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Driver Education and Traffic Safety Programs:

Findings from Two Recent Studies

Technical Assistance Project 2016

Driver Education and Training Administrators Association of National Stakeholders in Traffic Safety Education Highway Safety Services Supported by National Highway Traffic Safety Administration

We look to a time when safe drivers are the norm; risk prevention behaviors are employed, and traffic safety is a core societal value.

PURPOSE OF THE PAPER

This paper discusses the findings from two recent studies that have shown a safety effect for young drivers who have completed driver education programs. The two studies are: 1) Evaluation of Beginner Driver Education Programs: Studies in Manitoba and Oregon by Mayhew, Marcoux, Wood, Simpson, Vanlaar, Lonero, and Clinton (2014); and 2) Driver Education and Teen Crashes and Violations In The First Two Years Of Driving In a Graduated Driver Licensing System by Shell and Newman (2015) (1) (2).

BACKGROUND

Many states offer diver education programs to young people that provide an opportunity for early license prior to the age of eighteen. Young people feel that obtaining a driver's license is a rite of passage that enables them to become a productive member of society and more importantly, this passage provides them the opportunity to drive to and from work. However, young people should acknowledge that while obtaining a driver's license it is a privilege, it comes with obligations, responsibilities, and consequences. One of the consequences is a motor vehicle crash which is the leading cause of injury and death for teens (*3*). According to the Center for Disease, Control and Prevention (CDC) crashes are a predictable and preventable public health problem (*3*). Education is the foundation of a systems approach to address this public health issue. In an effort to provide some consistency and competence in driver education programs across the United States, the National Highway Traffic Safety Administration (NHTSA) supported the creation of the "Novice Teen Driver Education and Training Administrative Standards" (NTDETAS) (*4*).

Driver education experts from across the United States and Canada were involved in the development of the NTDETAS. The NTDETAS includes standards for states' driver education programs in the areas of administration, education and training, instructor training, parental involvement, and coordination with driver licensing (4). States are able to evaluate how its driver education programs align to the NTDETAS by completing a self-assessment evaluation that is found on the Information Sharing System on the Association of National Stakeholders in Traffic Safety Education's webpage (http://www.anstse.info/Survey/survey/index.php) (5).

NHTSA also supports driver education as a components of NHTSA's Graduated Driver Licensing (GDL) System model. This support can be found in the NHTSA GDL model: a), Stage 1: Learner's Permit includes "completion of basic driver training" (6) and in Stage 2: Intermediate (Provisional) License phase that notes that states should include "completion of advanced driver education training (safe driving decision-making, risk education)," and other educational components (6).

HISTORY OF DRIVER EDUCATION STUDIES

For many years, researchers have grappled with driver education and its impact on safer drivers. While, these programs teach new drivers how to pass a learner's license permit test and road test, there is still much debate regarding the role of driver education programs and the production of safer drivers. Previous driver education research has not shown a significant finding that these programs produce safer drivers or have a safety effect. In fact, the Large-Scale Evaluation of Driver Education: Review of the Literature on Driver Education Evaluation 2010 Update that included five studies reported no findings that the programs produce safer drivers or have a safety effect. The studies were: (1) Robertson and Zador study (1978) involving twenty-seven states in which the findings showed that there is no relationship between the drivers who completed a driver education course and the fatality rates; (2) Dekalb County Georgia study (1980 & 1983) findings showed that the drivers who had completed the driver education program showed better driving skills for only the first six months, with

no difference after the first six months; (3) Levy study's findings involving forty-seven states, showed only a small effect on fatal crashes (1990); (4) McKenna, Yost, Munzenrider and Young (2000) study in Pennsylvania findings showed that driver education programs did not produce drivers with lower crashes or violation convictions; and (5) Masten and Chapman study (2003 & 2004) in California findings showed that the home-based program was better for the knowledge and attitude exams while the classroom was better for the Department of Motor Vehicle's knowledge exam (7). Findings from these studies and others indicate it's difficult to determine if driver education just does not work to reduce crashes or that the research is inaccurate (1). As a result, some states have chosen to not fund driver education programs or just eliminated the need for driver education programs altogether by not requiring a program completion to obtain a driver's license.

Another studied showed that when states defund and/or eliminate the need to complete a driver education course, there is a negative effect on diverse novice driver populations. Curry, García-España, Winston, Ginsburg, and Durbin studied the effects of driver education programs by looking at the states' requirement for driver education. The study, "Variations in Teen Driver Education by State Requirements and Sociodemographics," described findings concerning diverse populations including ethnic, socioeconomic, and gender disparities (8). Results of this study showed that there are a disproportionate number of diverse learners who do not complete formal driver education instruction in the states without a driver education requirement for licensing (8).

In states that did not have a licensing requirement for driver education, it was found that more than "1 in 3" young drivers did not received formal driver education classroom instruction and more than "one-half" did not receive formal behind-the-wheel training (8). These study findings showed that approximately three-fourths of the Latino/young drivers in these states obtain a driver's license without completing a formal driver education program.

TWO RECENT DRIVER EDUCATION STUDIES

While previous studies did not provide conclusive evidence that driver training impacts driver safety, two recent studies show promising evidence and as such is the focus on this paper. More specifically, this paper will discuss the findings of two studies and provide recommendations. The driver education studies that have shown to have a safety effect for drivers who have completed driver education programs are: Evaluation of Beginner Driver Education Programs: Studies in Manitoba and Oregon by Mayhew, Marcoux, Wood, Simpson, Vanlaar, Lonero, and Clinton (2014) and Driver Education and Teen Crashes and Violations In The First Two Years Of Driving In a Graduated Driver Licensing System by Shell and Newman (2015) (1) (2). Each will be discussed briefly.

The Oregon and Manitoba Study

Findings from "The Evaluation of Beginner Driver Education Programs: Studies in Manitoba and Oregon" was published in September 2014. The study was supported by AAA Foundation for Traffic Safety, the CDC, NHTSA, and Manitoba Public Insurance (1). In Oregon, the study reviewed over 94,000 driving records of teens that completed and teens that did not complete a driver education program in Oregon (1). The Oregon Driver Education Programs consists of thirty hours of classroom instruction, six hours of behind the wheel instruction, and six hours of observation instruction. The goals of the study were to feature acceptable and useful driver education program evaluation approaches, achieve newer knowledge about the safety results and efficacy of driver education programs, and to propose ways to improve the "content and delivery" of driver education to expand the safety gains (1).

The study included "The New Driver Survey," longitudinal comparison of driver education (DE) teens and non-DE teens' safety, a cross-sectional comparison of driving records of DE and non-

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DE teens, and cross-sectional comparison of driving records (1). Findings from the New Driver Survey showed that DE teens increased their knowledge about "graduated driver licensing (GDL) and safe driving practices, greater self-reported skills and more driving exposure" (1). With that stated, the findings also showed that the DE teens' knowledge level was low (1). Findings from the crosssectional comparison showed a modest, positive safety as noted by a 4.3% lower incidence rate of collisions for driver education teens (DE) and 39.3% lower incident of traffic convictions for driver education teens DE (1).

In Manitoba, the study had over 11,000 high school students in Manitoba complete a New Driver Questionnaire. The Manitoba Driver Education Program consists of thirty hours of classroom instruction, eight hours of behind the wheel instruction, and eight hours of observation instruction. The finding showed that the "DE associated with slightly greater safe driving knowledge, greater self-reported skills, fewer self reported risk-taking behaviors, better performance on a simulated drive test, and stronger hazard anticipation" (1). However, the findings showed that the "DE teens still failed to identify many hazards" (1).

The Nebraska Study

The 2015 Nebraska study was authored by Duane Shell and Ian Newman of the Nebraska Prevention Center for Alcohol and Drug Abuse at the University of Nebraska-Lincoln. The name of the study is "Driver Education and Teen Crashes and Violations in the First Two Years of Driving in a Graduated Driver Licensing System" (2). The study involved a review of the reports of 151,800 Nebraska young drivers who received a permit between 2003 and 2010 (2). Of this group of young drivers approximately 53% completed a state-approved driver's education program and the remaining young drivers studied received a permit by completing fifty hours of driving supervision by a parent or another other adult (2). The findings from the study showed that the drivers who completed a driver education program had both fewer traffic violations and crashes. The findings showed that the teens that did not complete a driver education program are:

- 75 percent more likely to get a traffic citation;
- 24 percent more likely to be involved in a fatal or injury collision; and
- 6 percent more likely to have a collision (2).

The other findings are as follows are shown in Figure 1.

- 11.1 percent of the driver's education cohort was involved in a car crash, compared to 12.9 percent of those who did not take driver's education.
- 2.1 percent of the driver's education group was involved in a collision that caused injury or death, compared to 2.6 percent of those who did not take driver's education.
- 10.4 percent of students who took driver's education received citations for moving traffic violations, compared to 18.3 percent of those who did not take driver's education (2).

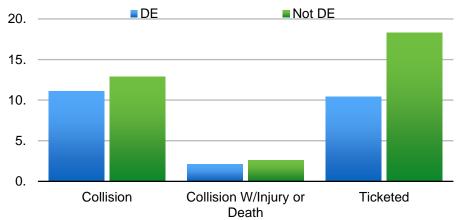


Figure 1. Nebraska Comparison of DE and Not DE Student: Collisions, Collisions with Injury or Death, and Ticketed (2).

SUMMARY

The findings from the Oregon and Nebraska studies concluded that there are modest, positive safety effects for teen drivers. These findings provide evidence that driver training can impact traffic citations and crash rates for teen drivers. The Oregon's study shows a 4.3% lower incidence of collisions and a 39.3% lower incident of traffic convictions for driver education teens (1). The Nebraska findings showed that completion of a driver education program results in fewer teen crashes and traffic citations in the first two years of driving in a graduated licensing system. The Nebraska study shows 11.1 percent of the driver education teens involved a car crash, compared to 12.9 percent of non-driver education teens; 2.1 percent of the driver education teens; and 10.4 percent of driver education teens received a moving traffic citation, compared to 18.3 percent of the non-driver education teens (2).

These findings should encourage states that have a driver education requirement for driver licensing to continue this process. For states that do not require driver education for driver licensing, these finding should encourage states to develop policies in accordance with the national standards to increase support for novice driver education. While these recent studies show merit and provide evidence that driver education programs appear to reduce crashes and citations more research is needed to provide more safety effects for driver education programs for teenagers. In addition, more research is needed to evaluate what should be taught in a driver education program to improve the quality of driver education programs.

RESOURCES FOR STATES

If a State wishes to complete a self-assessment of its driver education program to see how its program aligns with the "Novice Teen Driver Education and Training Administrative Standards" (NTDETAS), the state may access the Association of National Stakeholders in Traffic Safety Education's (ANSTSE) Information Sharing System on the following website, www.anstse.info. In addition, a state may learn about the process for requesting technical assistance from ANSTSE concerning its driver education program on the same website. If a state is interested in having a National Highway and Traffic Safety Administration (NHTSA) Driver Education Program Technical Assessment Peer Review conducted for its state, the state may access the information on the NHTSA website at http://www.nhtsa.gov/Driving+Safety/Teen+Drivers/InformationForStates (5).

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Driver Education and Training Administrators (DETA) is a national organization that supports State administrators of driver education programs. DETA's mission statement is: "We look to a time when safe drivers are the norm; risk prevention behaviors are employed, and traffic safety is a core societal value." The mission of the Association will be accomplished through five core goals and objectives that include:

- Promote and foster professional leadership in traffic safety education.
- Collaborate with other key traffic safety partners, to promote a national research agenda based on a scientist/practitioner model of traffic safety that results in best practices for teen drivers and ultimately all drivers.
- Provide and streamline access to driver and traffic safety information.
- Employ persuasive communications to the general public and partners in order to promote the vision and mission of the Association.
- Collaborate with influencers of traffic safety.

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