

## Students' Responses to the RACQ Docudrama Program

Ioni Lewis<sup>a</sup>, Judy Fleiter<sup>a</sup> and Julie Smith<sup>b</sup>

<sup>a</sup>Centre for Accident Research and Road Safety-Queensland (CARRS-Q), Queensland University of Technology (QUT)

<sup>b</sup>Royal Automobile Club of Queensland (RACQ)

### Abstract

Young people are over-represented in road crashes and school-based education programs, including the RACQ Docudrama program, represent initiatives aimed at improving road safety among this high-risk group. The aim of the study was to apply an extended Theory of Planned Behaviour framework to understand more about the extent to which the program influenced individuals' intentions to speak up to a driver engaging in risky behaviours (e.g., speeding). Senior high school students (N=260) from 5 Queensland schools completed a survey in class. The study included a Control group (n = 86) who responded to the survey prior to completing the Docudrama program and an Intervention group comprising an Intervention-Immediate (n=100) and an Intervention-Delayed group (n = 74) who completed the survey after having participated in the program either on the day or up to a week later, respectively. Overall, the findings provided support for the beneficial effects of the program. Some of the study's key findings included: (i) Intervention group participants consistently reported significantly stronger intentions to speak up than participants in the control group; (ii) among the significant predictors of intentions, a notable finding was that the more individuals anticipated feeling regretful for not having spoken up to a risky driver, the stronger their intentions were to speak up; and (iii) the level of fear reported by students significantly decreased and was lowest at the conclusion of the program, following facilitated group discussion. The implications of the results for future research, program development and practice are discussed.

**\*Please note that the content of this paper has been drawn from a report prepared for the RACQ. The citation of the full report is as follows:**

Lewis, I., Fleiter, J., Kennedy, A., Cullen, B., Firman, D., & Smyth, T. (2014). Investigating students' responses to the RACQ Docudrama Program: Study background, methods, results, and some recommendations. Report prepared for the RACQ. Unpublished report. Brisbane, Queensland: Centre for Accident Research and Road Safety Queensland.

### Introduction

Young people are over-represented in road crashes, fatalities, and injuries, compared with other age groups. In 2013, of all states and territories in Australia, Queensland had the highest number of road deaths among road users aged 16 years and under, and the second highest number of road deaths among road users aged 17-25 years (Bureau of Infrastructure, Transport and Regional Economics [BITRE], 2014). In the attempt to reduce crash involvement of young adults, substantial resources are dedicated to road safety initiatives targeting young drivers and passengers, including road safety school-based education programs. In Australia and elsewhere, many different young driver education programs exist, including the RACQ's Docudrama program. The program runs within student classes for approximately 3 hours and, similar to some other programs, it features a mock car crash scene. This scene appears as the first of three parts in the Docudrama program.

The crash scene features audience members' fellow classmates acting as the victim, driver, and passenger in the role play. The mock crash occurs outdoors (e.g., on a school oval or assembly area) and is attended by actual emergency response teams as well as a funeral director. The deceased

crash victim, “Katie” is shown to be zipped up in a body bag and taken away by the funeral director. This crash scene is followed by parts two and three of the program, both of which are classroom sessions, facilitated by RACQ staff who are trained teachers, accompanied by teachers from individual schools. These latter two parts were added as part of RACQ’s revisions to the program once they commenced running it from 2014 (i.e., the RACQ took over running of the program, running it for the first time in 2014 after the retirement of the program’s developer and long-term facilitator, Mr Barry Collis). In Part 2 of the program, students are shown the “Party Video” which depicts the 12 hours leading up to the crash. Students are guided by the facilitators to identify the risk factors evident in the video and which contributed to the crash. These risk factors incorporate particular focus on the ‘Fatal 5’ behaviours: speeding, drink driving, non-use of seatbelts, fatigue, and distraction (mobile phones) (Queensland Police Service, 2014). The third part of the program is the “Voting Session” which involves facilitated discussion. In this final session, students identify strategies that they could use to help them avoid ending up in similar, risky situations. Students are encouraged to value themselves as important, to trust their gut instinct if a situation (i.e., getting in a car with a driver) does not feel right, and to take responsibility for their own and others’ safety.

Given that the RACQ Docudrama program features a mock car crash scene, the program may be conceptualised as a fear-based approach. To the extent that fear has been recognised as an important motivator, through encouraging individuals to ‘do something’ to remove the aversive feelings of fear, the objective of fear-based approaches is not just to scare people but to promote changes in attitudes, intentions, and ultimately behaviours. Over a number of decades, however, a substantial body of research has amassed that suggests that the relationship between fear and persuasion is complex and high levels of fear do not equate to enhanced persuasion. In particular, research suggests that the fear-persuasion relationship is influenced by various factors (Lewis et al., 2007). Of these factors, theoretical (e.g., Extended Parallel Process Model [EPPM]; Witte, 1992) and empirical evidence (e.g., Lewis et al., 2010) has highlighted the particularly crucial role of providing strategies within fear-based messages in that such strategies function to enhance acceptance and reduce rejection of fear-based messages. Thus, considering the three parts of the RACQ Docudrama program, the combination of fear together with the facilitated discussions focusing on identifying risks and strategies to address such risks appears consistent with tenets of the EPPM. In particular, according to the theory, the mock car crash scene would constitute the physical threat that one should feel fearful of as a relevant and severe threat. However, the provision of strategies should function to help reduce individuals’ feelings of fear, thereby enabling them to focus on what actions they can take to reduce their risk.

As an overarching objective, the RACQ Docudrama program aims to raise young people’s awareness of risky on-road situations and to empower them to take control of their life and of situations they find themselves in to prevent them ending up in risky on-road situations. A theoretical framework that respects the important role that one’s perceptions of control over behavioural enactment have upon subsequent intentional and behaviour change is the Theory of Planned Behaviour ([TPB]; Ajzen, 1991). The TPB is a well-validated social psychology model of attitude-behaviour relations (Ajzen, 1991). The TPB maintains that its standard constructs of attitude, subjective norm, and perceived behavioural control (PBC) underpin intentions, and that intentions then predict behaviour. The TPB proposes that a person’s intention to perform a particular behaviour is the most proximal predictor of that behaviour (Ajzen, 1991). Three separate factors are proposed to influence intentions: (i) an individual’s attitudes towards the behaviour, that relates to how favourably or unfavourably one rates the target behaviour; (ii) subjective norm, that relates to the perceived pressure of important others to perform the target behaviour; and, (iii) PBC that refers to the extent to which an individual believes they have control over their ability to

perform the target behaviour. The framework has shown significant and consistent explanatory and predictive utility in relation to a wide-range of social and health-related intentions and behaviours, including within traffic psychology related contexts. In regards to the latter context, and of relevance to the current project, the TPB has been applied to understand factors influencing passenger's intentions when travelling in a car with a speeding driver (Horvath et al., 2012).

The TPB's explanatory value may be enhanced with the addition of other constructs. Anticipated regret relates to the extent to which an individual anticipates that they will feel sorry, and regret, for not doing something they should (e.g., not speaking up to a speeding driver when a passenger). In this research, consistent with a key focus of the Docudrama program, there was particular focus on the role that passengers may play in preventing risky driving. Although the Docudrama program seeks to influence young people when they themselves become drivers, it also focuses upon raising awareness of the dangers of being a passenger as well as highlighting what young people can do as passengers, to reduce their risk of being in a road crash. Thus, to explore affective influences further and acknowledging that, as a passenger, a young person may feel regretful for having not spoken up to a risky driver, anticipated regret was included in the current research.

Through the application of theory, research is better able to understand the overall outcomes of a particular intervention and to gain insights into why an intervention may succeed or fail. Thus, guided by an extended TPB, the research presented herein sought to understand the effects of the Docudrama program on students' reported intentions to enact safety-related behaviours when in a vehicle as a passenger; namely, intentions to speak up to a speeding driver<sup>1</sup>.

From the outset, it is acknowledged that when assessing the effects of the Docudrama program, it would be beneficial to establish the extent to which the program improves actual behaviour and, ultimately, reduces individuals' involvement in road trauma. However, an assessment with outcome measures of this nature was beyond the scope of the current project. Furthermore, even in instances where such investigations are attempted, there are methodological challenges associated with implementing such studies as well as the conclusions which can be drawn from the findings. For instance, there are challenges associated with being able to isolate the effects of exposure to a program from other on-going and concurrently running interventions (e.g., enforcement). In addition, in instances where a study may focus on exploring program participants' subsequent traffic infringements and crash involvement, such a focus limits understanding of program effects only to instances where negative outcomes occurred and were detected, rather than understanding about instances where a young person chose the right/safe option (Watson, 2003; Williams, 2006).

### ***The Current Research: Objective and Aims***

The overarching objective of the current research was to use a theoretically-guided investigation to understand the effects of the Docudrama program upon students. Specifically, the aims of this research presented herein were to:

- 1) Determine the extent to which exposure to the Docudrama program was associated with positive effects on students' reported intentions to speak up to a speeding driver. Specifically,

---

<sup>1</sup> The overall research project included assessment of a large number of intentions and willingness measures in regards to a range of risky, on-road behaviours (as well as intentions and willingness measures in regards to situations where one was said to be a passenger and a driver); however, space prohibits discussion of all of these measures herein. As some examples of the willingness measures, however, participants were asked to report, in regards to the question stem of "If, in the next month, you are a PASSENGER in a car being driven by a FRIEND, how willing would you be to.. [tell a friend who is speeding to slow down/tell a friend to stop using a mobile phone while driving/tell a friend they're too drunk to drive/tell a friend who is not wearing a seat belt to buckle up/tell a friend that they're too tired to drive]?".

- a. Determine the extent to which such intentions were higher in the Intervention groups than the Control group; and
  - b. Determine the extent to which such intentions would vary over time and, in particular, whether the effects of the Docudrama program remained approximately one week after program participation.
- 2) Identify factors that predict individuals' intentions to speak up to a driver who is speeding and, thus, provide insight into how the Docudrama program may be influencing intentions.
  - 3) Determine whether students' (in the Intervention group) level of self-reported fear decreased across the running of the Docudrama program. Specifically, it was anticipated that, based on predictions by the fear-persuasion model, the EPPM (Witte, 1992), the highest level of fear would likely be reported in association with Part 1 (i.e., "Car crash scene") but, that the level of fear should decrease across the subsequent two sessions and by the final session, given the focus on strategies, the level of fear should be lowest.

## Method

University ethics approval was gained and then approvals were sought from the Department of Education, Training, and Employment (DETE) for the state high schools as well as from the Catholic Education and Independent schools. Unfortunately, approval from the DETE was not secured in time and therefore no state schools were able to be approached to participate. Thus, of the 15 schools within the potential data collection period, only 5 schools could be approached. Of these 5 schools, permission was sought from Principals, all of whom agreed to participate.

In the between groups design, schools were allocated to one of the following groups: (i) Control, (ii) Intervention-Immediate, or (iii) Intervention-Delayed. Thus, each school only participated at one time point each and therefore any conclusions are based on *differences* between groups as opposed to *changes* in individuals' responses over time. The inclusion of the Control group provided a baseline measure with which to consider the Intervention scores, relative to no exposure at all.

One of the 5 schools had never previously hosted the Docudrama program and therefore, it was chosen to represent the Control group. The remaining schools were assigned to the Intervention group. The Intervention group was further divided into the Intervention-Immediate and Intervention-Delayed groups and two of the four schools were each allocated to these conditions. The Intervention-Immediate group participated in the study immediately after exposure to the Docudrama program; while the Intervention-Delayed group participated approximately one week after having been exposed to the Docudrama program.

## Participants

Year 11 and 12 students from five central and south-east Queensland high schools hosting the Docudrama program participated. No other selection criteria were applied, although parent/guardian and student consent was required to participate. Parents/guardians were asked to sign and return consent forms to approve of their child's participation. These forms were disseminated to parents several days in advance of the researchers attending a particular school and were collected on the day that the researchers were on-site to administer the survey. In regards to obtaining consent from the students who participated, they were informed that return of a completed survey to the researchers would be taken as their having provided their consent. As an additional check that parent/guardian consent had been obtained, the student participants were asked to tick a box at the commencement of the survey to confirm that their parent/guardian had consented for them to participate. A total of 270 surveys were collected. Two students did not indicate that they had parental consent and  $n = 8$  had completed less than 50% of the survey, resulting in the exclusion of

10 surveys. Thus,  $N = 260$  students ( $n = 182$  females,  $n = 78$  males) provided useable data. Of these students,  $n = 53$  (20.4%) reported that they did not have a licence,  $n = 149$  (57.3%) had a Learner's Permit,  $n = 57$  (21.9%) had a Provisional 1 (Red) licence, and  $n = 1$  (0.4%) had a Provisional 2 (Green) licence. The students' ages ranged from 15 to 18 years. Of the 260 participants,  $n = 174$  ( $n = 39$  males and  $n = 135$  females) were in the Intervention group (with  $n = 100$  in the Intervention-Immediate and  $n = 74$  in the Intervention-Delayed) and  $n = 86$  ( $n = 39$  males and  $n = 47$  females) were in the Control group.

### Measures

The measures relevant to this paper were assessed in relation to the following context, "You are a passenger in a car being driven by your friend" and the friend was said to be speeding. Wording of TPB items was in accordance with convention (Ajzen, 1991), the measure of fear was from Witte (1994), and anticipated regret was adapted from Abraham and Sheeran (2003). All items, as shown in Table 1, were assessed on 5-point Likert scales with higher scores indicating more of the construct. The only exception was for the attitude measure that was based on a 5-point semantic differential scale. Participants' responses to the perceived fear measure were assessed three times, once in relation to each of the three parts of the program.

**Table 1. Summary of items used to measure the study's key constructs and the scale reliabilities.**

Construct	Items	Alpha/r
Attitude	"Telling a friend who is speeding to slow down would be..." "Uncomfortable/Comfortable", "Bad/Good", "Irresponsible/Responsible", "Unwise/Wise"	$\alpha = .74$
Subjective norm	"Most people important to me would want me to tell a friend to slow down if they were speeding", "Most people important to me would approve of me telling a friend who was speeding to slow down"	$r = .44$ , $p < .001$
PBC	"I am confident that I could tell a friend to slow down", "I have complete control over whether or not I tell a friend to slow down if they were speeding", "It would be easy for me to tell a friend who was speeding to slow down"	$\alpha = .77$
Anticipated Regret	"I would feel sorry for not telling a friend who was speeding to slow down", "Not telling a friend to slow down when they are speeding is something that I would regret"	$r = .58$ , $p < .001$
Intentions	"I intend to tell a friend who is speeding to slow down", "I plan to tell a friend to slow down if they are speeding", "I would be willing to tell a friend who is speeding to slow down"	$\alpha = .85$
Fear	"To what extent did you feel anxious/sad/fearful"	$\alpha = .91$

### Procedure

Students completed a hard copy questionnaire that took approximately 25 minutes. It was completed in school time, in classroom groups in the presence of teachers, together with two members of the CARRS-Q research team<sup>2</sup>. In each school, students who participated were entered into a random draw for one of five \$20 iTunes vouchers.

<sup>2</sup> There was only one exception to this approach whereby CARRS-Q researchers were unable to be on-site due to distance. In this instance, arrangements were made with the RACQ staff, who were on-site to deliver the Docudrama program, for them to collect the surveys and return them to the CARRS-Q team.

## Results

### *Intervention versus Control groups on intention measures*

To compare differences in mean intention scores to tell a driver to slow down between the Control, the Intervention-Immediate, and Intervention-Delayed groups, an ANOVA was conducted. As Table 2 shows, an overall significant group difference was found. Follow-up pairwise comparisons revealed that participants in both the Intervention-Immediate and Intervention-Delayed groups reported significantly greater intentions than Control group participants. Further, the two Intervention groups' mean scores did not significantly differ from each other.

**Table 2. Descriptive scores and ANOVA results for differences between groups on intentions.**

Dependent variable	Control <i>M (SD)</i> <i>n=87</i>	Intervention- Immediate <i>M (SD)</i> <i>n=100</i>	Intervention- Delay <i>M (SD)</i> <i>n=75</i>	<i>F</i>	$\eta_p^2$
<b>Intention to tell a speeding driver to slow down</b>	3.60 (0.93)	4.25 (0.84)	4.11 (0.83)	14.00***	.10

Items were measured on 5-point scales with higher scores indicating more of the construct.

\*\*\* $p < .001$ .

### *Extended TPB predictors of intentions to speak up to a speeding driver*

To determine the predictors of intentions to tell a driver to slow down, hierarchical regressions were conducted. Separate regressions were run for the Intervention and Control groups so as to provide an understanding of factors that were influencing students' reported intentions as a function of whether or not they had been exposed to the Docudrama program. The predictors in the regression models were drawn from the extended TPB with the TPB's standard constructs of attitude, subjective norm, and PBC added in the first step and anticipated regret added in the second step. Anticipated regret was added in the second step so as to determine the extent to which it added variance explained in intentions, over and above the variance explained by the standard constructs.

Table 3 provides the descriptive statistics of, and correlations between, the study's predictors and outcome measures of intentions to tell a speeding driver to slow down. As anticipated, all predictors were positively and significantly correlated with intentions with the only exception being the correlation between anticipated regret and PBC in the Control group.

Table 4 summarises the results of the regression analyses predicting intentions to tell a friend who is speeding to slow down in regards to the final step (Step 2) of the model. As noted previously, each regression was run separately for the Intervention and Control groups. At Step 1, in regards to the Intervention group, the standard TPB constructs accounted for a significant 44.2 % of the variance in intentions,  $F(3, 162) = 42.76, p < .001$ . Of the predictors, both subjective norm ( $\beta = .17, p = .009$ ) and PBC ( $\beta = .457, p < .001$ ) were significant, positive predictors; however, attitude was not a significant predictor ( $\beta = .01, p = .85$ ). As Table 4 shows, at Step 2, the overall model accounted for a significant 48.1% of the variance in intentions,  $F(4, 161) = 37.28, p < .001$ . Anticipated regret added a further significant 3.9% of the variance explained in intentions,  $\Delta F(1, 161) = 12.08, p < .001$ . Of the standard TPB constructs, only PBC was a significant, positive predictor ( $\beta = .48, p < .001$ ), with subjective norm no longer significant ( $\beta = .10, p = .119$ ), and attitude remaining not

significant ( $\beta = .01, p = .877$ ). The additional predictor of anticipated regret was a significant, positive predictor ( $\beta = .24, p = .001$ ).

In regards to the Control group, at Step 1, the standard TPB constructs accounted for a significant 24.8 % of the variance in intentions,  $F(3, 80) = 8.82, p < .001$ . Of the predictors, only attitude was found to be a significant, positive predictor ( $\beta = .37, p = .001$ ) with neither subjective norm ( $\beta = .19, p = .096$ ) nor PBC ( $\beta = .06, p = .556$ ) reaching significance. At Step 2, as Table 4 shows, the model accounted for a significant 47.1% of the variance in intentions,  $F(4, 79) = 17.60, p < .001$ .

Anticipated regret added a further significant 2.3% of the variance explained,  $\Delta F(1, 79) = 17.60, p < .001$ . Of the standard TPB constructs, only attitude was a significant predictor ( $\beta = .26, p = .006$ ) while subjective norm ( $\beta = .11, p = .227$ ) and PBC ( $\beta = .09, p = .354$ ) did not significantly predict intentions. Anticipated regret was a significant, positive predictor ( $\beta = .50, p < .001$ ).

### ***Differences between the level of fear reported over the 3 parts of the program***

A repeated measures ANOVA was conducted to compare the level of fear reported by students over the three parts of the Docudrama program. The results indicated that there was a significant difference in reported fear levels across the three parts of the program,  $F(2, 168) = 76.49, p < .001, \eta^2_p = .48$ . Pairwise comparisons (with adjusted alpha of .01) revealed that fear reported at Part 1 ( $M = 3.15, SD = 1.24$ ) was significantly higher than fear reported at Parts 2 ( $M = 2.54, SD = 1.22$ ) and Part 3 ( $M = 1.91, SD = 1.15$ ), and that the level reported at Part 2 was significantly higher than fear at Part 3. Thus, the significantly lowest level of fear reported was for Part 3 of the program.

### **Discussion**

Overall, the findings of this study provide evidence of there being positive effects associated with students' exposure to the RACQ Docudrama program. In regards to intentions to speak up as a passenger to a driver who is speeding, the Intervention groups were associated with higher mean scores than the Control group, while the Intervention-Immediate and Intervention-Delayed groups did not significantly differ from each other. These findings suggest that exposure to the program is associated with positive impacts and that these effects remain up to at least one week after exposure to the program.

The extended TPB underpinning this research assisted in identifying factors influencing intentions to speak up. Although beyond the scope of the current study to incorporate behavioural outcome measures, evidence supports that, intentions, although not perfect predictors of behaviour, are the most proximal determinants of behaviour. Overall, in terms of predictors, a key finding was the support for the Docudrama program's revisions of the inclusion of facilitated discussion to heighten the focus on strategies and on students taking control of their own and others' safety. Specifically, a construct found to predict intentions in the Intervention group, but not the Control group, was perceived behavioural control (PBC). PBC refers to the extent to which one considers that they have control over whether or not they perform a particular behaviour (such as speaking up to a speeding driver) and the extent to which they consider such a behaviour as easy to perform. This finding is important because, according to the TPB, PBC may influence behaviour not only indirectly through intentions but also may influence behaviour directly. Therefore, by potentially bolstering one's perceptions of control over being able to speak up to a driver who is speeding, it is possible that this factor may directly influence one's enactment of the actual behaviour in the future, should they find themselves in a vehicle being driven by a friend who is speeding.

The influence of anticipated regret is both noteworthy and significant. This construct significantly predicted intentions for participants in the Intervention and the Control groups. This finding

suggests that, for young people, anticipating they will feel remorseful and guilty if they were not to speak up to a driver engaging in a risky behaviour was an important predictor of intentions. These findings highlight the potential benefits that education programs, and advertising messages more generally, may garner from focusing on the role of peer passengers. In particular, the benefits of bolstering: (i) individual's perceptions that, as a passenger, they have the ability to speak up to a driver whom they do not feel safe travelling with; and (ii) individuals' acknowledgement of the possibility that if they do not speak up, they may feel regretful and remorseful for having not taken control of the situation and looked out for their own as well as others' safety. There may be benefit in discussing this aspect in more detail in the Docudrama program, for instance, by taking the opportunity in the discussion sessions to pose to students, "how do you think you would feel if you were to know that you could have been the one to make a difference?". Such discussion may heighten awareness of the negative affective responses that may be experienced if one does not speak up and how such affect may be remedied easily by taking action and speaking up.

**Table 3. Descriptive statistics of, and correlations between, the study's variables for the Intervention and Control groups.**

Variables	Intervention group (n = 166)							Control group (n = 84)						
	M	SD	1	2	3	4	5	M	SD	1	2	3	4	5
<b>Intentions</b>	4.18	0.84	-	.36***	.40***	.65***	.53***	3.60	0.92	-	.45***	.36***	.23*	.60***
<b>Attitude</b>	4.44	0.68		-	.35***	.49***	.30***	4.30	0.64		-	.38***	.24*	.27**
<b>Subjective Norm</b>	4.51	0.69			-	.38***	.44***	4.20	0.83			-	.43***	.23*
<b>PBC</b>	4.16	0.83				-	.50***	4.00	0.76				-	.08
<b>Anticipated regret</b>	3.82	1.00					-	3.06	1.10					-

Items measured on 5 point scales with higher scores indicating more of the construct. PBC = Perceived behavioural control. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

**Table 4. Regression Analyses predicting Intentions to tell a friend who is speeding to slow down: Results for the Intervention and Control groups.**

Variable	Intervention group				Control group			
	$R^2$	$\Delta R^2$	$\beta$	$sr^2$	$R^2$	$\Delta R^2$	$\beta$	$sr^2$
<b>Step 2</b>	.481***	.039***			.471***	.223***		
<b>Attitudes</b>			.01	<.001			.26*	.05
<b>Subjective Norm</b>			.10	.007			.11	<.01
<b>PBC</b>			.48***	.141			.09	<.01
<b>Anticipated Regret</b>			.24**	.038			.50***	.22

Items were measured on 5 point scales with higher scores indicating more of the construct. PBC = perceived behavioural control. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .



Further support for the RACQ Docudrama program was offered through the finding that self-reported levels of fear experienced by students in the Intervention group decreased over the three parts of the program. Specifically, the results supported expectations with reported levels of fear highest at Part 1 (“Mock Car Crash Scene”) and significantly decreasing over each subsequent Part of the program, with Part 3 (“Voting Session”) associated with the lowest level of reported fear. Finding a statistically significant pattern of decreasing levels of self-reported fear in accordance with the ordering of the program’s content does support such ordering and, in particular, further supports the important role that the facilitated discussion may be playing in bolstering awareness of, and confidence in, strategies for reducing risk and also in reducing fear. Theoretically, the EPPM and fear-relief models suggest that fear alone is insufficient to motivate desirable change and that evoking strong levels of fear in the absence of strategy provision is likely to lead to defensive avoidance reactions and message rejection (Lewis et al., 2010; Witte, 1992).

### *Strengths and limitations*

This study is the first to examine the effects of exposure to the RACQ Docudrama program on young people’s (i.e., Queensland high school students’) intentions to speak up to a speeding driver. A notable strength of the study is the inclusion of a Control group that allowed comparison of responses between groups of students exposed and not exposed to the program. This design allowed an exploration of whether there were any discernible effects of participating in the Docudrama program, and in doing so, addresses a limitation of prior studies which have tested the effects of school-based road safety programs (see Senserrick et al., 2009). The study was strengthened by the use of an empirically tested and relevant theoretical framework that assisted with the identification of factors which influenced intentions.

Strengths notwithstanding, limitations also need to be acknowledged. A total of 15 schools were identified as falling within the potential data collection period; however, a delay in receiving DETE approval meant that state schools could not be invited to participate and, thus ultimately, only five schools participated. However, the study comprised a large sample of high school students as participants (N = 260), and was based on the inclusion of five different schools (Catholic and Independent) from around Central and South-East Queensland. Thus, it could be conceived that the final sample still would be reasonably diverse. It is also noted that, due to the inclusion of an all-girl high school without an all-boy high school available in the testing time-frame to better balance the gender ratio, the Intervention group was predominately comprised of females. Based on the body of evidence that suggests that females, generally, are more receptive to high school driver education programs, this gender imbalance has the potential to influence the study results by increasing the intervention groups’ scores (Harré et al., 1996; Harré & Field, 1998; Hover et al., 2000; O’Brien et al., 2002; Powney et al., 1995).

A further limitation relates to the between groups design, in that it restricts the analysis to exploring the *differences* between students who had experienced the Docudrama program (Intervention group) and those not yet been exposed to the program (Control group). An alternative approach would be to investigate, among students exposed to the Docudrama program, the change in individual student’s responses over time via a repeated measures design. It should also be noted that the potential for confounding effects of prior road safety knowledge and experience gained through driving exposure and participation in other school-based road safety education programs also exists. Including a Control group was intended to minimise this effect, however, the possibility of a confounding influence cannot be disregarded. In addition, even in instances where a repeated measures design was to be implemented, a Control group would still be essential to assist in determining whether the program had been associated with any discernible effects, relative to no exposure at all. It also needs to be noted that repeated measures designs are associated with their

own limitations including, for instance, that the act of repeatedly administering a survey instrument to participants may lead to the survey itself being part of the intervention and influencing behaviour; a phenomenon referred to as the mere measurement effect (Morwitz, Stern, & Fitzsimons, 2004). In the current study, acknowledging that participating schools had already given so graciously of their time to invite the research team into classes to survey students, to have required more than one data collection period would have represented further imposition. In addition, the use of self-report measures also has the potential to introduce a source of bias in the study results. For example, it is possible that students may have overestimated their intentions to tell a speeding driver to slow down, to the extent that this behaviour could be considered socially desirable. However, the anonymous nature of the survey may have minimised this effect. Finally, it is important to note that the outcome measure of focus in this study was intentions as opposed to behaviour and that, although there was an Intervention-Delayed group, intentions were assessed at a relatively short time after exposure to the program (i.e., approximately one week later). Although intentions are the most proximal determinant of behaviour (Ajzen, 1991) evidence suggests that there is not perfect correspondence between intentions and behaviour. In addition, future research is required to determine the extent to which the findings may emerge in the longer term.

### Concluding comments

The current paper presents on some of the key findings emerging from a larger study designed to assess high school students' responses to the RACQ Docudrama program. The results presented herein provide support of the positive effects of the program on students' reported intentions to speak up to a driver who is speeding. The findings also identified key factors that are influencing such intentions. In particular, an important role of PBC was identified in regards to the program potentially bolstering individuals' perceptions of control over their ability to speak up to a speeding driver. Also identified was the important role of anticipated regret for young people, highlighting that interventions which harness the power of passengers and encourage them to speak up, may be an important means to reduce risky driving among young adults. Given the extent to which young adults constitute high risk road users, it is important that interventions which encourage safer on-road related attitudes and behaviours be identified. This research has assisted with that important goal in relation to providing insights into the effects of the RACQ Docudrama program.

### References

- Abraham, C., & Sheeran, P. (2003). Acting on intentions: The role of anticipated regret. *British Journal of Social Psychology*, *42*, 495-511.
- Ajzen, I. (1991). *The TPB*. *Organizational Behavior and Human Decision Processes*, *50*, 179-211.
- Bureau of Infrastructure, Transport and Regional Economics (BITRE) (2014). *Road Deaths Australia, 2013 Statistical Summary*. Canberra, ACT: BITRE.
- Harré, N., & Field, J. (1998). Safe driving education programs at school: Lessons from New Zealand. *Australian and New Zealand Journal of Public Health*, *22*(4), 447-50.
- Harré, N., Field, J., & Kirkwood, B. (1996). Gender differences and areas of common concern in the driving behaviors & attitudes of adolescents. *Journal of Safety Research*, *27*(3), 163-173.
- Harré, N., Foster, S., & O'Neill, N. (2005). Self-enhancement, crash-risk optimism and the impact of safety advertisements on young drivers. *British Journal of Psychology*, *96*, 215-230.
- Horvarth, C., Lewis, I., & Watson, B. (2012). Peer passenger identity and passenger pressure on young drivers' speeding intentions. *Transportation Research Part F*, *15*, 52-64.
- Hover, A. R., Hover, B. A., & Young, J. C. (2000). Measuring the effectiveness of a community-sponsored DWI intervention for teens. *American Journal of Health Studies*, *16*(4), 171-176.

- Lewis, I. M., Watson, B. C., Tay, R., & White, K. M. (2007). The role of fear appeals in improving driver safety: A review of the effectiveness of fear-arousing (threat) appeals in road safety advertising. *International Journal of Behavioral and Consultation Therapy*, 3(2), 203-222.
- Lewis, I., Watson, B. C., & White, K. M. (2010). Response efficacy: The key to minimizing rejection and maximizing acceptance of emotion-based anti-speeding messages. *Accident Analysis & Prevention*, 42(2), 459-467.
- Morwitz, V. G., Stern, L. N., & Fitzsimons, G. J. (2004). The mere-measurement effect: Why does measuring intentions change actual behavior? *Journal of Consumer Psychology*, 14, 64-74.
- O'Brien, G., Rooney, F., Carey, C., & Fuller, R. (2002). Evaluation of the effectiveness of a dramatic presentation on attitudes to road safety. In *Behavioural Research in Road Safety: Twelfth Seminar* (pp. 195-207). London.
- Powney, J., Glissov, P., & Hall, S. (1995). *The use of theatre tours in road safety education: Drinking, driving and young people*. Report No. 66. Glasgow: Scottish Council for Research in Education. Available online from: <http://dspace.gla.ac.uk:8080/bitstream/1905/256/1/>
- Queensland Police Service (2014). *Fatal Five*. <https://www.police.qld.gov.au/EventsandAlerts/campaigns/fatalfive.htm>.
- Senserrick, T., Ivers, R., Boufous, S., Chen, H.-Y., Norton, R., Stevenson, M., van Beurden, E., & Zask, A. (2009). Young driver education programs that build resilience have potential to reduce road crashes. *Pediatrics*, 124(5), 1287-1292.
- Watson, B. (2003). Research priorities in driver training: bridging the gap between research and practice, *2003 Road Safety Research, Policing and Education Conference*. Sydney.
- Williams, A. F. (2006). Young driver risk factors: Successful and unsuccessful approaches for dealing with them and an agenda for the future. *Injury Prevention*, 12(1), i4-i9.
- Witte, K. (1992). Putting the fear back into fear appeals: the EPPM. *Communication Monographs*, 59(4), 329-349.
- Witte, K. (1994). Fear control and danger control: A test of the extended parallel process model (EPPM). *Communication Monographs*, 61, 113-134.

### Acknowledgements

Our sincerest thanks go to Andrew Kennedy, Brodie Cullen, and Dianne Firman who collected the data as part of their 4<sup>th</sup> year Graduate Diploma of Psychology degree. Sincerest thanks also, for their respective contributions and support of this research project, are extended to RACQ staff (David Terry, Karen Bradberry, and David Contarini) as well as CARRS-Q staff (Amy Schramm, David Soole, and Tanya Smyth).