behaviour in order to provide more positive modelling.

2.3 The Role of Parents

Of the range of influences that shape young novice driver behaviour this project focuses in particular on parents, that is, their influence on young drivers during training and after licensing. The level and effectiveness of parental involvement varies widely, possibly because, as Simons-Morton and Hartos (2003) conclude, parents don't appreciate how risky driving is. As a result many feel they have fulfilled their obligations once their son or daughter has successfully passed a driving test and that at this point their influence is neither needed nor welcome. At the same time many young drivers may be keen to assert their independence and will challenge or at least want to minimise parental control.

Road statistics would not be so concerning if at licensing novice drivers were sufficiently skilled and experienced to drive without incident or further intervention – either from parents or other sources. Research clearly indicates the link, during training and after licensing, between supervision and safety. This has been addressed in earlier discussion (see Section 2.2.3.4: Parenting Practices).

Research points strongly to the fact that once novice drivers take to the road on their own, without a supervising driver, their safety is challenged. The accident rate during practice - that is in the company of a supervising driver, usually a parent - is significantly lower than during the early phases of licensure. The safety of the novice is certain to be influenced, positively, by the presence of an adult supervisor, most likely a parent (Williams et al., 1997; McKnight & Peck, 2002). Learner drivers have been found to have the lowest crash risk of any age group (Gregersen, Nyberg & Berg, 2003). Once the required element of supervision is removed upon licensure the safety ratio changes dramatically. Gregerson, Nyberg and Berg put the health risk 33 times higher and the accident risk 10 times higher after licensure while Mayhew, Simpson and Pak (2003) put the crash rate of learners as ranging from approximately 10% of novices in the first month to 20% over the first year.

Parents are the primary driving instructor - and early driving influence - for most young novices yet research indicates their motivation for the task at hand may be compromised. Perhaps it is for reasons of time and/or convenience that they are, as Simons-Morton and Hartos (2003) concluded, ambivalent about teen driving risk and want to reduce the amount of time they spend transporting teens. Keating (2007) also states the underlying goal of parents - and teens - is obtaining licensure as quickly as

possible and reducing dependence for transport. This conflicts with the goal of developing a safe and cautious driver with research into parental imposed licensing delays and driving restrictions finding slowing licensure can produce safety benefits. In the study by Hartos, Eitel and Simons-Morton (2001) parents used self-determined judgements of teen "readiness", practice, skill mastery and participation in driver education before allowing attempts at licensure. They then limited access to driving in the first month of licensure. The study concluded that this combination reduces teen risky driving behaviour particularly if limits are imposed on exposure to high risk conditions such as carrying teen passengers and driving at night, in bad weather, in heavy traffic or on high speed roads. Despite this finding, other studies (Beck, Shattuck & Raleigh, 2001; Hartos et al., 2000) indicate that few parents set limits in these situations and even fewer set limits over the longer term.

These various studies contain two powerful research conclusions for road safety legislators. First, low parental involvement is clearly linked to high accident rates, second, accident rates for the first six months of licensure drop significantly and gradually decline over two years (Mayhew, Simpson & Pak, 2003). This presents a window of opportunity in which to increase young driver safety. Bingham, Shope and Raghunathan (2006) call for parents, supported by appropriate tools and knowledge, to provide effective supervision in the first years of licensure. They conclude interventions that include parents are particularly pertinent to young driver safety.

2.4 Existing Strategies to Increase Parental Involvement – the GLS Model

One of the most significant countermeasures to the novice driver road toll is the introduction of the graduated licensing scheme (GLS). In some jurisdictions this is also referred to as graduated driver licensing (GDL) or graduated licensing system (GLS). For the purpose of this discussion, the abbreviation GLS will be employed in reference to the graduated licensing scheme.

Elements of GLS were first introduced in 1964 in Victoria, followed by NSW in 1966. Between the learner stage and full licensure was a probationary period that allowed solo driving but limited speed and imposed sanctions for misdemeanours. The first law creating a formal GLS was enacted in Maryland in 1978, followed by New Zealand in 1987. The concept began to take hold in the 1990's, spreading throughout the USA, Canada and parts of Europe (McKnight & Peck, 2002). Although GLS requirements in these numerous jurisdictions have continued to evolve and may differ in terms of restrictions, sanctions and length of time spent at established stages, the basic tenet of the program remains the same: to allow skill development in a more forgiving environment (Mayhew, Simpson & Pak, 2003) and further, to gain driving knowledge, skills, attitudes and experience under conditions of minimal risk (Hedlund, 2007).

Parental involvement is integral to the operation and success of the GLS; without it there is limited enforcement of GLS restrictions and novice drivers will not receive the necessary level of practice (Mayhew, Simpson & Pak, 2003). There is also an increased opportunity for families to have a longer and more involved role in driving (Lonero, 1999) which opens intervention opportunities. Parental supervision in a GLS also

increases overall practice and accelerates skill development (Mayhew & Simpson, 2002) thus addressing the performance element of young driver danger. However the system does not necessarily focus on developing the safe behaviour - or driving style - that is a vital part of the solution.

The strength of GLS lies in allowing increased experience in a controlled environment that reduces exposure to traffic risk, delays the age of application for licensure and allows more time for parental influence (Beck, Hartos & Simons-Morton, 2002). The GLS in its many forms usually comprises the same basic elements: the learner stage, provisional stage(s), and full license. Fergusson, Swain-Campbell and Horwood (2003) suggest restrictions on night driving and passenger numbers work by keeping drivers out of hazardous situations rather than by directly addressing risk factors. However these restrictions mitigate the combination of youth and inexperience (Williams, Ferguson & Shope, 2002). Parents and young drivers responded favourably to the GLS restrictions and permit requirements, although young drivers did not strongly endorse passenger limits (ibid).

Continued extensive examination of GLS as an effective intervention strategy has shown encouraging results. Goodwin et al., (2006) concluded the extended learning experience is positive for many families. An analysis of 27 studies in the U.S. revealed consistently positive results, usually crash reductions, despite a range of study goals, methods and analyses (Shope, 2007). The level of crash reduction was also generally more significant than the effect produced by other interventions (Foss, 2007). In New Zealand, where GLS was introduced in 1987, crash figures have fallen, (Begg & Stephenson, 2003) and in Europe, where a wide variety of systems operate, most

countries are moving to multi-phased licensing systems (Twisk & Stacey, 2007). While the licensing age in most of Europe is 18 a trend is emerging to lower the age for acquiring a learner's permit in order for applicants to gain more experience. While similar moves in the U.S. have lowered permit age between three and six months, changes in Europe have been more dramatic: Sweden lowered the age from 17.5 years to 16; Norway dropped the permit age from 17 years to 16 (Williams, 2007).

In Australia components of GLS were introduced decades ago while the common three-stage system of learner, provisional and full licence was introduced in the 1990s. Now there is a variety of implementations throughout Australian states and territories with several advancing beyond the three-stage structure (Senserrick, 2007). In NSW requirements and restrictions increased from July 1st, 2007: first level provisional licensees (P1) are limited to one passenger aged under 21 years between 11pm and 5 am (with minimal exceptions); speed infringements will result in a three month suspension; and, significantly, supervised practice rose from 100 hours to 120 hours. This increase and the considerable cost of lessons with a professional driving instructor mean that parents are, and will likely remain, the primary supervising driver. Thus they play a critical role in shaping the quality and preparedness of young drivers who take to Australian roads.

2.4.1 Parents and GLS, Post licence

Studies indicate a positive result from GLS safety measures and support for the system but while parents are largely responsible participants and supervisors in the learner phase their involvement drops off after the novice drover is licensed. Beck et al. (2003) found when new GLS requirements were introduced parental supervision and

instruction during the learner phase increased significantly but supervision post license did not. The authors concluded that GLS is not necessarily related to increases in supervised driving or restrictions following licensure. They describe the "boomerang effect" wherein the increases in parental supervision required by the introduction of GLS decline post licence, as there is no mandated level of involvement. They call for programs that concentrate on helping parents set and enforce restrictions, thus making them effective driving regulators who allow novices to gain experience as exposure to risk is gradually increased. They add that programs such as a GLS will be not be as effective as when combined with programs to enhance parental involvement. GLS is a strong foundation on which to build these programs as research (Hartos et al., 2005) also indicates parental limit setting is higher in states where a GLS was operating.

Simons-Morton and Hartos (2003) are among those to conclude parents need motivational strategies to encourage them to adopt restrictions and driving agreements in order to allow young drivers to gain experience while limiting exposure to risky conditions. The importance of this involvement has been described as second only to GLS in showing promise to reduce novice road trauma, with parents the "primary supportive context for safe driving" (Keating, 2007, p155). To increase the effectiveness of GLS, a range of strategies has been developed and implemented to better support parents attempting to maintain a level of post license involvement.

2.4.2 I Promise, Checkpoints and related programs

One scheme designed to help parents keep young drivers safe is the I Promise Program (IPP, 2007) that was launched in Ontario, Canada, in 2001. IPP was developed by a parent, Gary Direnfeld, who was concerned about his son's safety as a young driver.

The program establishes a contract between parents and young drivers that commits to sober driving, avoiding mobile phone use and limiting passenger numbers. A sticker is also attached to the vehicle that enables other motorists to anonymously report the driver's behaviour to a call centre. A summary is then sent to the vehicle's registered owner enabling parents to monitor and then discuss risky incidents.

An evaluation of IPP (Votta & Mackay, 2005) found 75% of young drivers and 85% of parents perceived the contract as a useful communication tool. The authors also recommended significant modifications to the program, many of which were introduced. These included making the contract and sticker free of charge, available independent of each other, and available online (instead of via mail). Phone calls reporting risky behaviour were also made directly to the family. The key findings of this research were that recall of the contract was poor after six months and only 20% of families continued with the program after the study period. As the contract is presented as a tool to promote communication between parents and young drivers this result underscores the need for the program to provide ongoing support.

There were some common characteristics among the contracts that the families developed. Few involved in the IPP evaluation included rewards in the contract when the novice driver met their commitments. Conversely the removal of driving privileges was the main consequence for infringements. This had a strong impact on rural families, with parents complaining of a loss of their freedom when they were forced to revoke the young drivers' access to a vehicle and were again relied upon for transport. Alongside parents' desire to prepare their children to be licensed quickly (Simons-Morton & Hartos, 2003; Keating, 2007) may be their reluctance to impose censure which would

see both parties lose their newfound independence and return parents to their role, albeit temporarily, as the primary provider of transport.

The study highlights issues about the type of parental intervention. Another issue is the timing of introducing intervention. The following parent comment posted on the IPP website and contained in Box 2.1 makes a powerful observation which highlights the realities many parents face.

> *Box 2.1*
>
>
>
>

http://www.ipromiseprogram.com

Without a framework to implement, such as IPP or Checkpoints (discussed below), many parents see themselves as having only two choices: the "tough-guy" who enforces rules, or non-involvement. Support programs could enhance communication skills to effectively change the nature of the involvement from negative and reactive to positive, pro-active, and thus more effective.

The difficulty of timing the intervention is addressed in the Checkpoints Program. This strategy educates parents on the need for and methods of establishing early limits,

working on the premise that that it is easier to establish and maintain restrictions than introduce new ones. In this environment novices can gain experience more safely and are encouraged to take part in the program for up to 12 months. During the learner period families receive a video followed by a series of newsletters about the risks of novice driving and the value of parental management. Just prior to licensing families receive a parent-teen driving agreement that restricts driving in risky conditions such as at night and with teen passengers. More privileges are allowed as the novice demonstrates experience and responsible behaviour. Further newsletters are sent in the following six months in an effort to support parents in maintaining the program.

The Checkpoints Program's clear structure, supplemented by a steady flow of support and information, produced promising results in early assessment of a Connecticut pilot study (Simons-Morton, Hartos & Leaf, 2002). Parents and teens were responsive to the materials received and at three months families reported stricter driving limits in risky conditions. The effect of early limit setting was underscored by the results of a study in the state of Maryland (Simons-Morton, Hartos & Beck, 2003) where GLS operates. At nine months participating families were more likely than the control group to use a driving agreement and communicate about driving but driving limits evident at one month and significant at four months declined over time. It would appear that Checkpoints' strength in opening and supporting parent-novice communication is challenged by the practical difficulties of maintaining restrictions.

Another issue to emerge (Hartos et al., 2004) is that clear communication of mutually agreed rules can have an impact on the effectiveness of parental intervention. The study identified a high degree of miscommunication as a result of low parent-teen agreement

on the rules and poor enforcement. The authors concluded that a formal agreement might increase effective intervention.

The formulation of parent-novice contract has become the focus of a range of interventions from sources as diverse as community groups, insurance companies and car manufacturers, although few have been formally assessed. Results of an intervention as part of the Raising Healthy Children Project (Haggerty et al., 2006) focussed on pre-licence information about communication and risky behaviour, and post licence information about forming a parent-novice driver contract. The analysis showed that participants were less likely than the control group to drive under the influence of drugs or alcohol but there was no difference in terms of traffic infringements or accident involvement. There was no investigation of the consequences of contract violation. It is likely the effectiveness of the document would be reduced unless appropriate consequences for driving violations are agreed to and enforced. Similarly, studies (Goodwin et al., 2003; Chaudhary, Ferguson & Herbel, 2004) on the effects of instructional material sent to parents to encourage them to become more involved in their children's driving found awareness was raised but there was no significant behaviour change or measurable influence on the imposition of post licence restrictions.

An extensive study (Simons-Morton et al., 2006), which tested intervention levels at three, six and 12 months, was able to show the link between increased parental management and positive driving outcomes. Novice drivers in the Checkpoints Program reduced risky driving behaviour and traffic violations but, significantly, there was no effect on crashes. While researchers found passive persuasion can increase and maintain parental intervention on driving limits they also concluded the communication between

parent and novice driver – in the form of a contract – needs to be understood more thoroughly in order for it to operate most effectively. The research results emphasised the need to establish early driving limits given the fact that intervention was highest at licensing and then declined over the following 12 months.

In Australia licensing agencies make resources available to novice drivers and their families that focus on helping parents increase the amount and nature of learners' supervised driving (Mulvihill, Senserrick & Haworth, 2005). A gap exists in resources to assist unsupervised driving by provisional licensees. In contrast, this is where agencies in the US direct their attention. An RTA report (2004) focussed primarily on skill development of learners and restrictions for novice drivers. The document identified three groups of possible initiatives: experience, training and maturity of young drivers; vehicle and licence restrictions; night driving restrictions. A report from Austroads (2000) broadly identified the objective of ensuring support for young drivers from the community, family and the driver training industry but provided little in the way of suggested practical implementation.

While there appear to be few strategies that specifically assist effective parental intervention, Australia has followed the US trend of formulating parent-novice driver contracts. They have been successfully implemented because, according to research (Kazdin, 1989; Kirschbaum & Flannery, 1983; both cited in Simons Morton, Hartos & Leaf, 2002), they set clear expectations, standards and consequences and allow for greater privileges as experience increases. One such document is the Roads 2 Survival Parent-Young Person Safe Driving Agreement, part of a community based support program that was launched in South Australia in 2004.

A newer version of this approach is the Vehicle Access Agreement (Whelan & Oxley, 2007) that is formulated between parent and young novice driver. Limits on night driving and driving with peers are specified in the agreement and are gradually reduced over 12 months as the novice gains more experience. The document also contains extensive information on the dangers of novice driving and the benefits of parental intervention but, when the agreement is flouted, there is no framework for parents to open communication or introduce punitive measures. This limitation appears to be common to most, if not all, driving contracts.

The Australian GLS is also unique in that age requirements for learners and provisional license holders are generally higher and stages of the GLS are generally shorter than in the US. This raises the issue of cultural relevance for strategies: the conclusions of US–based research and the results of interventions may not necessarily translate into an Australian environment. This relates in particular to the terms of parent imposed limits on vehicles: older novice drivers may be more likely to own their own car and less likely to take note of parental influence.

2.5 The Role of Social Marketing

Given that this project strives to apply research findings to a social marketing intervention, it is worthwhile at this point to briefly examine the nature of this marketing approach in relation to existing road safety literature. (A more detailed discussion on the development and nature of social marketing can be found in Section 5: Application of Research Findings to a Social Marketing Intervention). The foundations of the discipline were laid in 1971 when Kotler and Zaltman discussed the application of marketing practices in order to achieve socially desirable goals, or in the

words of Andreasen (1995) to "influence the voluntary behaviour of target audiences in order to improve their personal welfare and that of their society."

Social marketing strategies involve the development of downstream and/or upstream strategies. A downstream approach provides the individual with tools for a safe and healthy lifestyle, while an upstream strategy addresses the social and physical determinants of behaviour. This "broader perspective' (Hastings & Donovan, 2002) often takes the form of government strategies to restrict, educate, or communicate. Donovan and Henley (2003, p3) identify the three major methods of achieving the objectives of a social marketing campaign as:

- education: the provision of information

- motivation: persuasive tactics

- advocacy: socio-political action

Campaigns designed to change behaviour within a social context are structured after considering the needs of all stakeholders, the change needs of the target audience, and the effect of the environment within which the target audience exists. These evaluations are made from a standpoint underpinned by a theoretical understanding of behaviour change. The Theory of Reasoned Action (Ajzen & Fishbein 1980) provides such a framework for examining the interplay of knowledge, attitude and social norms on behavioural intention and, ultimately, behaviour. Fishbein et al (2001) add further dimensions to such an understanding with the identification of eight key determinants of behaviour: intention, environmental constraints, skills, anticipated outcomes (attitude), social norms, self-standards, emotion, and self-efficacy. By analysing these influences

on current behaviours, social marketers are better equipped to direct target audiences into more positive behaviour change.

Social marketing has been utilised in road safety campaigns in order to address the problematic driving behaviour that negatively impacts on accident statistics. However, given increasing social and political concern over death and injury figures, particularly among 17 to 25 year old drivers, both social marketing based and conventional road safety advertising appear to have had limited success. One possible explanation for this is the predominant use of fear appeals. Research suggests this may be a problematic strategy (Hastings et al., 2004; Rossiter & Thornton, 2004; Tay, 2004). Hastings et al highlight the alternative use of humour, positive reinforcement appeals to develop good behaviour and, particularly for a younger target audience, the use of "post-modern irony".

A second point is also at issue when discussing the effectiveness of social marketing campaigns in improving road safety: the focus on social advertising rather than a comprehensive social marketing campaign. Social marketing strategies are designed to promote positive behaviour change, for the benefit of the individual and society, using elements of the marketing mix. When Kotler and Zaltman defined this new discipline in 1971 they also specified that social marketing "is a much larger idea that social advertising" (1971, p5). Yet the two are often confused, as a "result of social marketers taking too narrow and inflexible a perspective on the challenges they face" (Stead & Hastings, 1997). While advertising can be a powerful tool in educating young drivers and their parents about road safety, information provision in order to raise awareness is not a sufficiently powerful to change behaviour. The communication effects gap

(Snyder, 2007) is used to describe the target audience's inability to positively change their behaviour despite being aware of problematic behaviour (see Section 5.1.4: Theoretical Foundation). Other causes of unsafe driving behaviour need to be examined and understood, hence the focus of this project on parent-young driver communication, behaviour modelling, and peer influences. This information can then be directed into a comprehensive upstream and downstream social marketing campaign that addresses current behaviours and their stages of development.

2.6 Conclusion

There is a wealth of academic literature investigating driving, including a strong examination of novice drivers. Research is far more limited on the effects of parental influence and effective parental intervention. Leading researchers in this field, Bruce Simons-Morton and Jessica Hartos have noted:

Box 2.2
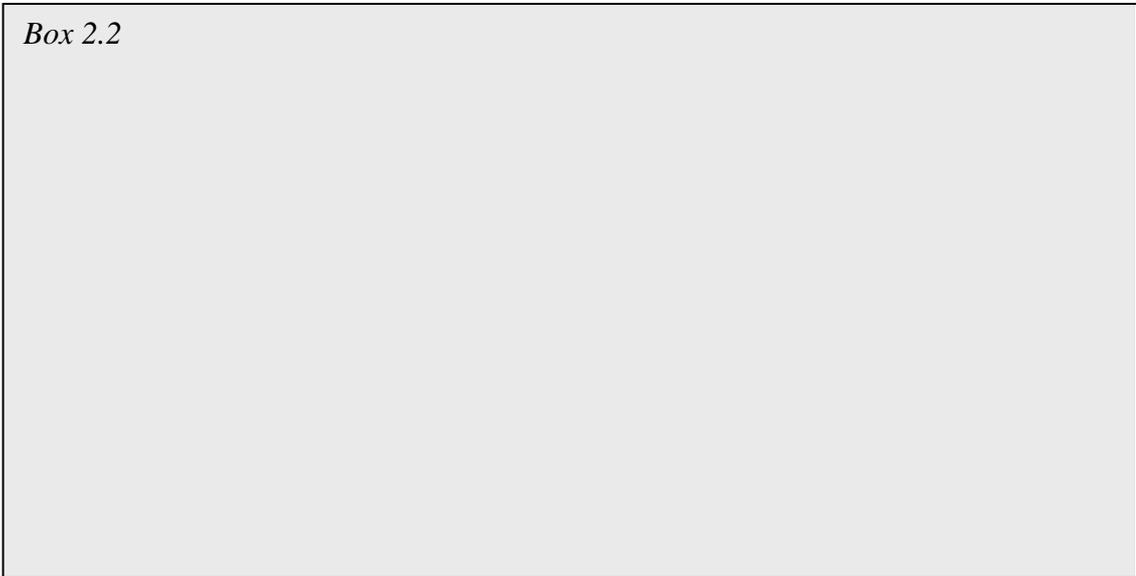
(Simons-Morton & Hartos, 2003, pp95-96)

Much of the existing research is context bound, and does not employ a social marketing perspective which would utilise the information collected from parents and novice drivers in order to develop options for intervention programs. Smith (2006) states that

social marketing's principle of societal benefit could viably be applied to teen driving safety in order to promote positive behaviour change. The exploratory research documented in this thesis aims to contribute to narrowing the void in understanding. The following chapter on Research Design will discuss the process that has been developed to help redress this dearth of information.

3. Research Design

3.1 Introduction

The aim of this research is to investigate the nature of parental influence on novice drivers. The findings of this project could have a significant impact on the development of more effective social marketing based parental intervention strategies designed to protect young drivers on the roads. As the previous chapter indicates, a review of the literature indicates a gap in knowledge in this area. Given the lack of previous empirical studies and current low level of understanding of parental influence on novice drivers an exploratory investigation adopting a qualitative methodology is well justified.

In selecting a qualitative methodology Crotty's (1998) four-step approach has been followed. Crotty and other authors (eg. Sarantakos, 1998) suggest the choice of methodology is preceded by consideration of a series of interrelated elements that inform each other and lead the researcher to the selection of the most appropriate methodology. Crotty uses a four-step process that starts by placing the research within an existing epistemological framework. This decision informs the selection of an appropriate theoretical perspective that in turn governs the choice of an appropriate research methodology. The decision on methodology then points to the research methods used to collect and analyse data. Figure 3.1 illustrates this four-step approach to selecting an appropriate research methodology.

Figure 3.1 Elements of the Research Process (adapted from Crotty, 1998)

This chapter will examine the reasoning behind the choice to implement a qualitative

research technique and expand upon the focus group research methodology utilised.

Incorporated within this is a discussion of how qualitative methodology, recognised for

facilitating exploratory research (Sarantakos, 1998; Miles & Huberman, 1994; Patton,

2002), suits the nature and purpose of this project. The chapter will conclude by

addressing the issues of research reliability and validity.

3.1.1 Locating the Study in a Suitable Research Framework

This project is placed within constructionism, the epistemology qualitative researchers

tend to invoke (Crotty, 1998). Here "truth or meaning, comes into existence in and out

of our engagement with the realities of our world" and "meaning is not discovered but constructed" (Crotty, p8, p9). When considering issues of epistemology it may be useful to bear in mind Miles' and Huberman's (1994, pp4-5) conclusion that "in the actual practices of empirical research, we believe that all of us – realists, interpretivists, critical theorists – are closer to the centre, with multiple overlaps. Furthermore, the lines between epistemologies have become blurred."

If an epistemological distinction might not be clear – or even sometimes particularly necessary – this perhaps is not the case when determining a research paradigm as the choice affects methodology, data collection and analysis. Sarantakos (1998) identifies three dominant perspectives in social research: positivism, interpretative social science and critical theory. Crotty (1998) broadens the dimensions to five non-exhaustive categories: positivism and post positivism, interpretivism, critical inquiry, feminism and postmodernism. This research rests within the interpretive paradigm, given its focus on gaining an "empathic understanding of human behaviour" (Sarantakos, 1998, p35).

3.2 The Choice of Research Design

Unlike quantitative methodology, which tests theory and is deductive, qualitative methodology aims to understand, not measure, people (Sarantakos, 1998). Inductive and theory generating, qualitative methodology is advocated as the best strategy for discovery, exploration, or development of hypotheses (Miles & Huberman, 1994). Through this exploratory process an in-depth understanding is developed of *what*, *how* and, crucially, *why* people think and feel as they do (Carson et al., 2002; McGivern, 2006). This research explores the experiences of parents and young people, that is, those who are personally involved in the challenges of guiding a novice driver through the

licensing process in order to become safe and qualified driver. As this is an exploratory study a qualitative methodology is suitably justified.

A qualitative methodology is also justified on the grounds that this approach attempts to explain how people understand and manage their lives (Miles & Huberman, 1994). Qualitative methodology is a naturalistic inquiry that studies real-world situations and produces descriptive data using respondents' own words and experiences (Sarantakos 1998, p46, p47). The aim, and advantage, of this approach is to develop understanding of people's lived experience rather than to prove a hypothesis. Miles and Huberman refer to locating the *meanings* (authors' emphasis) people place on the events, processes, and structures of their lives. Carson et al. (2002) describe the process of "unfolding" people's experience of what really happens and cite Van Maanen's (1979, p520) definition of qualitative research as "[coming] to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world".

These descriptions of real life thoughts and experiences, the fears and frustrations of parents, the excitement and nervousness of novice drivers, lend a powerful force to the data collected. The observations recorded are not confined by, or to, pre-generated categories (Patton, 2002). Instead the information gathering process is detailed yet flexible and thus free to explore the emerging patterns and themes that are generated by a thoughtful line of inquiry.

3.3 Research Method: Focus Groups

This exploratory qualitative research focussed on analysing the meanings parents and young drivers attach to their real life experiences. There are a number of methods of collecting qualitative interpretative data: the major ones are listed in Table 3.1.

Table 3.1 Qualitative Data Research Methods

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(Sources: McGivern, 2006; Miles & Huberman, 1994; Bryman, 2004)

In this project, the focus group research method was selected because of the advantage it provides in allowing participant interaction that enhances the detailed exploration of the topic. This interaction is a particular strength of focus groups, contributing to the depth of understanding of the research topic and to achieving a balance of meaningful information and opinions (Carson et al., 2002). The focus group is one of the qualitative researcher's most effective tools in contributing towards the development of understanding that emerges from observations and interviews in the field - or the real world (Patton, 2002).

A focus group is defined as a form of group interview in which the questioning focuses on a specific topic, with emphasis on interaction within the group and the joint construction of meaning (Bryman, 2001). This interaction is a critical to the analysis of how people perceive and make sense of events in their life, in this case preparing safe young drivers.

Focus groups are seen by some researchers as having a number of limitations, namely small sample size, the lack of generalisable results, non-standardised questions, and difficulties in managing group dynamics and data analysis (Fern, 2001; Bryman, 2004). Arguably however the method offers a number of significant advantages to the qualitative researcher (Patton, 2002):

- Focus groups often become a social experience in which participants can consider their own views in the context of the views of others while generating quality data. This social experience provides much richer data quality as similarities and comparative differences between individuals become the material for further exploration and discussion

- An open-ended question format allows respondents to describe what is meaningful to them without being restricted to standardised categories

- The moderator can quickly assess the degree of consistency or extremity among views

- Data collection is cost effective

Additionally, focus groups draw out individuals' views and have them considered in the light of the comments and experiences of other group members. It is a flexible research technique that does not limit participants in their choice or range of responses. As focus group facilitator I gained insight into the "real-world" (Sarantakos, 1998) or "real life"

(Miles & Huberman, 1994) situations that many authors on qualitative research matters refer to. Focus groups enable use of the participants' words to place the project's conclusions into a current and relevant social context.

3.3.1 Sampling Process

Once the focus group research method had been decided upon there were a number of important decisions made to enable effective data collection and valid results. The eligibility and selection of participants, the number of focus groups and participants, and the composition and location of groups were issues that were considered during the sampling process.

Given the aim of the project was to conduct exploratory research into the effects of parental influence on novice drivers, data was sought from these two groups, that is, parents and novice drivers aged between 17 and 25. Participants attended the focus group sessions in matched pairs, which streamlined the recruitment process. Parents and young drivers were grouped and questioned separately so they felt comfortable to speak freely, unconstrained by the fact a family member might judge, or even be unaware of, their experiences. Often parents' descriptions and perceptions of the same issue or event contradicted those of their son or daughter, which indicated the value of this approach in gathering a wide range of data. An example of this is the anecdote contained in Box 3.1.

Qualitative researchers usually work with small, purposive samples rather than using random sampling techniques. Convenience sampling, in which "samples are drawn at the convenience of the researcher as the study is being conducted" (Hair et al, 2003) was the methodology employed. This technique's common use in "exploratory research for generating ideas, insights or hypotheses" (Malhotra et al, 2002) also suited the nature of this project. The composition of sample groups in this project evolved as fieldwork progressed and new themes emerged. Purpose drives a qualitative study (Kruger & Casey, 2000) so participants for this project were recruited from a range of sources via a range of methods to support the emphasis of a particular focus group phase (see Figure 3.2). Groups in Phase One were designed to explore the field of study and gather information from a wide, general scope. Parent participants were randomly selected along with two groups of young drivers from contrasting socio-economic backgrounds. Participants in Phase Two were also randomly selected, being volunteers in a driver-training program. Participants in Phase Three were from a socially disadvantaged area but represented, as individuals, a range of socio-economic backgrounds.

Figure 3.2 Focus Group Research Phases

Phase One: *Exploratory* Groups were composed of parents, learner and pre-learner drivers from student and disadvantaged youth groups	→	Phase Two: *Theme Development* Groups were composed of parents, learner drivers and novice drivers from a cross section of the community	→	Phase Three: *Theme Development* Groups were composed of parents, learner and novice drivers from lower economic area

Members of the three exploratory groups in the first phase were:

1. University of Wollongong students who had their P-plates. Participants were contacted via an invitation extended to marketing students on campus

2. Teenage participants from a very disadvantaged socio-economic background who were recruited with the assistance of a community youth service. Some participants were considering application for a learner's permit while others held a learner's permit at the time the focus group was conducted

3. A group of parents who were supervising their children through the learner driver phase at the time of the focus group or who had already done so. Participants became involved through their neighbourhood associations

Analysis of the initial data collected in Phase One indicated a broader group of participants would provide richer data. Therefore in the second research phase learner and novice drivers, and their parents, were recruited using contact made through Wollongong City Council's driver training exercise, known as the Log Book Run. The third phase of focus groups was designed to involve participants from a lower socio-

economic sector of the community. To achieve this, advertisements were placed in two free suburban newspapers. This approach achieved its aim, resulting in a variety of participants from different sections of the community who shared involvement in the learner driver experience. Participants in all three phases freely agreed to their anonymous contribution to the project, signing a consent form approved by the University of Wollongong's Ethics Committee.

The challenge in focus group research is not only identifying willing and eligible respondents, but also ensuring that they attend the group (Bloor, 2001). Participants were encouraged to become involved by being offered incentives not as a reward but as a stimulus to attend (ibid). Incentives ranged from free movie tickets for the first phase of groups to shopping gift vouchers in stages two and three. In order to increase the likelihood of attendance the contact details of participants were recorded when they registered interest. They were then phoned for verification and suitability, and later given a reminder phone call just prior to the focus group. There was a minimal dropout rate between receiving the reminder and attending the group.

When determining the size of each focus group, consideration was given to how to ensure comprehensive but manageable data collection. The recommended size for marketing research is ten to twelve participants, while for non-commercial research the optimum number is generally regarded to be between six and eight (Bloor et al., 2001; Kruger & Casey, 2000). Group size in this project ranged from three to twelve. Smaller groups were conducted, for example, when gathering data from disadvantaged youth who might have felt intimidated in a larger group setting. Immediate logistical decisions also had to be made such as when only three students attended the one of the

exploratory sessions. In this case the situation became very similar to individual interviews and a level of familiarity developed between participants that countered the possibility of stagnating the flow of comments.

The number of focus groups was another issue given consideration during planning and data collection. Kruger and Casey (2000) and Bryman (2004) refer to the practices of "theoretical saturation". That is, the focus groups continue while they remain information rich and contribute to emerging data patterns. Once the researcher can anticipate what will be said the authors suggest it is perhaps time to cease the line of enquiry. Weight was also given to Bloor et al.'s (2001) suggestion that the labour intensive nature of focus groups should influence the decision to keep numbers to a minimum. After nine focus groups involving 53 participants the same pattern of responses began to emerge and data collection ceased.

The other matters considered in the use of focus groups included the location and composition of the focus groups. Data collection sessions were held at venues that were familiar and/or convenient to participants such as council chambers and community centres. This made attendance more likely and contributed to the comfort and familiarity levels of group members.

Groups were homogeneous in nature; participants were either learners or novice drivers, or their parents, and were formed in comparable groups throughout the research phases. There was a commonality that minimised conflict and optimised the opportunity to express opinion, with enough diversity to encourage discussion (Bloor et al., 2001). In general participants did not know each other. The exception to this characteristic was an

early focus group in which all members belonged to a community service group for disadvantaged youth. This pre-existing social group allowed "issues of disclosure of a potentially stigmatising status to be overcome" (ibid, p23). The participants knew each other, and their history, and were from similar backgrounds, leading to frank discussion during the session of law-breaking behaviour. It seems unlikely such candid comments would have been made if these young people were included in other groups involving participants from more advantaged sections of the community.

The decisions on selection of participants, the number of focus groups and participants, and the composition and location of groups had a significant, positive, impact on this project. This exploratory research was best conducted with a flexible approach, particularly in terms of focus group composition and number, enabling comprehensive, effective data collection. The specifics of the collection process will be discussed in the following section. Theoretical saturation was reached after nine focus groups in three stages involving 53 participants, justifying the cessation of data collection.

3.4 Data Collection – Topics of Conversation

Focus groups are designed to find "the range of opinion and feelings about a subject" (Kruger & Casey, 2000, p201). In order to do this the facilitator conducting each group examines a subject in detail using a pre-planned series of open-ended questions. A series of topic areas was selected from the literature review conducted prior to the commencement of data collection. These topic areas formed the cues which were designed to investigate the degree and type of parental influence on novice drivers and which are summarised in the Table 3.2.

Table 3.2: Focus Group Research Cues

Research Phase	Focus Group Cues
Phase 1	• Awareness level of driving risk factors eg night driving and the number of passengers • Level and type of parental communication and influence during driver training and in the first 12 months post-licensure • Development of strategies to communicate, remove participation barriers, and support parents
Phase 2	• Level and type of parental communication while learning to drive • Level and type of parental communication after licensing • Development of communication and education strategies
Phase 3	• Significance of driver's licence and access to a vehicle • Process of learning to drive, parental driving habits and influence • Post licence communication • Development of communication and education strategies

The scope and emphasis of research questions were refined throughout the data collection phase in order to fully explore emerging data patterns. Examples of the first set of prompts used to generate discussion in Stage 1 focus groups are provided in Appendix 1. The following section on data analysis will discuss the next stage of the chosen research path and in doing so will show how information gathered from focus groups was utilised to achieve the aims of this project.

3.5 Data Analysis – Identifying Themes

Data collection took place over three phases following Glaser and Strauss's (1967, p45) notion of "theoretical sampling". Under this notion collected data is constantly analysed to inform the researcher what and from whom new data needs to be collected in an effort to clarify and densify emergent themes and concepts. In keeping with Glaser and Strauss' notion, during the first collection phase, data was collected from a group of participants (that is, young drivers). The analysis of this data contributed information for the second and third phases, which clarified and densified understanding of the emergent themes. Specifically, the data analysis from the first phase indicated a need to involve young drivers *and* parents from a range of demographic backgrounds.

Data was collected from focus groups, which were tape recorded and then transcribed in two stages. The first stage produced a verbatim transcript of the conversation during each session that was checked for accuracy against the original tape-recording: before coding or analysis the transcript was then re-typed to remove pauses, stumbles and repetition (Silverman, 1993). An example of how the transcript was refined can be found in Box 3.2.

Box 3.2 Processing Focus Group Transcripts	

Stage 1: Original transcript:

Q: Do you talk to your friends about driving, for example what your parents have said or done, or ah how everyone is going with their driving?

A: I definitely talk to my friends about it 'cos I'm like one of the older ones in my sort of peer group. Everyone kind of has their L's by now 'cos everyone's 16 but it's kind of just funny to talk to people to see what they do when they go driving 'cos a lot of my friends have like had kind of accidents, like not real big accidents sort of just like an incident and it's kind of like I'm not saying it's like funny but it's kind of funny to sort of see that you're not actually like the worst driver, ah someone's probably worse than you at some point.

Stage 2: Final Transcript:

Q: Do you talk to your friends about driving, for example what your parents have said or done?

A: I definitely talk to my friends about it because I'm one of the older ones in my peer group. Everyone has their L-s now because everyone is 16 but it's funny to talk to everyone to see what they do because a lot of my friends have had an accident, not a real big accident, more an incident. So it's funny to see that you're not the worst driver, someone's probably worse than you at some point.

This aim of this transcription process was to maintain the accuracy and integrity of the information while producing user-friendly material for analysis. The term "information" can arguably be used here instead of "data". Carson et al. (2002, p115) specify that information generated from focus groups "may be deemed to have a broader and deeper meaning than data; involving some level of interpretation [and] may be deemed to represent knowledge or indeed understanding." The authors conclude that this "dimension" of information is one of the most significant justifications for focus group research methodology, comments that further support the choice of qualitative methodology and the selection of focus groups as the research method employed in this project.

The process of analysis, or transforming data into findings (Patton, 2002), was a continuous process of data reduction. Transcription and analysis of focus group interviews was carried out as each session was completed, as noted earlier. Emergent themes were identified and explored in all research phases. Once information gathering ceased the entire body of information was analysed for patterns that were developed, grouped and confirmed into themes. Carson et al. (2002) describes the first detective stage of ensuring all useful information has been gathered, and the second creative stage of revealing patterns, themes and categories "that requires making carefully considered judgements about what is really significant about the data" (p176).

Patterns, themes and categories were identified by coding the data. This process assigned meaning to the descriptive or inferential information compiled (Miles & Huberman, 1994). Codes were defined in order to be applied consistently throughout analysis and named in such a way that was closely linked to the concept described (ibid). Although there was only one coder, and analyst, the codes were constantly checked and discussed with thesis supervisors to further ensure consistent information processing. Coding and recoding ceased when the "analysis itself appears to have run its course – when all the incidents can be readily classified, categories are "saturated", and sufficient numbers of regularities emerge (Strauss 1987; Lincoln & Guba, 1985, cited in Miles and Huberman, 1994, p62).

Focus group transcripts were examined for significant words or sections. Significance was determined on the basis that key words were repeated or emphasised, represented a summary of the respondents' comments, or strongly related to the aims of the research project. This highlighted not the words themselves but their *meaning* (Miles &

Huberman, 1994) in a vital component of the analytical process. A code was assigned to similar key words or phrases; these were grouped based on their commonalities and links to the research aims. These groupings underpinned the identification of the emergent themes within the data; once coding and review was completed the links and relationships that told the *story* (McGivern, 2006) were clearer, allowing explanation and discussion of conclusions. The steps involved in this process are represented by the coding example in Figure 3.3, which illustrates how individual codes, grouped codes, and finally themes emerged during this method of data analysis.

Figure 3.3 Data Analysis: Identification of Key Words, Groups and Emergent Themes

Parent Focus Group Transcript
I've told my son stories of dumb things that I did when I was a dumb kid and there was no booze bus but it's a "do as I say not as I do" operation at my place.

Parent Focus Group Transcript
I'm not good. I don't think I'm as bad as a lot of people, I think it's very intermittent, very rare that I do things but I have done things and she has seen it.

Individual Code
Negative Parental Modelling

Individual Code
Negative Pre-licence observation

Grouped Code
Parental modelling

Emergent theme: Parental Topography
(Contributing characteristics are parental modelling, teaching, and communicating)

3.6 Issues of Validity and Reliability

To ensure the robustness of this study's findings the process of data collection, analysis and extrapolation of conclusions has been subject to a series of considerations. Throughout the project validity, reliability and trustworthiness have been weighed in order to present sound findings. Whereas validity in quantitative research relates to the ability to produce statistically accurate results and to "measure what is supposed to be measured" (Sarantakos, 1998, p78), the term in qualitative research refers to plausibility, sturdiness and confirmability of meanings that emerged from the data (Miles & Huberman, 1994, p11). To ensure issues of validity have been addressed within this study data has been collected from multiple participants from a range of psychosocial backgrounds.

As distinct from validity, reliability refers to the "consistency of research results" (McGivern, 2006, p337). The term is often found in the literature to be interchanged with the word "trustworthiness", and is seen by many as the critical criteria for judging the quality of a piece of qualitative research. Carson et al. (2002, p67) define trustworthiness as credibility, dependability and conformability, which "are addressed through sound and rigorous methodological progression". In this study, the systematic approach adopted in the collection and analysis of data has been elucidated in this section of the thesis to demonstrate how the findings of the study have been identified. Koch (2006, p95) suggests that providing such an "audit trail" is an important method for ensuring a qualitative study's trustworthiness.

When setting standards for the quality of these research conclusions consideration has also been made of a comprehensive list which Miles and Huberman (1994, p279)

formed from an amalgam of sources. Further discussion of the validity, reliability or trustworthiness of this research will be presented in terms of the five key components these two authors have identified, as listed below.

3.6.1 Objectivity and Confirmability

These considerations relate to the objectivity of the researcher and the replication of the study – also sometimes referred to as "external reliability". As a former news journalist and documentary producer I have a strong professional background in detailed and objective investigation. These characteristics are included in Miles and Huberman's (1994, p38) description of a "good qualitative researcher" along with familiarity with the phenomenon under study and its setting, strong conceptual interests, and a multidisciplinary approach.

Throughout the reporting phase the study's methodology has been recorded and thoroughly described, showing the sequence of data collection and analysis. The links between the data and the conclusions have been consistently established with details of the process and examples of transcripts provided. The results are confirmable in that another researcher, using the same information and methodology, would reach similar, if not the same, conclusions. However this might not be the case if the data collection process was repeated in its entirety, as it is impossible to exactly replicate focus group composition and setting, and the spontaneous interaction between participants.

3.6.2. Reliability

The issue under consideration here is whether the "process of the study is consistent and reasonably stable over time" (Miles & Huberman, 1994, p378). Throughout the three

data collection phases the questions, or discussion prompts, used in focus groups have consistently aligned with the research aims and reflected the areas of enquiry that each stage was designed to explore and confirm. Data was collected in a range of appropriate settings and involved participants relevant to both the research aims and lines of investigation within the research phases. The use of only one field worker ensured the development and use of consistent data collection techniques. The entire practical and theoretical process was subject to regular and thorough review by the supervisor of this thesis.

3.6.3 Internal Validity

Also referred to as credibility, authenticity or "truth value" (ibid), internal validity is a judgement of whether the findings generate an authentic understanding of the people and phenomenon being investigated. McGivern (2006, p79) describes this as the ability of the research design to deliver credible evidence to address the research problem. The ultimate aim of this qualitative study was to involve young drivers and their parents in the process of developing a useful, social marketing based safety intervention. Critical to this process, and to developing an understanding of their needs, was the accurate documentation of their experiences, described in their own words. The account of these experiences endeavours to be as comprehensive as possible without being repetitive. Links have been made to existing areas of research and the presence of research deficiencies, which could, at least in part, be addressed by the findings of this project.

3.6.4 External Validity

External validity refers to the degree to which the findings can be generalised or transferred to a larger population, that is, whether "the conclusions of a study have any

larger import" (Miles & Huberman, 1994, p279). The composition of focus groups has been thoroughly documented in order to allow for replication or comparison in a larger setting. The participants in this exploratory study represent a diverse but not exhaustive range of community groups; as such, the composition of focus groups could also be replicated or expanded upon within the broader population. The report's conclusions also identify areas of further investigation, which would add to the robustness of these findings.

3.6.5 Utilisation and Application

The utilisation of the study's findings could simply be described as "usefulness". Miles and Huberman refer to "what the study does for its participants, both researchers and researched – and its consumers" (ibid, p280). The study findings would be of interest to parents of young drivers, if not the young drivers themselves. While the findings in their initial form present a bank of timely and relevant information they have also been presented as a series recommendations for a social marketing based safety intervention. The recommendations could be utilised and further developed by local government, police and other government agencies.

3.7 Conclusion

This chapter has detailed the research design employed in this investigation. Critical to this is the argument presented for the decision to follow a qualitative methodology, deemed in this case to be the most effective way of representing the real life experience of parents and young people involved in the challenging process learning to drive. The decision on research methodology has been supported further by extensive discussion of the validity, reliability and ultimately the trustworthiness of a qualitative approach. The

strengths of this technique lie in its ability to enable the researcher to gather comments, which accurately reflect the lived experience of research participants. This unique and valuable information contributes to the research findings that are detailed in the following section.

4. Findings and Discussion

4.1 Introduction

This chapter presents and discusses the major findings derived from the focus groups that were conducted during this research project. Data analysis resulted in the identification of three emergent themes:

- ***Risk Topography***

- ***Young Driver Topography***

- ***Parental Topography***

Risk Topography refers to parents' and young peoples' attitudes and communication about the risk behaviours of young drivers. *Young Driver Topography* concerns the descriptors or characteristics that are particular to young drivers. *Parental Topography* classifies components of parental behaviour and influence that affect young drivers. Table 4.1 lists each of these three emergent themes along with their associated components and characteristics.

Table 4.1: Major Emergent Themes, Contributing Components and Characteristics

Emergent Themes	Components	Characteristics
1. Risk Topography	i) Reaction	• Awareness, • Fatalism, minimisation, avoidance • Management
	ii) Discussion	• Discussion types • Parental communication styles • Young driver receptiveness
2. Young Driver Topography	i) Character	• Negative elements • Positive elements • Ego Effect • Confidence and competence
	ii) Dissonance	• Behaviour dissonance • Communication dissonance
	iii) Mile-stoning	• Meaning of driving • Meaning of licence
3. Parental Topography	i) Modelling	• Pre-licence observation • Parental modelling
	ii) Teaching	Teaching issues • Teaching communication • Confidence, competence, conflict • Knowledge (currency, confusion, need for educational support • Emphasis on driving skill/experience versus behaviour Parental behaviour • Confidence in experience • Teaching subjectivity Teaching dissonance (driving behaviour versus teaching behaviour • Dissonance awareness
	iii) Communicating	• Risk reminders • Level of influence • Parental frustration • Post licence limits: effectiveness • Power to punish: effectiveness • Contract: effectiveness

In the sections that follow each of the three major themes is discussed, along with their

contributing components. The discussion in the latter part of this chapter then places the

findings of this research project within the context of the extant field of literature that focuses on the subject of young drivers.

4.2. Risk Topography

The first of the emergent themes to be discussed is risk topography. This term refers to:

- The attitudes of young drivers and their parents about the risk factors particular to young drivers

- The types of communication, regarding risk factors, that occurs between young drivers and their parents

Within risk topography there exist three components*: risk reaction*, or the degree to which parents and young drivers acknowledge risk; *risk modification*, or the positive and negative elements which can affect the degree of risk undertaken by young drivers; and *risk discussion*, or parental communication about risk, and the response to this from young drivers. Each of these components provides details to the features, or topography, of parents' and young drivers' treatment of risk.

4.2.1. Risk Reaction

Media campaigns, both in Australia ad overseas, have focussed on road safety issues, such as drink driving and seatbelt use, and also targeted specific risk factors associated with young driver fatalities, such as speed and peer group pressure. The impact of these and other factors including night driving and passenger numbers is also well documented by research (Deery & Love, 1996; Fergusson, Swain-Campbell & Horwood, 2003; Rice, Peek-Asa & Kraus, 2003; Romer & Winston, 2008: Simons-Morton, Hartos & Beck, 2003). Participants in parent and young driver focus groups were aware of a number of driving risks, most readily nominating speed and drink

driving and their associated education campaigns. However they spoke of being desensitised to road safety advertising and were ambivalent about whether this information would result in a change in their behaviour, as the following quote from a young driver indicates: "the ad says 'speeding kills' but everyone still speeds, so in a way they're not that effective. I don't think people, when speeding think: 'oh, I saw that ad on TV, I'd better slow down.'"

The comments from focus groups also identified a number of perceived risk factors not currently addressed in road safety education programs. Common to both groups was concern about the danger posed by other drivers on the road and the need for learners and young drivers to be aware of this. Similarly, both groups acknowledged the dangers posed by distractions such as mobile phones, music and passengers. Parents were particularly concerned that overconfidence among young drivers was a "huge" risk, along with a "sense of invincibility", inexperience, and the fact that "it's a learning process, they're still in the early stages of the learning process, they have poor control."

The data revealed that there was a level of fatalism among parents and young people revolving around the perception that drivers, and young drivers in particular, would always engage in risky behaviour. Many parents believed a "shock" or "near miss" would have a positive long-term effect on young drivers' behaviour. The following anecdote, contained in Box 4.1, is an example of this.

Box 4.1

"When my son had one of his accidents my daughter was in the car and her head went through the windscreen and it didn't stop her speeding when she got her licence. After three months of having her licence she lost it on double demerits for speeding and it didn't stop her from driving either because she had to get to work – there were no trains or buses in Shellharbour Village. She said she drove her husband's four-wheel drive with no P-plates on it. So for three months she drove with no licence because she had to get to work, but she doesn't drive fast any more."

Aligned with this is a tendency within both groups to minimise the degree of risk or to avoid considering the risk at all. This was revealed in comments about driving under the influence of cannabis, which is perceived to be "safer" because "[we] think [we] can get away with it." Similarly when discussing speeding, young people said they accept the risk, feel invincible, "just keep doing it until maybe something happens", or simply don't acknowledge speed as risky behaviour. This is shown in Box 4.2.

Box 4.2

"You wouldn't walk down a street wielding a knife or a gun but people will speed in a school zone. We can do as much damage as we can with any other weapon but we put them in completely different categories."
Focus Group Facilitator: "Why?"
"Because it's just accepted, it's just driving, driving fast, we never think how bad it can be."

It would appear from their comments that parents also minimise the risk of speeding: "he probably speeds a bit but he's not excessive." For want of knowing any other course of action they can only rely on their son or daughter's good judgement: "you don't know what they are doing when they're not at home and they are out in their car. You might make rules but you can't select what they are doing. You just have to trust them."

4.2.2 Discussion

The degree to which young drivers and their parents acknowledge, and then treat, risk appears to be interconnected with families' discussion of risk: discussion increases with more frequent acknowledgement and decreases with risk minimisation and fatalism. Notably, the instigators of communication are invariably parents – young drivers did not admit to asking for information or opinion.

Parental communication is most likely to take two forms: direct communication such as a conversation about an accident seen in the media, or counselling about a specific risk, such as speeding or drink driving. The second, and most common, form of communication was indirect or general in nature, such as a reminder to "drive safely". Regardless of the nature of their communication parents expressed frustration at the impotence of their message, as the following comments show: "he drives fast. I don't want him to have an accident, but I don't see what I can do"; "you can only say 'drive carefully', that's about all the participation you can have, and when they come home ask if everything went OK… but I don't think you can actually influence their driving." Parents feel their influence is second to that of their children's peers. They are also challenged by the difficulty of reprimanding the poor driving of their children, who are legally young adults, and who often own their own car: "what tactics will you use to tell an 18 or 20 year old what to do?"

Focus groups involving young people revealed that neither a direct nor indirect approach appeared to have a profound impact on young drivers' decisions and behaviours. The common link through all three focus group phases was that largely they did not listen or pay attention to parental reminders about safety, although the following

comment shows it is not only the content of the message but its delivery which perhaps contributes to this: "if mum just sat me down and said it calmly instead of screaming at me in the moment I would probably take it in more, but if she screams at me I just get cranky and don't listen".

The data gathered from young drivers reveals their choices and actions are most likely to place them into one of three groups: those who flaunt risky behaviour while knowing of the dangers; those who indulge in a level of risky behaviour within their own defined "safe" limits; and those whose actions are dependent upon an inbuilt sense of safe or correct driving behaviour which is a result of observation and learning in their family environment. One young driver described this as "the values your parents have raised you with, more than one conversation."

The data from focus groups shows young people's perspectives on parental involvement differ from those of their parents. Currently involvement consists mainly of a series of (largely ignored) reminders from parents. While young drivers might give parents the satisfaction of appearing to take notice, and stated in focus groups that any discussion with their parents at least raises awareness, the general consensus is that once they are in the car, without a supervising driver, they will do as they please. This sense of self and assertion of independence, which has been termed "the ego effect", increases their resistance to hearing and positively acting upon safety messages from their parents. The ego effect is discussed below in greater detail as one of the contributing characteristics of young driver topography (see section 4.3.1).

4.3 Young Driver Topography

The second emergent theme to be discussed is young driver topography, which refers to:

- The characteristics of young drivers that affect their driving decisions and behaviour

- The social signifiers, particular to young people, that impact on their driving

Within risk topography there exist three components: *character,* or the traits of young drivers which contribute to an understanding of their driving behaviour; *dissonance,* or the incongruity in young drivers' behaviour and communication; and *milestoning,* or the social meaning young people attach to driving and obtaining their licence. Each of these components provides detail about the features, or topography, of young drivers. They will also be shown in the following discussion to have a strong impact on their treatment of risk and their receptiveness to information designed to reduce risky behaviour – whether this information is from parents or external organisations.

4.3.1 Character

Participants in the young drivers' focus groups contributed much to the development of a clearer picture of what is termed "the young driver character". They were candid in their discussion of themselves and their behaviour, admitting to driving unlicensed or without a learners' permit, speeding, and driving under the influence of drugs and alcohol. While these comments might have tallied with some parents' worst fears about teenage deviance and rebellion the data also revealed many young people hold a strong sense of responsibility for self, passengers and family. One young driver admitted transporting his daughter has modified his driving behaviour: "I still am a bit of a hoon and I will admit that, but I have dropped off a lot because I carry my daughter in the car

a lot. When she is in the car I am a lot different than when I am by myself. [When I have mates in the car] I drive like I have my daughter in the car." Others spoke of paying particular attention to ensuring passengers were safe, behaved responsibly in the vehicle and wore seatbelts. In fact, young drivers often spoke of the presence of passengers as a positive behaviour modifier: "I always driver safer when I have passengers in the car. I figure if I was going to do something stupid I would rather do it on my own than with other people in the car." Yet the statistics for young drivers are a grim contradiction.

While parents – often legitimately – are concerned about negative peer pressure in the car it would appear that young drivers' peers can be a positive influence, forming something of an information network. Learner drivers and provisional licence holders spoke of how gossip about peers' road accidents served as warnings and reminders, while "the ones who didn't have their P's [Provisional Licence] but were preparing for the driving test would be [asking] about road rules and the ones who would have P's would kind of instruct us."

In this discussion about young driver characteristics it is worth revisiting what can be referred to as "the culture of safety" developed in many families. One young driver described it as "values, and safety, even from when you're a kid on a bike wearing a helmet." Others referred to their own common sense as the strongest guide to staying safe. This inherent awareness of safety is another positive characteristic impacting on young drivers' decisions and actions.

Perhaps countering these more positive elements is the ego effect, young drivers' need to assert themselves and their (perceived) ability, which in turn makes them more likely to act in a risky manner. Young people admit to wanting to show off to their peers while behind the wheel, to flouting safety regulations and ignoring danger, despite warnings: "I think I'm alright but my dad is always going off at me because I'm going too fast. I think I'm not that bad because I haven't crashed into anything yet." Their comments also reveal that their attitude and behaviour change dramatically once they have qualified for their driver's licence: "with [parents] in the car on L's [learner's permit] they tell you what to do. When you're on your own and they try to tell you what to do before you go out you're like "whatever" and once you're in the car [you do what you like]."

Parents also recognise how the ego effect has an impact on young drivers' response to communication, especially about safety issues. Some don't even begin discussions about driving because of the reception their comments receive: "oh no, you wouldn't dare. They get very angry." Many more find their concern and their driving experience are entirely disregarded: "my child thinks he is an expert… when we had that downpour of rain I said 'the road is wet' and he said 'I know that, I've passed my test' and my 25 years of driving experience didn't matter for anything."

Young drivers are keen to extend their experience, even if this too is unsafe: "once you have your licence, even though you are not 100 per cent confident of what you are doing you have this cockiness – 'I'll go and learn things for myself.' You're not going to listen to your parents any more because they're not sitting next to you any more."

This confidence is a major element of the young driver character that has emerged from focus group data.

Many young drivers describe themselves as confident, even over-confident, once licensed. Their parents concur and identify over-confidence as a major risk factor. Unfortunately it would seem that confidence level is not matched by competence and young drivers have been startlingly honest about this: "me and my friends weren't competent drivers on our P's. Not confident in traffic, roundabouts, missing stop signs... I could have been a better driver on my P's." It would appear that this is a common experience: "we would always notice my friends who had just got their licence. We would go in the car with them but we'd be scared because they wouldn't be a safe driver. You can tell new drivers – they drive a bit fast, they don't pay attention." A contributing factor to this lack of competence could be the focus by young drivers, parents and, young people say, driving instructors on successfully, obtaining a licence: "a lot of people learn how to pass the test not so much how to drive. Instructors know the test route and when you are 17 you just want to get your P's."

4.3.2 Dissonance

Dissonance is discussed here in terms of behaviour and communication. Interestingly this element has emerged from the data gathered only from focus groups involving young drivers and appears to be specific to them. Behaviour dissonance is the gap, or the difference, between young drivers' behaviour with their parent in the car and when they travel without a supervising driver. Young drivers tend to "behave" themselves when their parents are present and do "the little things you do to keep them happy, like adjusting the mirrors." Their attitude is radically different after they gain their licence:

"when you drive with your parents sitting next to you, you try not to do anything that your parents might not like. Once you're in the car by yourself you do things that you like that they might not, like speeding. If your parents are next to you, you won't speed. You get into a car by yourself and think, 'I want to see how fast I can go.'"

Young drivers appear to have a degree of fear, initially that is, about being behind the wheel without the reassurance of a supervising driver being present. This contributes to communication dissonance, the discrepancy or gap between what young drivers say to their parents and what they privately admit to really needing in terms of parental communication. While learning to drive they were "spoon-fed", to use one learner driver's description, with constant warnings about behaviour, vehicle control and other drivers. The world of solo driving presents its own challenges. Learners describe the prospect as "weird" while provisional licensees confess to feeling nervous. Others admitted their inability or unwillingness to accept advice: "I don't want her advice but I still need it." This comment exemplifies communication dissonance.

The presence of communication dissonance increases the difficulty for parents who are trying to determine the level and type of involvement in their son's or daughter's driving. When a young driver says during a focus group "I think I know everything but at the same time it all helps" there is an admission of the need for information. There is also little likelihood that parents will ever hear the same comment made.

4.3.3 Milestoning

During data analysis distinct differences emerged in the meaning, or significance, young drivers and their parents attach to the act of driving and to obtaining a licence, a step that has become one of the major social milestones in a young person's life. These differences are significant to note because they illustrate the disparity between both groups in terms of the motivation for learning to drive and the communication difficulties that almost inevitably develop subsequently.

Parents refer to driving as a "commodity" or "necessity" and "one of the practicalities of life". For parents driving serves a purpose and allows other important activities to occur. For young people there is an additional layer of importance and their descriptions contrast with those of their parents: "for us driving is a much more social, more enjoyable experience"; "it's a cool kind of experience for a young person in a car." Driving in itself becomes more than a function: it has a social and entertainment benefit. The destination is of less importance than actually being in the car, seeing and being seen: "if you want to drive, you just drive." Further to this, a young person's car conveys status, personal style, and even represents a sense of self. Parents' acknowledge "kids worship cars" which become "a whole lifestyle"; "everything about them is their car." Their comments show they are aware of this phenomenon among young people, even if they can't quite understand the focus on vehicles.

For young people a driver's licence represents entrée into a new world where, to use their words, they are free and independent. From their descriptions the knowledge that they are legally able to drive without supervision has something of a transformational effect: "at first I just wanted to drive, to keep driving. I had to drive two minutes home

from work – that was the first time I drove – but I didn't want to stop because I was in the car by myself and I just felt so free and different." A licence has its own significance as a particular milestone in a young person's life. It appears that the focus might not be on developing the required driving skills but on reaching the goal - their licence - and thus obtaining the accompanying benefits of social independence: "a lot of young people in general will be ticking off the days until they get their own licence and they are free to do what they want."

While young people relish their newfound freedom, parents are faced with their own "new world", one in which they must relinquish some control over their children, their transport and their whereabouts. They welcome being released from driving their children to sporting, work, study and social commitments but as is shown by the quote in Box 4.3, it is clear many struggle with their protective instincts and the need to encourage independence.

> *Box 4.3*
> *"I could never say I [regret] what I have done for her because as a parent their welfare is number one. But with the driving and her becoming independent comes all these other worries. You're a protective source in their life and then all of a sudden now they can just go anywhere and do as they like."*

Milestoning creates another source of communication conflict between young drivers and their parents. At the very point where young people are exercising their sense of independence, responsibility and decision making power, parents are still seeing their need for support and information. Young drivers' resistance to parental communication

is part of their assertion of self, yet it adds to the existing difficulties parents face in knowing how and when to stay involved in their children's driving.

4.4 Parental Topography

The third emergent theme to be discussed is parental topography, which refers to:

- The nature of parental influence, during childhood, during learning and after licensure that affects young drivers' decisions and behaviour
- The types and level of post license communication that parents seek to have with the young drivers in their family

Within parental topography there exist three components: *modelling,* the observed driving behaviour of parents; *teaching,* the process and issues encountered while teaching children how to drive; and *communicating*, the effectiveness of desired intervention measures. These components provide detail about the features, or topography, of parents' interaction with their young drivers.

4.4.1 Parental Modelling

It was found during the focus groups that, for reasons of economy and convenience, many young drivers in Australia do most, if not all, their learner driving with their parents as the primary supervising driver. This places parents in a position of tremendous responsibility; they have the role of ensuring their sons and daughters develop the skills and behaviours required to take to the road safely. The significance of this is not lost on them, as revealed by the following comment: "This is a very critical thing. The most important thing we are going to teach them is how to get behind this weapon and not die."

The issue of parental influence can be divided legitimately into three components: pre-learner, the childhood and teenage years leading up to applying for a learner's permit; learner, when a young person is learning to drive; and post licence, which begins when a young person has gained a provisional licence. Even before a young driver takes to the wheel after acquiring their permit and undertakes instruction from their parent(s) they have spent at least 16 years and nine months (according to guidelines regarding age and the issue of learners' permits in NSW) watching how that parent drives. They develop an opinion about their parents' driving and are influenced subliminally and directly by their observation. Once they begin driving themselves they also begin to compare their own performance with that of their parents.

Young people speak of exposure to positive driving behaviour and describe their parents as cautious, calm and safe. Conversely, the comments gathered during focus groups reveal the negative modelling they observe has a profound impact: "they don't realise that it is more of an influence than directly saying something." Even parents who are seen as "good" drivers have some concerning habits. For example, a father who is described as a "casual, street-wise driver" is "not attentive" but "a good driver"; a mother is "good with speed limits except if she is in a hurry." This brings into question the common understanding of what is good or safe driving behaviour, and what benchmarks young people use to make their judgements.

Young people feel parents are aware of their observation but this does not change parental driving behaviour. Parents themselves are aware of the impact of their children's observation over more than a decade and a half. Their awareness increases once they assume the role of driving instructor, largely because the task calls upon them

to consider what otherwise they might do automatically. Increasingly their driving is criticised by young learners whose road knowledge is developing. Along with the ego effect and milestoning, negative behaviour modelling compromises the success level of parental intervention. The contradictions exposed in what parents say to young people and how they drive dilutes the effectiveness of any safety message they communicate.

4.4.2 Teaching

Teaching is the second phase in which parents' influence and behaviour modelling will have a significant impact on young drivers. In discussion about what constitutes a good teacher young people appreciated patience, knowledge and observation of the road rules. When describing their parents' performance in this role there was a range of responses: from the positive, "dad is a perfect driver"; to the judicious, "my dad is not that good a driver but I just have to listen to what he says, not watch what he does"; and the concerned, "they scare the **** out of me. I don't want them teaching me."

The learner's permit phase of parental influence often generates contradictions for young drivers to contend with: parents' behaviour and knowledge might oppose correct processes cited in the current road rule book; parents might be ignorant of these contradictions; or, if they are aware, parents might concentrate on developing positive behaviour in the learner driver during a lesson but continue their own contradictory behaviour outside of that. Young drivers admitted this challenging environment often resulted in conflict as they drew attention to their parents' negative behaviour: "if I say something dad will tell me to shut-up so I tend to keep it [to myself]."

Many parents take little notice of comments about of their driving and are unwilling to engage in discussion – or implied criticism – of their behaviour: "it might be a bit confronting"; "I don't know if I want to open that can of worms, there might be too much truth in there." Those aware of the teaching dissonance, or gap between their modelling and their instructions, might attempt communication: "I get a bit impatient, but if I've been a bad role model at least I try to point it out and say you shouldn't let your mood impinge on your driving." This course of action might be a partial solution but there is no parental commitment to changing the underlying problem behaviour. Some parents even seem unaware of the contradiction between their words and behaviour when making statements such as: "it's a 'do as I say, not as I do' operation at my place."

This attitude also seems to be aligned with parental perception that their level of experience mitigates against their negative driving behaviour: "the only reason that we get away with the bad things that we do is that our years of experience compensate for some silly things that we did, where as they [the young drivers] might be doing it without the experience and that's where they get into trouble." While research does indeed show that lack of experience has a profound effect on young drivers' statistics for death and injury, many parents seem not to realise the apparent conflict between their own actions, their instruction during training and advice post licence.

It must be said however that many young drivers participating in the focus groups commended their parents as positive driving role models and noted the effort they took in order to be good teachers. For their part, parents spoke seriously of their responsibilities. Their comments revealed that most were well aware of the importance

of their role but the most significant finding in this area was that the awareness was accompanied by a high level of insecurity and lack of confidence in their effectiveness as teachers. The following exchange, contained in Box 4.4, between three parents during a focus group is evidence of this:

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Box 4.4

Parent 1: "It's hard on parents... what training do parents have to be able to take the child? We all just fumble through it because it has to be done, but whether you're nervous or a yeller of whatever, the child has to put up with whomever they have to take them. It's the only way that they will get through the hours to get [their licence].

Parent 2: "And if you're a crummy driver, you've got X hours of crummy driving to get through."

Parent 3: "If the only people they have to take them are their parents and their parents are dreadful drivers then it makes it very hard on them to get any positive [influence]."

</div>

Many parents admitted to teaching subjectively, strongly influenced by how they drove or how they were taught decades ago under different regulations and road conditions. As one young driver observed of his parents, "they teach how *they* drive." Parents recognise information currency is a particular issue: "I remember the skills of thirty of forty years ago and I have been using them to keep going but are they the right skills for today and am I qualified to teach someone today?"

These admissions were the source of a sense of conflict for some parents as they realised their shortcomings while attempting to give their son or daughter the best preparation possible to assume sole responsibility for controlling a vehicle. Yet few parents availed themselves of the RTA (NSW Roads and Traffic Authority) resources

designed to supplement and update parental knowledge and improve teaching techniques. Despite the existence of these state government resources, parents also felt unsupported in their role. Perhaps this was less about a supply of current information and more about the lack of acknowledgement of the real difficulties involved in teaching young drivers and communicating with them.

4.4.3 Post licence Communication

The final component of parental influence is that of communication, particularly post licence. Many parents struggle to maintain an effective level of influence, or any influence at all, once the young driver has gained their licence. Many felt their main form of communication was to remind their son or daughter about specific risks, such as speeding, or safety at particular times such as at night or in the wet. Parents were also challenged by how to set effective limits on risky behaviour, how to communicate these limits and how to deal with the consequences once a problem arose. Some surrendered to this difficulty or fell back on hopes their children knew the right thing to do. Other parents keenly felt the loss of control over their children's actions and were acutely aware of the dangers posed by a moment's reckless behaviour behind the wheel. They simply weren't sure if their children had the necessary risk awareness or ability to control their behaviour.

Young drivers and their parents were asked about a number of post licence limits ranging from restrictions on passenger numbers and access to a vehicle, to the implementation of a contract, similar to the Checkpoints Program in the US. Parents felt they had more control if they owned the car a novice driver was seeking access to, while young people observed this gave parents "the ultimate power". They also noted strong

parental involvement resulted in careful young drivers: "some have very strict parents and they are the ones who are some of the best out of all of us because they don't act stupid… What the parent says goes." This implies that set limits are effective only once they are enforced.

The problem parents acknowledged was knowing when their restrictions have been flouted. Young drivers spoke of sneaking out after a driving curfew, or driving as they pleased once out of their parents' view: "as soon as you drive around the corner you can just pick up one of your mates anyway, your parents aren't going to see it." Another young driver spoke how she regularly had passengers in the car, while in the corresponding focus group her father confidently spoke of her adhering to his "no passengers" rule. Her words contained in Box 4.5 encapsulate the impact of the "ego effect" and the young driver's communication dissonance, that is, the difference between their needs and their communicated needs.

> *Box 4.5*
> *"My parents said for three months I could only take them or my brothers or sisters. But I didn't want to do that – I wanted to show of and take my friends out. They said if I disobeyed and they found out I would get another month. But I thought 'how are you going to find out. Most of the time I was on my own but sometimes I gave friends a lift. They didn't find out but even if they did I still would have done it. But it's is a good thing not to have distractions even though when I first drove on my own it was weird and I was nervous, but I was fine quickly."*

Commitment to safe driving agreements within families also appears to be compromised by these recurring elements that negatively impact on parental

involvement. Additionally, if young people perceive their parents' driving behaviour as problematic and/or are moving away from the family sphere of influence they are less likely to genuinely commit to a safe driving agreement.

Some young people fail to see the positive effect of driving limits. There is a perception that restrictions are less about their safety and more about parental authority: "parents will be parents, they like to put down rules." Limits then need to be mutually agreed upon, as well as communicated and enforceable.

The prospect of a contract or agreement between parents and young drivers received limited support at best. Parents' reactions ranged from concern about enforcement, "anything that saves one life is worth a try but I just don't know how much they would stick to it", to dismissal of the idea, "you really shouldn't have to sign anything. It's the parent's responsibility to look after the child so they should be laying down the rules – I know I will be." Yet clearly, as evidenced by road statistics, this does not occur, or, if rules are made young drivers ignore them or parents do not enforce them once they have been flouted.

Young drivers saw an agreement as another form of parental authority designed to control their behaviour. They perceived this strategy as designed to satisfy parents rather than to keep young drivers safe: "I think it will give them peace of mind if they think you are doing the right thing, even if you're not." The most positive perception was that even discussion about implementing a contract would raise awareness about risk factors: "even if you disagree, something would stick in your mind and it would

come up to remind you so it would have some effect." This is not however the response that parents might be hoping for.

4.5 Conclusion

This study has revealed that three elements compromise effective parental involvement and the establishment of successful intra-family safety restrictions. These factors are:

1. Poor parental driver modelling: this occurs in the pre-learner and learner phases

2. The ego effect: young people are at a point in their personal development where they are asserting independence from the family unit and the milestone of gaining a driver's licence is integral to this

3. Communication dissonance: what young people need (involvement) may not be what they say they need (parents to give them their driving freedom). Young drivers who might admit to an objective party that they were open to parental involvement might not admit this to their parents, often because of the interplay between Factor 1, poor parental modelling, and Factor 2, the ego effect.

These factors have implications for a social marketing based campaign designed to tackle the deficiencies in existing strategies. Currently campaigns target the post licence phase. Authorities are trying to change the behaviours of young drivers once they are on the roads in a solo capacity, after the learning phase, after the foundations of bad habits have been laid and after they move away from parental influence. If safety and education campaigns were integrated into the learning, licensing and post licence phases young drivers and their parents would have the information and the tools to better communicate.

5. Application of Research Findings to a Social Marketing Based Intervention

5.1 Introduction

This research project has been undertaken from the outset with a view to applying its findings to a social marketing intervention. Kotler and Zaltman (1971) are credited with coining the term 'social marketing' and first proposing it as an effective approach in which marketing practices are applied to achieve socially desirable goals. The social marketing discipline has been refined over more than three decades, with some of the currently recognised definitions of the concept included in Table 5.1.

Table 5.1: Selected Social Marketing Elements

Social marketing	Source
• Is designed to…influence the voluntary behaviour of target audiences in order to improve their personal welfare and that of their society.	Andreasen, (1995)
• Is concerned with helping to achieve desirable social change.	Donovan and Henley, (2003)
• Sets behavioural goals.	NSMC Social Marketing Benchmarks cited in Hastings, (2007)

It is evident that past practices involving legislative approaches (with associated punitive measures) or communication strategies (to educate the young driving public) have not had the desired result of improving injury and fatality rates among young drivers. Central to both approaches is the use of fear appeals although there has been much debate about the degree of fear used and level of campaign success. While early research (Sutton, 1992) suggests the use of a moderate, rather than high, fear level was

more effective in achieving behaviour change, later analysis (Witte & Allen, 2000) indicates strong fear campaigns were effective, given three conditions: the audience was convinced of the severity of the threat; the audience was vulnerable to this threat; and there is a effective course of action to reduce or eliminate the threat (Wilson, 2007). The course toward positive behaviour change is not, however, so clear-cut. Concerns have been raised (Hastings, Stead & Webb, 2004) about the "unintended deleterious effect" of the use of fear appeals in social marketing campaigns. These include heightened anxiety among those most at risk and complacency among those groups not directly targeted. Focus group participants involved in this research spoke of how they were de-sensitised or simply "tuned out" during visually confronting road safety advertisements. Yet many parents in particular proposed the use of graphic road trauma images as a way of positively redirecting young drivers' behaviour.

If penalties and/or information alone are ineffective when operating as individual elements, a more positive impact could be achieved when the emphasis is broadened to incorporate changing the behaviour of the target audience using integrated strategies. This alternative approach, social marketing, is best suited to help promote the desired social change as it "not only targets individual behaviour change, but also attempts to bring about change in social and structural factors that impinge on an individual's opportunities, capabilities and right to have a healthy fulfilling life" (Donovan & Henley, 2003, p ix). When applied to the issue of young driver behaviour, a social marketing intervention would address environmental factors such as parental behaviour and communication, as well as the social environment of the young driver. These components contribute to achieving the larger goal of promoting safe driving behaviour.

Consideration of the environmental determinants of behaviour is critical to the implementation of upstream social marketing strategy. Initially social marketing emphasised the "downstream" approach that provided the individual with behaviour tools for a safe and healthy lifestyle. Hastings and Donovan (2002) made a pivotal contribution to the existing school of thought when they called for social marketers to "embrace a broader perspective that encompasses not just individual behaviour influence but also the social and physical determinants of that behaviour" (ibid, p4). These determinants could take the form of government initiatives to restrict, educate, or communicate.

Another argument for the upstream-downstream combination is this approach circumvents the application of "victim" blame (Andreasen, 2006; Hastings, 2007) associated with downstream-only campaigns. Hastings, for example, re-emphasises his support for the inclusion of an upstream approach when stating: "if we keep focused on the individual while ignoring the environmental determinants of their behaviour we are effectively blaming them for their predicament – a predicament that is in many ways beyond their control" (ibid, p25). Both upstream and downstream strategies are required to address young driver safety; strategy choices will be specified later in this document.

A useful way of approaching the formulation of possible strategies is to utilise Andreasen's (2006) framework to advance social issues. The eight-step sequence he has identified is represented in a matrix form in Figure 5.1.

Figure 5.1 Framework for Advancing Social Issues (adapted from Andreasen, 2006)

These stages outline the progressive considerations for social marketing practitioners addressing the issue of young driver safety and implementing positive social and behavioural change. The three early stages represent the development of the issue within the public, media and legislative consciousness. Stage 4 is highlighted within the matrix as it represents the current point of discussion within this report, that is, the presentation of strategy options. During this stage strategies need to be assessed for their ability to have a lasting impact, not just at licensing. A strategic campaign will

have long-term effects particularly on the behaviour of young drivers as they in turn become mature drivers, parents and teachers.

The interventions are being evaluated on the basis of their ability to contribute to positive behavioural change. They have been structured after determining the impact of four key elements: the target audience, all stakeholders, the environment, and a sound theoretical underpinning. The relationships of these elements to the intervention are represented below in Figure 5.2.

Figure 5.2: The Four Critical Elements Shaping a Social Marketing Intervention
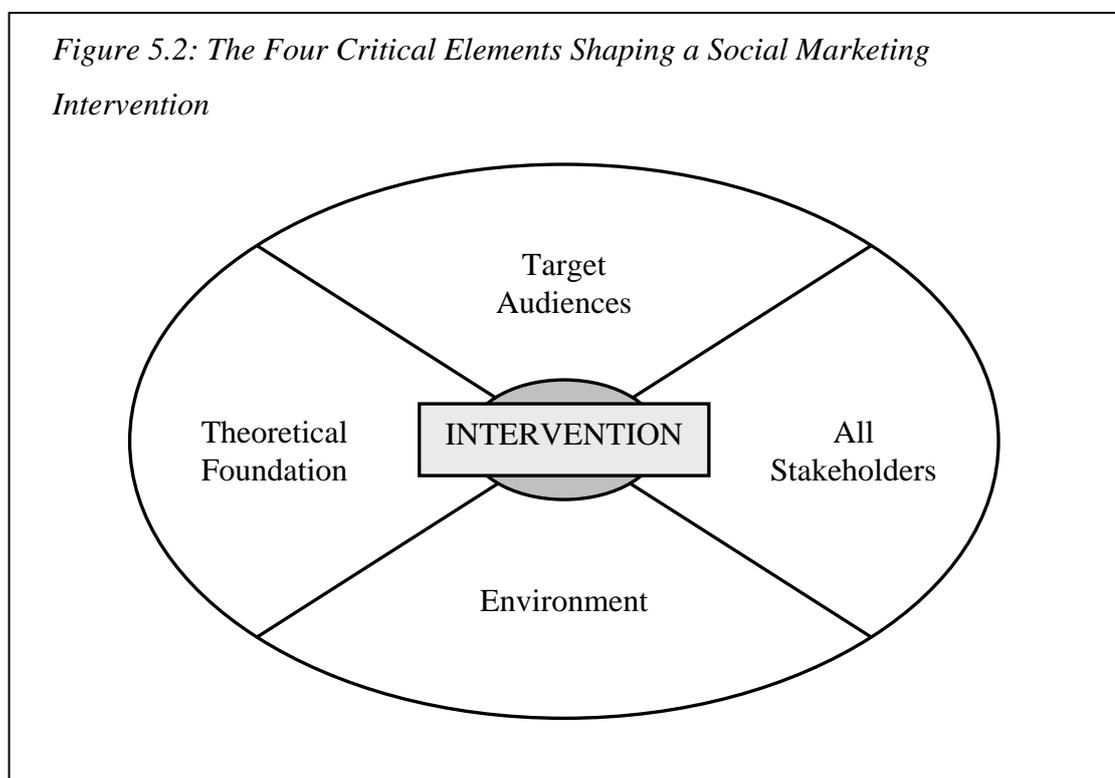
5.1.1 The Target Audience

As already identified, the subject of this research and the target audience for a proposed social marketing intervention are young drivers and their parents. When assessing what can be referred to as the "change needs" of these two groups the use of Rothschild's (1999) approach will add valuable detail to the social marketer's understanding of the target audience's issues and the corresponding strategies required. Rothschild's

conceptual framework displayed in Table 5.2 analyses three characteristics of the target

audience to determine the best social marketing tools in order to obtain the desired goal.

Table 5.2: Rothschild's Assessment of Target Audience Characteristics and
Application of Social Marketing Tools

Motivation	Yes		No	
Opportunity	Yes	No	Yes	No
Ability Yes	Prone to behave	Unable to behave	Resistant to behave	Resistant to behave
	Education	Marketing	Law	Marketing Law
No	Unable to behave	Unable to behave	Resistant to behave	Resistant to behave
	Education Marketing	Education Marketing	Education Marketing Law	Education Marketing Law

The first analytical step is an examination of the target audience's level of motivation.

Rothschild defines motivation as self interest because "individuals are motivated to

behave when they can discern that their self interest will be served. As such, self interest

is a strong component for motivation"(ibid, p31). Critically, for social marketers,

Rothschild notes, "for many issues, there is no inherent motivation to comply because

there is no perception of the potential accommodation of self interest" (ibid). This

statement emphasises how individual self interest sits at the centre of any change

strategy. Determining and highlighting the target audience's self interest, and thus the

motivation for a social intervention, increases the impetus for positive behaviour

change.

Motivation is integrally related to the opportunity to act and the ability to act. Opportunity "includes situations when the individual wants to act but is unable to do so because there is no environmental mechanism at hand" (ibid, p31). Ability is the individual's "skill or proficiency at solving a problem and may include breaking a well-formed habit or countering the argument of peers" (ibid, p32). Ability also impacts upon whether the target audience is prone, unable or resistant to behave. Consideration of these elements provides the basis for the third stage of decision making, determining which social marketing tools - education, marketing or legal strategies - will be used, individually or in combination.

In the case of young drivers their motivation to act, or their self interest, would initially appear to be self-preservation on the roads, the protection of their lives and those of their passengers. Their opportunity to act is largely determined by their licence level. Novices are still under the relative control of their parents and thus may be unable to act, particularly if their parents' influence on driving behaviour is negative. Young licensed drivers may have more opportunity to act once they are driving independently, but this element is limited if their early behaviour has been negatively shaped, or they are subject to the influence of their peer groups or ego. It is clear from much of their negative behaviour that many are unable and/or resistant to behave.

The motivation of parents would similarly appear to be the protection of young drivers' lives. It seems many parents are limited in opportunity and ability to change, lacking the tools to positively modify their own behaviour modelling, and their teaching. After considering these elements, and their impact on the "change needs" of the target audience, it becomes evident any comprehensive social marketing intervention must

incorporate all three tools - education, marketing and law - in order to present an effective solution.

In addition to understanding the target audience, social marketers are advised to involve them in the formulation of social marketing strategy. Andreasen (2006) describes the social marketer's focus on the target audiences as "slavish" (p94) and "fanatical" (p96) but only in that this distinguishes great social marketers from others merely attempting social influence. Rothschild, Mastin and Miller's (2006) examination of a drink driving intervention and Snyder's (2007) study of nutrition campaigns both recommend the target audience has input in all critical stages of intervention development: initial research, program formulation, review and improvement. Andreasen's (2006) representation of this continual inflow and review of information during a social marketing campaign is contained in Figure 5.3.

Figure 5.3: The Social Marketing Campaign Process (Andreasen, 2006)

5.1.2 Stakeholders

The target audience is the main focus for a social marketing intervention; however it is arguable that strategists also consider the needs of a broader group of stakeholders with an interest or involvement in the issue. Noble (2006) suggests the identification of all possible client and stakeholder groups who may be causing, be affected by or have a capacity to influence outcomes. Widening consideration of change needs from the target audience to this broader base consisting of all stakeholders enables the social marketer to also determine the social environment, or social context, in which individuals operate and ultimately make decisions about their behaviour. In the case of young driver safety and parental involvement, the larger stakeholder groups comprise the media, levels of government, and other road users.

5.1.3 Environmental Considerations

The second element that will affect the formulation and assessment of intervention strategies is the environment within which the target audience and stakeholders operate. The environment also impacts on the implementation, and ultimate success, of the social marketing intervention. Analysis of the data produced in this study reveals there are three particular environmental considerations:

- First, the public, government, and media agendas that are focussing concern over accident and fatality rates involving young drivers.
- Second, the financial pressure that exists within families which frequently minimises opportunity for professional driving instruction and that places most parents in the role of driving instructor – whether or not they feel comfortable in and prepared for this role.
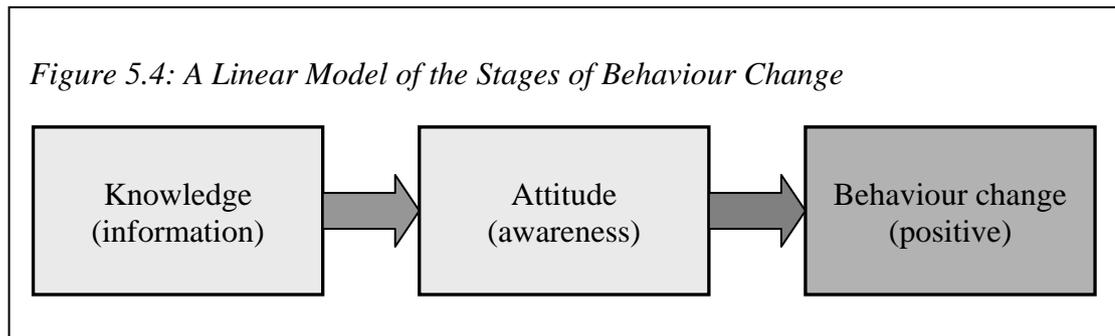
- Third, the increasing emphasis on obtaining a licence as quickly as possible. This is due to logistical pressures from parents who may be keen to reduce demand from their children for transport to study, social and work commitments; the financial costs which effectively limit the amount of professional driving instruction which is available to many, if not most, learner drivers; and the social pressures on young drivers to obtain their licence and thus the symbol, amongst their peers at least, of their maturity and independence.

5.1.4 Theoretical Foundation

Target audience, stakeholder and environmental analyses are critical to strategy formulation but become relatively meaningless without an understanding of two key, and inter-related, issues: why people behave as they do and, given this, how can that behaviour be positively changed. The application of a sound theoretical knowledge, or good theory, is necessary to thoroughly comprehend the elements at play in any social marketing scenario. Delaney et al. (2004) discuss the application of a theoretical model in their lengthy evaluation of road safety mass media campaigns. McKenzie-Mohr and Smith (1999, p7, cited in Kollmuss & Agyeman, 2002) claim that social marketing starts with people's behaviour and works backward to select a particular tactic to suit that behaviour.

A social marketing intervention should, at the very least, set out the reasons for and direction of behaviour changes in order to direct the target audience away from their current patterns and towards more beneficial behaviours. Social marketing's focus on behaviour change is advantageous because it addresses the effects of the knowledge gap or communication effects gap (Shingi & Mody, 1976, cited in Snyder, 2007). This term

describes the target audience's inability to initiate positive behaviour change, despite being aware of the problems their behaviour creates. An education or communication campaign will focus on providing the target audience with information about an issue in order to raise awareness, with the underlying assumption that people will act when they learn of a problem. This progression is represented Figure 5.4.

Figure 5.4: A Linear Model of the Stages of Behaviour Change

Knowledge (information) → Attitude (awareness) → Behaviour change (positive)

The drawback of this approach is that, as Snyder (2007, p34) states, "people do not always act on what they know… so even when campaigns include knowledge, awareness, or belief change goals, they should also include behaviour goals." It is not enough to merely provide the target audience with facts and raise their awareness of problematic actions. Clearly this education/information approach does not provide the required impetus for positive action, largely because "attitudes do not determine behaviour directly, rather they influence behavioural intentions which in turn shape our actions," (Kollmuss & Agyeman, 2002, p242). This more complex interplay of elements, which impact on an individual's behaviour, can be explained through the Theory of Reasoned Action, referred to in Ajzen and Fishbein (1980). Figure 5.5 illustrates this inter-relationship of elements and the effect of social or normative pressures upon behavioural intention.

Figure 5.5 Theory of Reasoned Action (Ajzen and Fishbein 1980)

Ajzen and Fishbein (1980), in their development of the theory of reasoned action, conclude, "the ultimate determinants of any behaviour are the behavioural beliefs concerning its consequences and normative beliefs concerning the prescriptions of others" (p239). Accordingly, identifying existing behavioural beliefs is the first step in developing any type of social marketing intervention. This is the aim of this study.

Much attention has been directed at developing a greater understanding of the links between knowledge, attitudes and responsible behaviour. A potential difficulty of this pursuit is that these inter-relationships have been described as "weak at best" (Kollmuss & Agyeman, 2002, p244). In a study of the factors affecting pro-environmental behaviour Hines, Hungerford and Tomera (1986) classified six variables:

1. Knowledge of issues

2. Knowledge of action strategies

3. Locus of control (personal belief in ability to change behaviour)

4. Strong attitudes, verbal commitment

5. An individual sense of responsibility

6. Situational factors: economic constraints, social pressures and opportunities to choose different actions

As a further development, and in a major seminal paper, Fishbein et al. (2001) identified eight key determinants of behaviour. These variables are contained in the table below.

Table 5.3 Eight Key Determinants of Behaviour (Fishbein et al., 2001)

These variables may influence behaviour individually or in combination. However, Fishbein et al. (2001, p5) describe the first three as being "necessary and sufficient for

producing any behaviour". As such the variables could be described as behaviour requirements. Fishbein et al. classified the remaining five variables together as they influence "the strength and direction of intention" (ibid). This group could be referred to as behaviour modifiers. Some of these eight variables, such as skill and self-efficacy, have a more profound role to play in the social marketing intervention designed to focus on the findings of this research. This will be discussed in detail in the following section.

Finally, developing a social intervention around an understanding of behavioural influences also requires practitioners to consider any environmental barriers that limit responsible behaviour. An element of the target market will continue to behave inappropriately, despite campaigns that effectively raise awareness and reinforce appropriate behaviour. In their study of a drink driving intervention Rothschild, Mastin and Miller (2006) determined that marketing driven changes to the environment "provide immediate benefits for exhibiting the right behaviour and remove barriers in the way of such behaviour" (p1226).

5.2 Discussion in Relation to Findings

Driving behaviour has been identified as a critical factor in young drivers' safety. However the current safety focus of legislators (in NSW) is on developing driving skill by increasing the number of on-road hours a novice driver must experience in order to attempt a road test. Limitations on speed and passenger numbers have also been implemented plus a series of harsh penalties for infringements. These punitive measures are focussing on addressing negative behaviours.

This report considers how upstream and downstream strategies can be combined as part of a social marketing campaign to shape positive behaviour change during the childhood observational phase, the novice driver's learning phase, and the ultimate phase as a young licensed driver. Table 5.4 summarises suggested intervention strategies, based on the findings of this research along with the relevant theoretical construct from Fishbein et al.'s (2001) work. Each of these seven strategies is then detailed in the following discussion.

Table 5.4 Research Findings, Theoretical Variable and Related Strategies

Finding	*Theoretical Construct*	*Strategy*
1. Skills focus of driver training and assessment	Skill Environment	Upstream intervention to incorporate driver behaviour and skill in licence training and testing
2.Young drivers lack skill and confidence when licensed	Skill	Upstream intervention to address licence testing process
3.Young drivers have low confidence in parents as driving teachers: parents are not confident teachers	Skill Self-efficacy	Downstream intervention to educate and support parents as teachers
4.Young drivers do not heed parental safety messages, parents are not confident communicators	Skill Self-efficacy	Downstream intervention to educate and support parents as safety communicators
5. Parents often provide negative behaviour models – before and during teaching.	Self standards Social norms	Social marketing campaign to educate parents and change behaviours in order to provide stronger positive models
6. Punitive focus on post licensure infringements	Intention Skill	Upstream intervention to remodel punishments to facilitate positive behaviour change eg driver training or re-education courses for speed infringements not licence suspension
7. Drivers licence as social milestone is a strong shaper of young driver behaviour	Self standards Intention Social norms Attitude Emotion	Social marketing campaign to shift the focus from independence, expressed by risky driving choices, to independence as signified by skill and positive behaviours

One area highlighted in this research is the consistent focus on skills development during driver training and assessment. This is despite the proven role of driver behaviour in causing, and also preventing, road accidents. Providing young drivers with an opportunity to develop positive behaviour in conjunction with, rather than at the expense of, their skills development would result in a more rounded candidate presenting for licence examination. An upstream social marketing intervention, in which state governments modified the learning and assessment requirements for novice drivers to incorporate elements of behaviour and risk, would address the impact of two behaviour-modifying variables: skill and environment. An intervention of this nature would provide young drivers with the skills in order to make positive behaviour choices and remove one of the environmental barriers – namely, how their respective state governments require them to learn.

The research revealed another finding related to the issue of skill that challenges the focus of the current learning regime. Despite the emphasis on skills development, many young drivers candidly admitted that at licensure they were neither skilled nor confident. Even accounting for the challenges presented by their change in status, from supervised novice to independent solo driver, their comments highlight deficiencies in their ability to control their vehicle, deal with split second decisions, and maintain focus. The upstream intervention discussed above requires state governments to further restructure the learning and licence testing process for young drivers in order to provide them with the skills to drive more safely and to legitimately feel confident in their ability to do so.

It is pertinent to note these conclusions are based on the findings from focus groups conducted before and just as the NSW state government modified the novice driver program, extending the mount of required driving for learners to 120 hours (as of 1 July, 2007). The impact of this strategy is yet to be assessed.

The third social marketing intervention addresses the issue of confidence, but this time in relation to learning and teaching. Research found young drivers are not confident in their parents as supervising drivers and, more profoundly, that parents lack confidence and skill in this role. (Refer to Section 4.4.2 Teaching) The high cost of professional driving lessons forces many parents to take on the task and while most recognised their responsibilities there were a number of challenges: negative behaviour modelling, outdated knowledge, and poor driving and communication skills. This is not an indictment of parental skill but a summary of parents' honest reflections about the stresses and challenges they face as supervising drivers.

Clearly parents require more support and information if they are to effectively teach young people to drive safely. As they are responsible for the overwhelming majority of that teaching it would appear to be an effective, if not also a glaringly obvious, placement of resources. In NSW the RTA currently offers support measures including workshops and information for supervising drivers. Details on the latter can be found in the licence information section on the RTA website: http://www.rta.nsw.gov.au/licensing/gettingalicence/car/learners/supervising_drivers.html. However, based on the comments gathered throughout this project it would appear parents are not accessing these resources, or these resources do not satisfy parents' needs. In light of this, a downstream social marketing intervention to educate and

support parents as teachers would effectively enhance their skills and self-efficacy - their perception of their own capability to perform the behaviour - as positive and effective driving supervisors.

Communication is another area in which a social marketing intervention could result in positive behaviour change. According to these research findings, young drivers do not heed parental safety messages. For their part, parents do not feel confident when communicating with the young drivers in their family about these issues, nor are these messages delivered in a particularly effective manner. Just as a downstream social marketing intervention can address parental teaching capabilities, a downstream strategy could also be designed to educate and support parents in their role as their family's road safety communicator. Such a strategy would also address the behavioural variables of skill and self-efficacy.

Another social marketing intervention could be structured to address the issue of parents as negative models of driving behaviour in the years before teaching and during the teaching phase. Young drivers consistently commented on the perceived double standard of watching parents driving to their own set of rules and teaching another. Those parents who were aware of these foibles indicated they were disinclined to welcome discussion or permanently improve their behaviour, making short-term positive changes largely only when the novice was in the car.

The focus of the intervention would be on long-range behaviour change within society as a whole. It is essentially too late to affect the behaviour of parents currently teaching novices to drive, as these same novices have been exposed to almost 17 years of

observation. A more effective campaign would target parents of much younger children, aiming to educate and raise awareness that from a very young age their children are watching their driving behaviour. Such an approach would focus on the behaviour variables of self-standards and social norms. For example, a parent is more likely to modify their behaviour and model safe driving if they perceive strong social pressure to drive "well", that is safely, for the sake of their children and that this behaviour is consistent with their self image.

Currently (in NSW) there is a strong focus on punitive measures to address novice's post license driving infringements. State Roads Minister Eric Roozendaal cited the disqualification of more than 15,000 provisional licence holders and the issue of more than 1200 penalty notices for flouting passenger restrictions within nine months as evidence of the government's effective campaign to improve safety for P-plate drivers (ABC News, April 7, 2008). The strategies have raised millions of dollars in state government revenue yet the minister did not present evidence that these measures prevented young drivers from re-offending or that they led to long-term positive behaviour change. The Minister described those punished as "too inexperienced or too reckless to act responsibly on our roads" without recognising that removing the ability to drive legally does not contribute to developing a safe experienced driver.

An upstream social marketing intervention would remodel existing punishments in order to facilitate positive behaviour change. For example, instead of suspending a provisional driver's licence in response to a speeding infringement the government could institute driver training or re-education courses. This approach could operate in addition to the upstream measures already discussed which are designed to focus on

driver training and assessment for licence. A strategy of this nature would address the behavioural intentions of young drivers as well as ensuring they have the skills required to drive safely.

The final area in which a social marketing intervention could be developed focuses on the significance young people attach to a driver's licence as a major social milestone. This perception has a strong impact on young drivers' behaviour; the desire to assert independence and experience driving freedom is often coupled with irresponsible and dangerous behaviour such as speeding. Shifting the meaning of this milestone - while still maintaining its importance in a young person's life - could result in safer, and therefore life saving, behaviour. To achieve this, a downstream social marketing campaign would be designed to shift the focus from freedom, independence and maturity, as expressed by risky driving choices, to one where independence and maturity are signified by skill and positive, responsible behaviours. A campaign of this nature hinges on the development of self in relation to community and would work with almost all of the behavioural variables in order to influence a young driver's positive behavioural intentions, namely self standards and perceptions of social norms, anticipated outcomes (or attitude), self standard and emotion.

5.3 Conclusion

These seven strategies are designed to positively effect behaviour change of young drivers and their parents. Critical to their implementation is an understanding of the behavioural variables that affect an individual's choices. This understanding must also be addressed within a social marketing intervention.

The following chapter will draw together the aims, methodology, findings and recommendations contained within this research project. It will also reflect upon the implications of this research, and the opportunities that this document could present to community and government authorities considering the issue of young driver safety.

6. Conclusion

6.1 Introduction

Most, if not all, documentation of research into novice and newly licensed young drivers begins with an acknowledgement of the unacceptably high incidence of on-road death and injury among those aged between 17 and 25. Also acknowledged are the safety risks particular to this group, ranging from peer pressure and challenging driving conditions, to dangerous behaviour choices such as speeding and driving under the influence of drugs and/or alcohol. There is recognition too of how these elements interplay with personality and, critically, overconfidence. Researchers, legislators, and the broader community are involved in an ongoing attempt to develop effective strategies to deal with continually tragic statistics.

This research attempts to contribute to efforts to understand and improve young driver safety by focussing on parents and their impact on learning and communication. There is a wealth of academic literature investigating driving and the novice experience: research is relatively more limited on the effects of parental influence and intervention. Given the gap in knowledge in this area the aim was to investigate the nature of parental influence on and communication with novice drivers. In the majority of cases parents assume the role of supervising driver when their children formally obtain a learner's permit – yet for years prior those children have been observing, and absorbing, their parents' driving habits. When novice drivers become licensed parents struggle to be heard when discussing safety issues.

A qualitative methodology was adopted in order to effectively explore the issues, based on the strength of this approach as a technique of discovery. The choice of methodology

also contributed to a greater understanding of how people think by giving a voice to those personally involved in the issue: young drivers and their parents. The research details their experiences using their descriptions, the words of parents and young people themselves providing direct insight into the fears and jubilation that gaining a driver's licence can generate. This qualitative approach makes the findings more relevant to the thousands of families who go through the learner driver experience every year.

6.2 Study Limitations

This chapter notes the limitations of this research design, which are:

- Focus group composition
- Focus group location

The research design attempted to ensure data was gathered from a range of socio-economic groups within the community. However more participation from young people and in particular parents from socially and/or economically disadvantaged backgrounds would have been useful for the research. This would have allowed the comparison of findings across community groups to determine any differences in how young people were taught, how they perceived driving laws and what parental driving behaviours were observed prior to gaining a learner's permit. This process would also have identified if this group had particular needs that should be addressed in any social marketing based behaviour change intervention.

Focus groups were conducted in two local government areas, so from this perspective were limited geographically. Addressing the composition of focus groups and their location would also have enabled the researcher to observe if the findings were repeated across a wider area.

6.3 Key Findings

Data analysis identified three emergent themes: *Risk Topography,* which refers to parents' and young peoples' attitudes and communication about the risk behaviours of young drivers; *Young Driver Topography,* which concerns the descriptors or characteristics that are particular to young drivers; and *Parental Topography,* which classifies components of parental behaviour and influence that affect young drivers. Of these three themes, young driver topography and parental topography contribute significantly to the later development of safety interventions based on social marketing principles.

The study found parental influence on young drivers was exhibited in terms of communication and behaviour, both in negative terms. Parents consciously attempted to exert an influence when communicating to young drivers about safety – and were largely unsuccessful. Their strongest influence on young drivers was their own - unconscious - behaviour while driving; their children observed their negative habits and often found themselves subject to the contradictions of "do as I say not as I do" teaching methods.

Research findings focussed on parental teaching issues, specifically teaching confidence and competence. Many parents were aware of their responsibilities as supervising drivers but were not confident in the role, used outdated rules or experienced difficulty communicating clearly and calmly.

The research also found that young drivers exhibited dissonance in relation to two areas: when supervised by their parents they drove with less risk than when driving solo or

with peers; and the safety information they privately admitted needing was different to indications given to parents. They also admitted to nervousness and poor driving competence post licence, yet regarded their licence as a major social milestone which, when reached, allowed them to exercise perceived independence from their parents' influence.

6.4 Implications for Safety Interventions

The application of a social marketing perspective to the findings of this research can guide the development of options for intervention programs. Social marketing's principle of positive behaviour change can be viably applied to young drivers to promote safe driving practices.

The interventions centre on:

- Upstream strategies to enhance driver training and testing procedures in order to address skill and behaviour deficiencies

- Downstream interventions to address parental driving behaviour, and to educate and support parents as teachers and safety communicators

- Upstream interventions to focus on re-training rather than punishment in response to driving infringements

- A social marketing campaign linking the milestone of a licence to positive behaviour and independence

These suggestions can be viewed as strategy foundations that can be developed and then refined as behaviour changes and statistics drop. The emphasis is on listening to, and involving, the target audience. This enables the creation of a long term integrated

strategy rather than a singular approach that focuses on, for example, the short-term impact of punitive measures.

6.5 Implications for Future Research

This project has been designed to address a gap in the existing field of research and while answering some questions also raises the possibility of further investigation. Additional research could be designed to address the limitations noted in this report, that is, the composition and location of focus groups. Extending the focus groups to other economic groups and local government areas would further validate the findings of this project and ensure the planned social marketing intervention addressed all needs of the target audience.

The aim of this project was to develop understanding of parental influence and communication in order to construct practical social marketing interventions to enhance positive behaviour change and improve young driver safety. A number of strategies have been suggested based on the findings of this research; both the findings and the strategies themselves present opportunities for further, long term, study. The effects of specific interventions could be measured over time to examine the impact on the learner stage, then at specific points over the ensuring months and even years. This process would also enable the observation of any changes in parent-young driver communication and young driver skills and behaviours. These changes could also be measured in relation to any improvement - or worsening - in accident statistics.

Further, research is suggested to investigate the meaning of driving and the significance of the social milestone that is represented by a driver's licence. The results of this

project could be significant in providing a deeper understanding of young drivers' behaviour and motivation, while contributing further to the development of a useful social marketing intervention.

6.6 Closing Observations

Based on their comments, young drivers are a somewhat dangerous and contradictory combination of vulnerability, inexperience, excitement and overconfidence. This report is not designed to criticise their behaviour – or for that matter that of their parents. Both groups, if one is to maintain a social marketing view of young driver safety, behave in a manner that is the result of current upstream and downstream influences in their environment: existing legislation and driver training protocols, social norms, and intra-family dynamics. Existing strategies to improve young driver safety are failing to produce the desired result, that is, a significant improvement in young driver safety.

After writing this report I am left wondering if any of the young participants in this project will become a road statistic, injured or killed while driving or being driven by one of their peers. The sad and uncomfortable reality, given the current trend, is that this is highly likely. With statistics proving young drivers are the most at risk group on our roads young driver safety is truly an urgent issue. The pressure is on governments, law enforcers and the broader community to contribute to forming and implementing effective safety strategies. Preventing young drivers from becoming a statistic will enable them to become safe and competent drivers and, in their turn, make their own contribution to road safety as safe and competent supervising drivers.

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Appendix

Appendix 1

Stage 1 Focus Group Discussion Prompts (Parents)

1. Have you accessed support information for parents teaching their children to drive?

2. What is your opinion about the support information for parents?

3. What do you think is needed?

4. Did you impose restrictions on your son/daughter when they were learning to drive?

5. What were they?

6. Did you impose restrictions on them when they were on their P-plates?

7. What were they?

8. Why did you impose restrictions?

9. How long were the restrictions in place?

10. How effective were restrictions as a safety strategy?