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Graduated driver licensing and teenage driver research in 2006

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Abstract

This is the third update of research on graduated driver licensing (GDL) and related teenage driver issues. It briefly summarizes research published since or not included in the 2005 update (Hedlund, J., & Compton, R. (2005). Graduated driver licensing research in 2004 and 2005. *Journal of Safety Research, 36*(2), 109–119.), describes research in progress of which the authors are aware, and announces plans for a symposium on teenage driving and GDL to be held in February 2007.

Keywords: Graduated driver licensing; Beginning drivers; Teenage drivers; Driver education

1. Introduction

The January 2003 special issue of the *Journal of Safety Research* was devoted entirely to graduated driver licensing (GDL). The first 12 papers, written for and presented at a GDL symposium in November 2002, provided a comprehensive review of research on teenage drivers with an emphasis on GDL. The final paper (Hedlund, Shults, & Compton, 2003) used information from these papers to summarize GDL knowledge, information gaps, and research needs as of the time of the symposium. All papers are available on the National Safety Council's website www.nsc.org/gdlsym/index.htm.

There has been substantial research on GDL and teenage drivers since the 2002 symposium. Hedlund and Compton (2004, 2005) provide annual summaries of newly-published results and work in progress. This paper is the third annual update. It briefly summarizes research published since or not included in the 2005 update and lists research in progress or planned. Published research was obtained from a keyword search of Medline, PsycInfo, ERIC, TRIS, NTIS, Wilson Applied Science and Technology Abstracts, and EMBASE, supplemented by information provided by the authors and several reviewers.

2. What is GDL and where has it been implemented?

GDL is a three-stage licensing system for beginning drivers consisting of a learner's permit, an intermediate license, and a full license. A learner's permit allows driving only while supervised by a fully licensed driver. An intermediate license allows unsupervised driving under certain restrictions. Both the learner's permit and the intermediate license have a minimum age requirement and must be held for a specified minimum period of time.

Other restrictions or requirements may apply during the learner's permit and intermediate license periods. The most common are that learner's permit drivers may be required to have a minimum amount of supervised driving before advancing to the intermediate phase, and intermediate license drivers may be prohibited from driving during specified nighttime hours or with young passengers. For a full discussion of GDL systems, requirements and restrictions, and recommended practices see Insurance Institute for Highway Safety (IIHS) and Traffic Injury Research Foun-

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dation (TIRF; 2004) or Mayhew, Simpson, and Singhal (2005).

Almost all jurisdictions in the United States and Canada have implemented GDL in some form. The GDL requirements in all jurisdictions as of October 2005 are summarized in IIHS (2005) for the United States and Mayhew et al. (2005) for Canada. The National Committee on Uniform Traffic Laws and Ordinances provides a model GDL law (NCUTLO, 2002).

3. Syntheses and overviews

3.1. Extensive syntheses

Mayhew et al. (2005) contains a detailed description of current GDL programs in Canada; a comparison with GDL programs in other countries, including tabular summaries of GDL provisions in Canadian provinces, states in the United States, Australian states, and New Zealand; a description of the safety benefits of GDL, including a tabular summary of effectiveness estimates from evaluations and a discussion of the features that have been shown to contribute to GDL effectiveness; and recommendations for best practices.

Senserrick and Haworth (2005) provide a comprehensive review of driver education and training, licensing, and GDL, with well over 300 references. They provide specific recommendations for Western Australia.

Simons-Morton, Mickalide, and Olsen (2005) summarize research on young driver crash and injury rates; risk factors, including age, inexperience, nighttime driving, passengers, safety belt use and alcohol; and prevention strategies, including GDL and parental management.

Simons-Morton and Winston (2006) discuss GDL and parental management of young drivers as examples of how research translates into action by informing and influencing policy.

The Organization for Economic Co-operation and Development (OECD) has established a working group on Young Driver Risks and Effective Counter-Measures. The working group is assessing the factors that contribute to young drivers' crash risks; reviewing countermeasures, including driver education, driver training, and GDL; and documenting current practices in the OECD countries. A final report is scheduled for release in 2006. For information, contact Colin Stacey at Colin.STACEY@oecd.org.

The Highway Safety Research Center (HSRC) at the University of North Carolina is drafting a guide for states to use in reducing crashes involving young drivers. The guide is part of the series of state guides for implementation of the American Association of State Highway and Transportation Officials (AASHTO) strategic plan. Each guide is a volume in the National Cooperative Highway Research Program (NCHRP) Report 500. The young driver guide should be completed in 2006. For information, contact Rob Foss at foss@hsrc.unc.edu.

The Centers for Disease Control and Prevention (CDC), the National Institutes of Health (NIH), and the National Highway Traffic Safety Administration (NHTSA) are co-funding a National Research Council scoping study to examine new insights from the behavioral, cognitive, health, social, and biological sciences, especially in the area of adolescent development and learning processes, that may guide prevention strategies to reduce motor-vehicle crash rates. The study will examine diverse scientific literatures, including research on adolescent health and development, decision making research, parental and family processes, education, risk communication, public health, human factors studies, highway safety, motor-vehicle injuries, public policy, and related fields. The scoping study should be completed by late 2006. For information, contact Ruth Shults at rshults@cdc.gov.

The United Kingdom Department for Transport is funding an extensive review of the judgment and decision making literature to investigate potential road safety applications to adolescents. Victor Strecher and Jean Shope expect their review of psychosocial factors and behavioral science theoretical frameworks to be available in 2006. For information, contact Deirdre.O'Reilly@dft.gsi.gov.uk.

3.2. Brief overviews and commentary

Williams (2005) observed that by 2005 the first phase of GDL implementation was essentially complete in the United States and Canada, with most jurisdictions having some form of GDL in place. In the next phase, jurisdictions with weak GDL systems should strengthen them. He noted that 15 states have improved their initial GDL systems but that as of 2005 no state had an "excellent" system consisting of a minimum learner age of 16, a 6-month learner's permit holding period, and intermediate license restrictions on nighttime driving (beginning at 9 p.m.) and carrying more than one young passenger, with intermediate restrictions in place until age 18.

Stevenson (2005) observed that Australian GDL systems have no nighttime or passenger restrictions for intermediate license holders. He recommends that they be added.

McKay (2005) briefly reviewed teenage driver crash risks and advocates GDL with nighttime and passenger restrictions as well as safety belt use, not drinking and driving, and safer vehicles.

4. The need for GDL: teenage driver risk factors

Risk factor study methods include cohort studies, focus groups, telephone surveys, questionnaires, crash data analyses, and experimental studies. They provide additional detail on the influences of general lifestyle and of specific individual and environmental factors on teenage driver crash risk.