



Research Problem Statement

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I. TITLE

17-043 Evaluating the effectiveness of the Graduated Driver Licensing Program in Oregon

II. PROBLEM

Graduated Driver Licensing (GDL) aims to reduce teen driver crashes by gradually exposing them to regular driving risks in a staged manner. According to the Insurance Institute for Highway Safety (IIHS), an optimal GDL system involves three stages: (i) Learner, (ii) Intermediate, and (iii) Full Privilege. During the learner period, driving is conducted with minimum supervision. For the intermediate stage, supervised driving is conducted for “high-risk” situations. The move towards the GDL began in the United States in the 1990's and currently, all states have some form of the three-stage GDL system (IIHS, 2010).

To date, several research efforts have focused on determining the impact of GDL on reducing teenage crashes and fatalities (Mandic and Ridgeway, 2010, Mcknight et al., 2002; Morissey et al., 2006). Several studies have focused on correlating the level of strictness of the policies with the reduction in teenage crash involvement. However, different states have adopted different policies corresponding to varying level of strictness of the GDL policies and it is difficult to extrapolate the results from one state to another. NHTSA also studied the effectiveness of Oregon GDL in 2003 by interviewing 14 focus groups comprising of parents of teenage drivers, DMV personnel, high school administrators, law enforcement officers and driving instructors. The study also reviewed teenage crash and conviction information from 1998 to 2003. The study suffers from several limitations including low sample size of interviewees and qualitative nature of information collected. The study also provided a limited understanding of the factors and variables affecting teenage driver safety (Raymond et al., 2006). Moreover, previous studies are somewhat dated since teenage driving habits are expected to have changed significantly in the last 15 years. Teenagers are more prone to multitask and are early adopters of new technologies. The ubiquitous ownership and utilization of smartphones among teenagers may have a significant impact on teenager attention levels. The changes observed in the last 15 years warrant a study of GDL effectiveness since its implementation. The project fits within the RAC priority of “Enhance transportation and/or employee safety”.

III. PROPOSED RESEARCH, DEVELOPMENT, OR TECHNICAL TRANSFER ACTIVITY

The proposed research will:

- Evaluate trends in teenage crash injuries and identify specific factors affecting teenage crash fatalities. The research team will compare the safety of teenage drivers before and after implementation of GDL in Oregon.
- Survey teenage drivers currently enrolled in the GDL program, parents of teenage drivers, and law enforcement officials on their understanding of the specifics of the GDL programs, attitudes towards the effectiveness of the GDL programs, and recommendations to make it better. The research team will specifically look to compare the differences in attitudes towards and knowledge of GDL of teenage drivers, their parents, and law enforcement officials living in rural and urban areas.
- Survey teenage drivers currently enrolled in the GDL program about distractions that they may have experienced and how they handle devices (e.g. smartphone) or applications (mapping) that are commonly utilized in vehicles for directions or to find destinations. For example, what percentage of teenagers turn off or mute smartphones? How many use phones for directions? What are their attitudes towards texting?
- Compare the GDL program in Oregon with neighboring states in terms of minimum permissible age, passenger restrictions, nighttime driving restrictions, etc. and identify any critical best practices or programs in other states in terms of promoting teenage driver safety.

IV. POTENTIAL BENEFITS

The project will provide insights on the effectiveness of the different aspects of the GDL policy from a public perception as well as crash data analysis perspective. Differences in rural and urban teenage driver attitudes and knowledge will provide the guidance on developing effective teenage driver safety programs. Insights on knowledge of GDL will help develop better teenage driver education programs. The study will also help in evaluating the Oregon GDL from a policy perspective and provide guidance on potential revisions or updates.

V. IMPLEMENTATION

This main products of this research will be: (i) identification of factors affecting teenage driver safety and effectiveness of GDL program, (ii) guidelines for improving the effectiveness and knowledge of Oregon GDL program among teenage drivers, parents, and law enforcement officials (iii) recommendations to the legislature for potentially updating the Oregon GDL program, (iv) recommendations on effective teenage driver safety improvement programs. The proposed research is timely as several news articles have reported that Oregon legislature is considering updating GDL laws due to high teenage crash fatalities (OregonLive, 2015;KOIN, 2015).

VI. LIST OF REFERENCES (optional)

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