



Evaluating a model linking assessed parent factors to four domains of youth risky driving



Sarah Schmidt, Barbara A. Morrongiello*, Scott R. Colwell

University of Guelph, Psychology Department, Guelph, Ontario N1G 2W1, Canada

ARTICLE INFO

Article history:

Received 12 December 2012
Received in revised form 25 August 2013
Accepted 27 August 2013
Available online 25 September 2013

Keywords:

Teens
Injuries
Risky driving
Parents
Modeling
Teaching

ABSTRACT

Motor vehicle collisions are the leading cause of death in youth aged 15–19. Research has consistently shown that driver education programs do not result in safer youth driving. Indeed, the biggest predictor of collisions involving youth is parental history of collisions. The current study examined how parental modeling of and teaching about risky driving behaviors related to youth practices within four domains of risky driving (aggressive, substance use, distracted, moving violations), and evaluated whether the Prototype-Willingness Model explains links from parent to teen driving practices. Participants ($N = 432$) were undergraduate students (mean age 18 years, age range 17–22 years) who had obtained their G2 driver's license within the past year; the G2 driver's license allows youth to drive alone on all municipal roads, with some restrictions on their blood alcohol level and the number of passengers they can carry. Results revealed that parental modeling was more predictive than parental teaching for all domains of risky driving examined. Youth whose parents modeled risky driving behaviors were found to be more likely to have engaged in those risky driving behaviors in the past, as well as to be more willing to engage in the behaviors in the future. The Prototype-Willingness Model was not a good fit to explain these relations. Findings from this study highlight the role parents play in the development of youth risky driving practices.

© 2013 Elsevier Ltd. All rights reserved.

1. Introduction

Unintentional injuries are the leading cause of death and disability for children and youth under aged 20 (World Health Organization, 2010). Although the cause and type of injury varies significantly with developmental stage, for youth aged 15–19 years motor vehicle collisions rank first in causing death and injury (World Health Organization, 2010). In Canada in 2009, for example, motor vehicle collisions were responsible for 240 fatalities and 20,632 injuries among youth aged 15–19 (Ontario Ministry of Transportation, 2008; Transport Canada, 2009). Past research has noted that learning to drive and being passengers in cars driven by other teens both contribute to this statistic, and many studies have aimed to identify the factors that predict motor vehicle collisions among teens. One noteworthy finding in past research is that parents who have a history of at-fault collisions and traffic violations have youth with similarly poor driving records (Ferguson et al., 2001; Wilson et al., 2006). This link from parent to youth driving records could reflect a number of mechanisms, including parental modeling of risky driving and/or ineffective parent teaching of safe driving. Few studies, however, have investigated the

relation between parental modeling or teaching and youth risky driving directly; the studies that have investigated the relation have focused primarily on modeling (LaHatte and Le Pape, 2008; Prato et al., 2010). Addressing this gap, the current study examined if parental modeling of risky driving behaviors and teaching about avoiding risk behaviors contribute to predict risky driving behaviors in youth. In addition, a popular model of youth risk taking was evaluated, the *Prototype-Willingness Model* (Gerrard et al., 2008; Gibbons et al., 2003, 2009). This model was chosen because it has been shown to predict a variety of youth risk behaviors, including smoking, drinking, and drug use (Blanton et al., 1997; Gerrard et al., 2005, 2006; Gibbons et al., 2004, 2010), and the concept of a 'risk prototype' (i.e., internal image of someone engaging in a risk behavior) has excellent face validity for research focusing on the impact of modeling of risky driving on adopting these practices. Given evidence that determinants can vary depending on the nature of the risky driving behavior (Beck et al., 2001a,b; Begg and Langley, 2004; Hartos et al., 2000, 2002), the model was evaluated within each of four distinct domains of risky driving.

1.1. Prototype-Willingness Model

The Prototype-Willingness Model (PWM) is a dual-processing model that is based on three assumptions. The first is that there are two types of decision-making processes, or pathways, that impact

* Corresponding author. Tel.: +1 519 824 4120x53086.
E-mail address: bmorrong@uoguelph.ca (B.A. Morrongiello).

adolescent health behavior, namely – ‘reasoned reaction’ and ‘social reaction’ (Gerrard et al., 2008; Gibbons et al., 2003). The reasoned reaction pathway comprises many elements of expectancy value theories, the key notion being that a youth’s risk-taking behavior is a result of a deliberately planned decision (Gibbons et al., 2003). Alternatively, the social reaction pathway suggests that while youth may not intend to engage in risk behaviors (Gerrard et al., 2003; Zabin, 1994), they do so because of social opportunity (Gerrard et al., 2008; Gibbons et al., 2003). Thus, while the reasoned reaction pathway reflects a predetermined course of action, the social reaction pathway is thought to be a more emotionally driven and unanticipated reaction to risk-conducive situations (e.g., an unsupervised gathering of friends where alcohol is available) that facilitates risky behaviors.

The second assumption of the PWM is that youth who have observed prior risk-taking behavior in social situations form schemas or images of risk taking behavior for that situation and, as such, are more likely to engage in risk taking (Gibbons et al., 2003). Finally, the third assumption is that youth risk behavior is influenced by their formation of positive or negative evaluative based beliefs of the ‘prototypical’ youth who engages in risky behavior (Gibbons et al., 2003). Positive prototypes (e.g., youth who speed are popular) increase the likelihood of engaging in that type of risk behavior, whereas negative prototypes (e.g., speeders are foolish) reduce the likelihood of doing so. Prior research has shown that, given the right situation, prototypes predict youths’ willingness to take risks for a number of behaviors, including smoking, drinking, and having unprotected sex (Gibbons et al., 1995; Gibbons and Gerrard, 1995; Spijkerman et al., 2005). Hence, there is considerable support for PWM and its applicability to youth risk taking.

Typically, in order to measure the reasoned path to risk taking, youths’ subjective norms (i.e., their perceptions of what others would want them to do) are measured by asking youth to report on the behavior of significant others whose opinions they value; for example, youth who report that their peers engage in risk-taking behavior are more likely to report willingness to engage in these same behaviors themselves (Gibbons et al., 2004). These norms, referred to as “behavioral intentions” (BI) or more recently “behavioral expectations” (BE), are thought to inform a youth’s risk taking decision and are measured as their judged likelihood of engaging in a particular behavior at some future point (Gibbons and Gerrard, 1997; Parker et al., 1992). Measuring planned risk taking in this manner is appropriate because prior work has shown that while youth are reluctant to report an immediate intention to engage in behaviors deemed potentially undesirable, they are more willing to acknowledge that they may try these behaviors in the future (Parker et al., 1992; Pomeroy et al., 2009). To measure the social reaction pathway to risk taking, youth are asked to rate their willingness or openness to take risks, referred to as “behavioral willingness” (BW). Behavioral willingness in risk-conducive social circumstances is influenced by a combination of youths’ affect and prototype images (Gibbons et al., 2010), as well as by youths’ subjective norms (i.e., how they perceive significant others would behave).

Prototypes are often measured by providing youth with a list of adjectives, both positive and negative, and asking them to indicate to what extent their mental image of this risk-taking person is reflected in these adjectives (Gerrard et al., 2008; Gibbons et al., 2003). Youth who report a positive prototype for a risk-taker are likely to take risks in the same way (Gerrard et al., 2005; Gibbons et al., 1995; Spijkerman et al., 2007a,b).

Currently, there is no research on the use of the PWM with regards to risky driving, and little consideration has been given to the role parents might play in the formation of teens’ behavioral norms. Prior research using the PWM has mostly focused on linking peer-based norms to youth risk practices (e.g., Gibbons et al., 2002, 2003; Spijkerman et al., 2007a,b). However, past research on

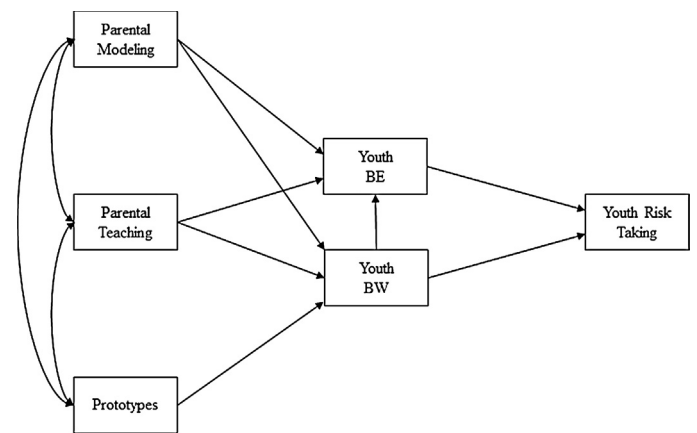


Fig. 1. Initial path model analyzed for aggressive, substance use, distracted, and moving violations driving behaviors, based on the Prototype-Willingness model typically used in the literature (Gerrard et al., 2008; Gibbons et al., 2003, 2009). Note: BW = behavioral willingness; BE = behavioral expectations.

risky driving suggests that youth who have recently obtained their driver’s license are more strongly influenced by their parents’ driving habits (LaHatte and Le Pape, 2008; Miller and Taubman-Ben-Ari, 2010; Prato et al., 2010). Hence, parents would be expected to influence youth prototypes about risky driving. Past research examining parental alcohol or substance use in the context of the PWM, for example, has noted that adolescents whose parents showed higher alcohol or substance use held more favorable prototypes about drinking and substance use and were more likely to engage in these behaviors themselves (Gibbons et al., 2004; Spijkerman et al., 2007a,b). Conversely, other research found that youth whose parents modeled smoking behavior held more negative prototypes about smokers (Blanton et al., 1997). Thus, it is possible that parental modeling of driving risk may lead to either positive or negative prototypes about risky drivers, ultimately evoking risk taking or risk avoidance, respectively.

1.2. Present study

To summarize, while prior research has shown that teen risky driving records often mirror those of their parents, we have limited understanding of the factors that can explain how this association occurs. The PWM has been applied to a number of teen risk behaviors, but whether it also applies to risky driving practices has not previously been considered. Addressing these gaps, the current study had two aims: (1) to examine the relationship between parent modeling of risky driving, parent teaching about avoiding risky driving, and youth risky driving practices within four domains of risky driving practices; and (2) to assess how well the PWM explains these relationships. Specifically, the study examined the risky driver prototypes held by youth and assessed whether these influenced youths’ behavioral willingness, expectations, and risky driving practices; see Fig. 1 for the general model to be tested. The parent teaching component to the PWM was included in order to assess for the possibility that parent modeling of risk practices and teaching about these contribute differentially to youth risky driving practices.

The focus was on youth self-reported perceptions of parental modeling and teaching rather than obtaining parent reports. This decision was motivated by evidence that youth perceptions of parental actions are more relevant in predicting youth behavior than is what parents report they actually do. For example, youths’ perception of parents’ health risk behavior has been found to contribute to their own risk behavior with respect to alcohol abuse (Thoomb, 1997), drug use (Henry et al., 2003), smoking (Jackson

Download English Version:

<https://daneshyari.com/en/article/572357>

Download Persian Version:

<https://daneshyari.com/article/572357>

[Daneshyari.com](https://daneshyari.com)