Parental Influence: targeting parents to improve the safety of their children on our roads.

Samantha Collins¹, Samantha Cockfield¹, Anne Harris², Antonietta Cavallo³.  
¹ Transport Accident Commission, Victoria, Australia, 03 52256738,  
Samantha_collins@tac.vic.gov.au ² Royal Automobile Club Victoria, Australia,  
³ VicRoads, Victoria, Australia.

Abstract

Parents have long been a target of road safety organisations to teach their young children safe road crossing behaviours and help their learner drivers to increase their driving experience. Research is now suggesting that parents may also have a role to play in preventing or reducing the risky behaviours of their children, as pedestrians, passengers and young drivers. Parental role modelling, parental monitoring and parental control have all been identified as potentially playing an important role in the safety of children and young people.

The TAC, RACV and VicRoads recognise the potential of parental influences on risky driving behaviour and as such are focussing on developing and implementing two strategies to target parents.

The first strategy will focus on targeting parents with road safety specific messages. The overall aim of this strategy is to encourage and educate parents to have a greater influence on the road safety behaviour of their children. Some aspects of this strategy are already in place. Other aspects are new and will complement existing materials.

The second strategy will focus on improving general parenting skills. The overall aim of the strategy is to encourage and educate parents at a preventative level, to adopt risk reduction strategies to reduce risk taking behaviour among children and young people.

Introduction

Parents have long been a target of road safety organisations to teach their young children safe road crossing behaviours and help their learner drivers to increase their driving experience. Research is now suggesting that parents may also have a role to play in preventing or reducing the risky behaviours of their children, as pedestrians, passengers and young drivers. Parental role modelling, parental monitoring and parental control have all been identified as potentially playing an important role in the safety of children and young people. The TAC, RACV and VicRoads recognise the potential of parental influences on risky road behaviours and as such are in the process of developing and implementing two strategies to target parents.

The research
There are several constructs that make up the parenting process. The research has identified several that seem to be of greatest importance with regards to different types of problem or risky behaviours and road safety. However, it is important to note that there may be other moderating variables within a parent-child relationship that may also impact upon these behaviours to a certain extent. The constructs that seem to be most important, particularly with regard to road safety, have been identified as parental role modelling and parental monitoring.

**Parental Role Modelling**

There is now considerable evidence that parental role modelling can play an important role in preventing the development of problem behaviours. Social learning theory holds that humans learn many of their behaviours by observing other humans, often referred to as models (Miller and Taubman – Ben-Ari, 2010). Learning occurs when a person’s responses are influenced by the observation of others. As the theory has been refined, it has become apparent that certain types of models and outcomes are more influential than others. For example, people are more likely to imitate behaviour if:

- The model achieves a positive, desired outcome from the behaviour,
- The model is liked or respected by the observer,
- The model is considered attractive or powerful by the observer, and,
- The observer sees similarities between themselves and the model.

Research on the intergenerational transference of risk taking and antisocial behaviours from parents to children supports social learning theory. There is considerable evidence indicating that parents of children who use substances, are violent, abuse alcohol or smoke also display similar behaviours (Corvo and Carpenter, 2000, White et al., 2000). Similar findings have also been found with relation to driving styles. Recent research from Israel has found significant correlations between parents’ driving styles (particularly anxious and aggressive styles) and those of their children a year after licensure (Miller and Taubman – Ben-Ari, 2010). The correlations were weak though, which the authors suggest may be due to imperfect transference of driving styles. This study also found that relatively safe ‘careful’ driving styles were not transferred to children, suggesting that role modelling may help to prevent the development of unsafe driving rather than acting to promote safe driving styles. Miller and Taubman – Ben-Ari also found that gender played a role in the transference of driving styles. Their findings support other studies that have found that men’s driving styles are influenced most by fathers and women are influenced by both parents.

**Parental Monitoring**

Another parenting construct that has a growing body of evidence supporting its influence on problem behaviours is parental monitoring. Dishion and McMahon (1998) propose that adequate parental monitoring is a necessary but not sufficient condition for effective parenting. Parental monitoring generally refers to knowing where your children are, what they are
doing and who they are with. Positively, Steinberg and colleagues (1994) note that monitoring is a skill that can be improved through parent-training programs, even in high risk populations.

There are at least four areas of child and adolescent research in which some aspect of parental monitoring is considered to play an important role: anti-social behaviour, substance use, academic achievement and safety and injury (Dishion & McMahon, 1998). With regards to anti-social behaviour, several delinquency studies found that poor parental monitoring during childhood was one of the better predictors of male adolescent delinquency (Loeber and Dishion, 1983; Loeber and Stouthamer-Loeber 1987 as cited in Dishion and McMahon, 1998). In fact, a group of family factors relevant to parental monitoring consistently provided the best predictor in this study of adolescent problem behaviour, even in comparison to childhood problem behaviour. Further research also found that poor parental monitoring was a significant factor in a child’s development of a deviant peer network in early adolescence (Dishion et al., 1991 as cited in Dishion and McMahon, 1998).

Several studies have linked low levels of parental monitoring to early substance use (e.g Baumrind et al. 1985; Brown et al. 1993; Fletcher et al., 1995; as cited in Dishion and McMahon, 1998). Parental monitoring has been found to be directly and indirectly related to young people’s use of alcohol and marijuana (Dishion and Loeber, 1985, as cited in Dishion and McMahon 1998). In addition, studies have found that low levels of parental monitoring after school are critical to the early onset of substance abuse (Radziszewska et al. 1996; Steinberg, 1987 as cited in Dishion and McMahon, 1998).

The relationship between parental monitoring and academic achievement has also recently been explored. However, some contradictory results have been found. Some US research has found that low levels of parental monitoring are associated with poor academic performance between 9 and 12 years old for boys only (Crouter et al., 1990 as cited in Dishion and McMahon, 1998). Other research found that moderate levels of parental monitoring were associated with the highest grade point averages for sixth graders (Kurdek et al., 1995 as cited in Dishion and McMahon, 1998). Further research has found that in two parent families, lower levels of parental monitoring were associated with higher standardised math achievement scores in third and fourth grade students. However, children from two parent families who were monitored scored higher than children from single parent families with comparable levels of monitoring (Coley and Hoffman, 1996 as cited in Dishion and McMahon, 1998). These authors suggest that the contradictory findings may be due to other potentially moderating variables such as neighbourhood risk, single parent, maternal employment status etc.

Research on risky driving behaviours has found links between antisocial behaviour, substance abuse, poor academic achievement, other problem behaviours and crash risk (Vassallo et al., 2007; Vassallo et al., 2008; Möller et al., 2008, Bina et al., 2006, Hutchens et al., 2008). It is likely that these areas are related and that research findings in these areas may also apply to
risky road safety behaviours. Many problem behaviours that are related to risky driving begin before young people are able to get their license and this has led researchers to suggest that they may be antecedents to risky driving (Vassallo et al., 2007; Vassallo et al., 2008; Møller et al., 2008). Research shows that if young drivers engage in a range of risky driving behaviours, regardless of their perceptions or attitudes about safety, their crash risk increases by approximately 50% (Ivers, 2009).

Research from the US by Hartos and colleagues (2000) on the relationship between parenting practices and adolescent problem driving behaviours found that the parental monitoring variable was the most useful in predicting risky driving behaviours. This study also found that traffic offences were two times more likely with low parental control. The age of participants in this study ranged between 16 and 18 years old due to the lower licensing age in the US. Further US research by Shope and colleagues (2001) surveyed 15 year old students regarding substance use and parenting practices. Over the next 8 years driving history data was obtained for these students. This study found that substance use at age 15 and negative parental influences reported at age 15, such as low levels of parental monitoring, nurturance, family connectedness and high levels of parental leniency towards young people’s drinking were important predictors of subsequent excess risk for serious driving offences and serious crashes for both men and women. When substance use and parental influences were included together in the regression models, marijuana use and parental monitoring were important predictors of serious offences for both men and women. Cigarette use and parental leniency towards young people drinking were also important predictors of serious offences for men. In predicting serious crashes, parental influences remained the primary factor in the full model for both men and women.

The Victorian Response

Having recognised the emerging research in parental influences on road safety behaviours, the RACV commissioned a report to explore what information could support parent-focused road safety interventions (Harrison, 2009). Harrison found that there is at least some evidence that parents do play a role in the safety outcomes of their children and can be influenced to improve their effectiveness. Harrison also noted that although some parents may benefit from an information campaign, there is consistent evidence that parents do not generally respond to additional information by changing their behaviour in relation to safety and injury prevention. Interventions will require additional content to generate one or all of a change in perceived risk, improved self-efficacy and motivation to act.

In 2009 the TAC and VicRoads also completed a review of all key messages that were delivered to young people in Victoria from pre learner to full licensure (Elliott, 2009). One key gap that the review found was in parent communication. Communications to parents were based on helping their children learn to drive, and this information was generally delivered via the
learner driver. It is not clear whether this information was read by parents, or if they even received the information from their children. It was clear from the review that more effective communication is required for parents, particularly with regards to risk taking behaviours. Similarly with young children, the information provided to parents is usually regarding teaching children to cross the road or proper use of child restraints. There is a small amount of information regarding parental role modelling and monitoring however it is unclear how widely this information is being accessed.

Based on the existing research, the TAC, RACV and VicRoads are now collaborating on a project to target parents to educate and encourage them to improve the road safety behaviour of their children as pedestrians, passengers and young drivers. The partners have identified two areas for potential intervention. Firstly, there is potential to target parents with specific messages relating to road safety. Secondly, there is potential to target parents more generally with regards to parenting skills with the probability that improvement in these general skills will improve the safety of their children on the road.

The TAC, RACV and VicRoads decided to begin communicating with parents by targeting them with messages relating to road safety, as it is where the bulk of the agencies expertise lies. A review of the literature around parental influences and several discussions between the agencies did not provide a clear direction to follow with regards to targeting parents. This prompted the development of a communication strategy. The aim of developing this strategy is to identify the key messages, key intervention times and methods of communication for effectively targeting parents. To support the development of this strategy, a parenting and road safety expert group will be set up to provide the appropriate evidence base for targeting parents. This group will include experts in road safety and parenting. A communication strategist will facilitate the group through several workshops to explore the relevant research findings and prompt expert discussion about the best way to target parents. The communication strategist will use the outcomes of the workshop to develop a report outlining the recommendations for appropriate and effective communication with parents. The aim is to have the communication strategy developed by February 2012 with implementation by late 2012.

With regards to targeting parents more generally on parenting skills, it is likely that this will require a different approach. The Victorian road safety agencies are currently unclear what direction interventions in this area will take. There is research that suggests that to prevent problem behaviours and poor academic behaviour, early interventions show the greatest cost benefit ratios and best outcomes (Heckman, 2006) and this may guide the approach to be taken. Further investigations are required before action can be taken in this area.

In conclusion, it is clear that there is potential to target parents with messages around parental influences, to educate encourage them to prevent
the development of risky road use behaviours in their children. The TAC, VicRoads and RACV are currently working on two strategies to guide the development and implementation of messages/interventions for parents.
References


Elliott, B. (unpublished) Identifying and optimising key times and key audiences for messages targeting novice drivers aged 15 – 26 years.


