

Kentucky's graduated driver licensing program for young drivers: barriers to effective local implementation

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Abstract

Objectives—To examine the implementation of graduated driver licensing (GDL) in Kentucky and to use the data collected to recommend actions to enhance the effectiveness of the GDL program.

Methods—Data were acquired from surveys of 700 law enforcement officers and more than 40 judges and from interviews with 100 persons who implement or are affected by Kentucky's GDL program—for example, traffic court judges, licensing clerks, law enforcement officers, insurance agents, driving instructors, parents, and employers of teens. Transcripts from interviews were analyzed using a qualitative data analysis computer program.

Results and conclusions—Participants noted a widespread lack of awareness of the night-time driving restriction and a substantial number of young drivers receiving little driving time during the learner permit phase. It appeared that specific GDL provisions can be difficult for judges and law officers to enforce and the penalty of license suspension after several traffic violations may not be a sufficient deterrent. Efforts are needed to increase parental awareness of GDL provisions, GDL purpose, and their teen's traffic violations and to increase parental enforcement of restrictions that are difficult for law enforcement agencies to monitor, such as the night-time driving restriction and the adult supervision requirement.

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The involvement of teenaged drivers (16-19 years old) in motor vehicle crashes continues to be a serious problem in Kentucky as well as in most of the developed world. In 1999, Kentucky's teenage crash death rate was almost three times the rate for other licensed drivers. During 1995-99, teen drivers were associated with 24% of injury crashes in the state, despite representing only 6.4% of licensed drivers.¹ Thirty two states have attempted to address this problem through graduated driver licensing (GDL) programs.² This legislation extends the supervised learning period to improve driving skills and decision making, imposes restrictions to help protect young drivers from hazardous situations while they learn to drive, and applies penalties to motivate young drivers to drive

safely. Requiring new drivers to demonstrate safe driving (by having no traffic violations) before progressing to a less restricted level is a key element of most GDL programs.³ This requirement is not, however, a part of Kentucky's program. Examination is needed of the policy, its implementors, and the settings in which decisions and actions occur to identify impediments to successful implementation.⁴ Lessons learned in this process evaluation may be applicable to other policy measures in other jurisdictions.

Kentucky's partial graduated licensing program

Kentucky's GDL program includes: (a) a six month learning permit level (may start at age 16) that requires adult supervision; (b) a restriction on driving after midnight during the permit level; (c) a six point limit on traffic violations to age 18, with a penalty of license suspension; and (d) a four hour driving education class. In addition, blood alcohol concentration (BAC) limit is 0.02 ml/dl for drivers under age 21. There are no special limits on the number or age of passengers. Kentucky's program no longer meets the minimum requirements for a "full GDL" program under current National Highway Traffic Safety Administration guidelines. Missing are three provisions: (a) a visibly distinguishable intermediate level license, (b) a limit on unsupervised night-time driving in the intermediate stage, and (c) a requirement to be free of traffic violations for a period of time before graduating to the next level of licensure.⁵

Effect on teen driver crashes

Researchers at the Kentucky Transportation Center and Kentucky Injury Prevention and Research Center have examined teen crash data for the three years (1993-95) before and three years (1997-99) after Kentucky enacted its program (1996).¹ Results indicate a 32% reduction in crash rates for 16 year old drivers due to an 83% decrease in crash rates for drivers age 16 to 16½, the age that drivers are in the adult supervised permit level. Unfortunately, there have been no decreases in the number of crashes for drivers over age 16½. Therefore, although Kentucky's program has saved lives, reduced injuries, and reduced crash costs for permit age drivers, there is no current evidence that Kentucky's "partial GDL" program has sufficiently addressed the teen crash problem. Results from this study indicate a need for additional measures to decrease motor

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Table 1 Interview participants

Interview participants	County				Total
	A	B	C	D	
Judges and judicial support staff	2	4	3	2	11
Court clerk/licensing	2	2	2	2	8
Law enforcement officers	4	2	6	2	14
Driver instructors/educators	4	2	1	1	8
Insurance agents	3	2	3	2	10
Emergency health care	2	1	0	1	4
Employers of teens	3	3	2	3	11
Parents of teen GDL drivers	4	3	3	4	14
Teen GDL drivers	5	5	5	5	20
Total	29	24	25	22	100

vehicle crashes in the 16½ to 18 year old age group.¹

Research evaluating GDL programs in most jurisdictions indicates that teen crashes have decreased significantly after implementation of GDL programs.⁵⁻¹⁴ However, studies also indicate that the effect on 17 and 18 year old drivers varies greatly among jurisdictions, from a substantial reduction (17% in Nova Scotia⁶), to an increase (6% in Kentucky¹). The reason for this variation has not been determined.

The study

The purpose of this study was to examine the perspective of participants who are responsible for the implementation of Kentucky's GDL or are affected by the program, and to use the data collected to recommend actions to enhance the effectiveness of this and similar programs.

This report describes methods and results of a survey of 700 law enforcement officers and more than 40 district judges conducted in 2001 and of a qualitative analysis of transcripts from interviews with 100 participants conducted in 1999. The interviews were conducted in four Kentucky counties representing urban and rural areas from four geographical regions.

Methods

QUALITATIVE DATA COLLECTION: INTERVIEWS

Sampling procedures

Groups were identified who were responsible for local implementation of the GDL program or who would be expected to be affected by it (primary participants). These included driver educators, district judges, police chiefs, sheriffs, licensing clerks, emergency department supervisors, insurance agents, and employers from randomly chosen businesses. Parents and teen drivers (secondary participants) were randomly selected from those working in the

Table 2 Frequency of themes in interviews

Major theme	Lines of text	Subgroups most often verbalizing theme	
Enforcement difficulties	500	54% of judicial 75% of educators	71% of law enforcement 70% of teens
Problems with penalties	900	21% of parents 73% of judges	100% of insurance agents 86% of law enforcement 50% of driver educators
Lack of knowledge (to varying degrees) regarding GDL/provisions	900	73% of judicial 86% of parents 75% of teens	93% of law enforcement 88% of driver educators 80% of insurance agents
Recommendations for education	1300	73% of judicial 79% of parents 65% of teens	86% of law enforcement 100% of driver educators

agencies, businesses, hospitals, or schools where interviews with primary participants had been conducted. Structured interviews by one person were conducted with the 100 participants shown in table 1 and 87 were audiotaped. Detailed field notes were taken on sessions with those who refused. Teens were given questionnaires to be mailed back anonymously regarding knowledge, compliance, and attitude toward GDL to supplement the qualitative interviews.

Qualitative data analysis

Transcripts from the interviews were entered into the QRS NU*DIST ([Non-numeric Unstructured Data Index Searching and Theorizing] Rev 4; Qualitative Solutions & Research Pty Ltd, Melbourne, Victoria, Australia) computer program for coding and sorting. Text was coded line by line and analyzed to identify recurring themes. Coding for statements from the 20 teens interviewed was compared with data from completed questionnaires from these same teens and no discrepancies were noted. Hard copies of five transcripts were used to assess inter-rater reliability that showed 99% agreement in category coding patterns.

QUANTITATIVE DATA COLLECTION: SURVEYS

Sampling procedures

Questionnaires were developed based on issues identified in the interviews and from analysis of crash data. These were sent to all state law enforcement posts and 400 were returned. In addition, 300 city and county level law enforcement officers attending randomly selected mandatory in-service training classes also completed questionnaires. A separate questionnaire was sent to judges in 59 districts; 43 judges from 34 districts completed the questionnaires.

Results

INTERVIEWS

Themes from interviews were generated based on groupings of related categories with "substantial coding". The four primary themes relating to implementation are listed in table 2.

Enforcement difficulties

Statements from all subgroups, except employers and health care providers, identified problems with enforcement relating to alcohol, the six point violation limit, the night-time

driving restriction, and the adult supervision requirement.

Inadequate quantity and quality of driving instruction—Teens and driver education instructors indicated that most teens they knew were not getting adequate driving experience or quality driving instruction from their parents or guardians during the six month permit phase. Suggestions included requiring the parent/guardian to certify that the teen has received a specified number of hours of driving practice during the instructional permit level before issuing license.

Primary enforcement—Officers reported they believed they did not have primary enforcement rights—that is, were not able to legally stop a driver who is suspected of being in violation of the night-time driving restriction or adult supervision requirement for permit drivers. They stated they believed this did not constitute “probable cause” (that is, a legal justification for making a traffic stop) because permit status could not be determined until after the officer stopped the driver and checked the operator’s license. If the driver proved they had a regular license, rather than a learner’s permit, the initial cause for the stop would become invalid because the restriction would not apply. Officers expressed the concern that, in these cases, any subsequent charges made after the traffic stop—for example, open alcohol container, alcohol on breath, drug paraphernalia—might be dismissed in court. Some officers suggested that a “decal” or placard would help identify a vehicle driven by a permit driver (as is customary in some other countries) and thereby facilitate enforcement of permit level driving restrictions.

Uninformed parents—Additional problems identified through judicial comments included lack of parental awareness of the teen’s citations, and the absence of parents in the courtroom for these offenses. They added that a parent may not know of violations or “points” accumulated by their teen until they received notice of license suspension.

Parents not enforcing GDL provisions—The majority of judicial and teen participants, and all law enforcement participants, stated that they knew of parents who were not enforcing GDL provisions, especially the night-time driving restriction. They recommended steps to increase parents’ awareness, motivation, accountability, and responsibility for enforcing GDL provisions, especially the night-time driving restriction.

Range of enforcement—Judicial and law enforcement participants expressed concern that teen licenses in Kentucky could be easily altered to allow underage purchase of alcohol. Responses indicated there was perception of a wide range of enforcement of the alcohol (0.02 ml/dl BAC) provision, from strict to lenient. Teens, law enforcement officers, and judicial participants reported few to zero citations were given for violations of the night-time driving restriction provision (or adult supervision requirement), except in the county that already had an established teen curfew law.

Fines and suspensions

Participants also identified problems and made recommendations related to imposing fines and license suspension penalties for violations.

Problem with license suspension—Responses from the judicial branch indicated that the penalty of suspended license that can be administratively imposed for exceeding the six point traffic violation limit often resulted in the additional problem of older teens driving without a license and losing their insurance. Persons were later seen in court on subsequent violations for driving without an operator’s permit or driving without insurance, thus producing a greater burden on the court system. Because the first traffic violation is usually deferred, teens may have four moving violations without having their license suspended.

Effect of penalties on others—Comments indicated the greatest impact of current Kentucky GDL penalties—that is, fines and suspensions—was often on the parent, not on the teen. The majority of insurance agents indicated that a license suspension that came to their attention would significantly influence (the parent’s) automobile insurance coverage and often resulted in minimal liability coverage. Insurance agents stated that if a teen driver was involved in a vehicle crash while driving on a suspended license, an insurance claim might be denied.

Lack of knowledge

Seventy four participants, representing all four counties and all subgroups, made statements indicating lack of awareness regarding one or more of the GDL provisions, GDL purpose, or indicating misconceptions regarding the law, especially the night-time driving restriction. Comments from teens, parents, and licensing clerks indicated that the parent/guardian is often not aware of the contents of the GDL orientation and driving instruction booklet which the teen and guardian are given when applying for a driving permit. Many were also not aware that they were expected to provide extensive driving instruction to their teen. In a direct observational study of the permit process in all four counties, no licensing clerk in any county was seen instructing parents regarding GDL provisions or to read the booklet given to the teen driver.

Recommendations for education

Statements from the majority of participants identified a need for increased education. These views were expressed in response to the question “What else can Kentucky do to help decrease the number of teen crashes in Kentucky?” Table 3 summarizes the recommendations made; these are listed in more detail in the survey results section. Law enforcement officers and the judicial subgroup indicated that increased public and parental awareness might help facilitate judicial and law enforcement efforts, which may in turn, increase compliance.

Table 3 Educational recommendations: summary

Recommendation	Lines of text	Primary concern
Education for law enforcement and judicial subgroup regarding GDL provisions and enforcement	100 lines	Law enforcement
Education for parent and communities regarding teen crash problem, GDL provisions, and parental role in enforcement	331 lines	Law enforcement Parents
Increased teen education regarding driving skills, decreasing risks	1017 lines	All groups

JUDICIAL AND LAW ENFORCEMENT SURVEYS

Survey results revealed substantial support for the primary issues identified in the interviews. More than 93% of the 700 law enforcement respondents felt that Kentucky should make legislative changes to address repeat teen offenders of Kentucky's (0.02 BAC) alcohol law, make teen driver's licenses less easily altered, and require parents to be notified of a teen's traffic violations. More than 90% of respondents noted substantial unawareness of the night-time driving restriction and more than 80% noted a problem with the penalty of license suspension. In addition, results indicated that three fourths of respondents felt that is it difficult to enforce a night-time driving restriction for permit drivers. Half did not think there was legal justification for stopping a driver who is suspected of violating the night-time driving restriction for permit level drivers. More than 80% felt specific educational efforts would help improve the program. Law enforcement survey results are summarized in tables 4 and 5.

Discussion

This research supports the current literature indicating that enforcement, compliance, awareness, and education all influence the effectiveness of injury prevention programs. However, several issues identified in this process evaluation are unique. Findings relating to penalties specific to this evaluation include the problem of license suspension as the primary penalty, and the problem of penalties not having sufficient effect on the teen driver. These problems may not be as significant with other GDL programs because many jurisdictions do not use license suspension as the primary penalty. Instead, they require a clean driving record (free of crashes/convictions) for a period of time before progressing to the next GDL level or full licensure.

ENFORCEMENT AND COMPLIANCE

Although the difficulty for law enforcement agencies to enforce the night-time driving restriction and the adult supervision requirement is a unique finding, previous studies have

Table 4 Results from law enforcement officer questionnaires: per cent agree (average)

Comments	% Agree
1. Many people do not seem know about the GDL night-time driving restriction for permit drivers	93
2. The penalty of license suspension on teen drivers can result in persons being seen back in court for driving without a license and driving with no insurance	83
3. The teen's parent/guardian is usually not required to accompany the teen in court for a traffic violation	82
4. In many cases, the teen's parent/guardian may not know of the teen driver's traffic violations	91
5. It is hard to enforce the GDL night-time driving restriction for permit drivers	73
6. A suspicion of violation of the night-time driving restriction does not necessarily constitute "probable cause" for stopping a vehicle	62

Note: average per cent from state level law enforcement and city/county level law enforcement surveys.

Table 5 Recommendations from law officer questionnaires: per cent support (average)

Recommendation	% Support*
1. Include a GDL provision to allow stronger penalties for teen drivers repeatedly convicted of DUI violations (0.02 BAC law)	96
2. Allow a teen's record of previous DUI violations to be accessible to the courts (BAC 0.02 to 0.08 ml/dl)—allows identification of repeat offenders	95
3. Make driver licenses for those under age 21 more difficult to alter/fabricate to help decrease purchase of alcohol by minors using altered identification	93
4. Require licensing agency to notify parents/guardians of teen's traffic violations	93
5. Provide increased teen EDUCATION on driving safety	91
6. Provide EDUCATION to the law enforcement officers, judges, and prosecutors implementing GDL. This includes providing clear information on GDL purpose and provisions, their specific role in enforcement of the provisions, ideas on effective ways to enforce the provisions, and statistical results of their efforts.	86
7. Allow courts to require the presence of parents (guardians) when teens are in court for traffic violations	91
8. Regularly disseminate local and statewide teen crash statistics	83
9. Conduct a MEDIA campaign to encourage parents to enforce provisions such as the "night-time driving restriction" and "adult supervisor/escort requirement" for permit drivers	82
10. Conduct a MEDIA campaign focusing on the first six months of independent teen driving, to inform parents about the need for close monitoring, skills training, and need for limit on passengers and driving privileges	82
11. Require vehicles driven by new teen drivers to display a sign or decal identifying them as a novice or permit drivers under GDL provisions and restrictions (336 asked)	53

*Note: "support" is defined as responses of "definitely would help", "would help", "might/should help" improve Kentucky's GDL program. Average of percentages between the state level law enforcement and city/county level law enforcement. DUI = driving under the influence.

identified difficulties in enforcement of provisions,¹⁵⁻¹⁸ non-compliance with the night-time driving and passenger restrictions,^{1 15} and inadequate driving experience for some permit level drivers. Compliance varies with the particular restriction, with the licensing level, and the jurisdiction.^{15 19-21} Analysis of Kentucky crash data involving drivers age 16 to 16½ after GDL verifies that there is substantial non-compliance with permit level provisions, such as the night-time driving restriction and the adult supervision requirement.¹ Research in New Zealand indicates that non-compliance and low level of official enforcement have a significant influence on GDL effectiveness.^{15 22} Survey results in Ontario and Nova Scotia revealed that a substantial number of permit drivers (15% to 30%) reportedly drove only two or less times per month in the learning stage of GDL.^{19 20} Twenty eight states have addressed this issue by requiring a minimum number of hours of supervised driving during the learner stage.²

LACK OF KNOWLEDGE AND EDUCATIONAL NEEDS

The specific recommendations for GDL related education for law enforcement officers and the judges are unique findings, although lack of knowledge of GDL and recommendations for parent, teen, and community education for injury prevention programs have been previously documented.^{4 23-28} A lack of awareness of the penalties for violations of the GDL restrictions was especially noted among the teens surveyed in Nova Scotia.¹⁹ In Kentucky, survey results indicated that only 50% of the participants were aware of GDL and related restrictions for teen drivers.²⁹

Participants recommended providing increased teen education aimed at improving teen driving safety/skills and motivating teens to drive more safely either through GDL in school programs or through driver education courses. The literature does not clearly support the participants' confidence in driver education courses in the high schools as a means to help improve teen driving or decreasing risks.³⁰ Other studies have identified the importance of providing local injury data to communities to increase the motivation for compliance with injury prevention policies and to increase support from families, populations, and authorities.^{23 24} Dowswell *et al* reported that legislation without a strong educational component might result in poor compliance or ineffective implementation,³¹ and Cassidy *et al* have described the importance of increasing awareness through media to the success of injury prevention programs.⁴

LIMITATIONS

Three judges in one county and five law enforcement officers in another county required the interviews to be conducted as a group, despite having scheduled individual interviews for all adults. Group bias may have occurred in these groups in which senior or supervisory members were present. Lines of text coded from the interviewer's notes attributed to the participants who refused to be

Issues effecting local implementation of the GDL program

- Parental compliance with providing sufficient driving experience for new drivers.
- Parental enforcement of GDL restrictions.
- Awareness of GDL purpose, provisions and role.
- Enforceability of GDL provisions.
- Effectiveness of GDL penalties.
- Education for all those implementing the policy.

audiotaped may under-represent the discourse that actually occurred. Responses do not necessarily represent non-working parents, non-working teens, or employers in small, independently owned businesses.

Implications for prevention

There is widespread lack of knowledge regarding the night-time driving restriction and limited parental enforcement of some GDL permit provisions, such as adult supervised driving instruction. This may be resulting in insufficient driving experience and inadequate protection from risks for some teens during the permit stage. Effectiveness of Kentucky's program may also be impaired due to difficulties in enforcement of some permit provisions. Non-cumulative penalties for teen alcohol (0.02 BAC) cases, and license suspension for exceeding the six point traffic violation limit (plus deferred violations) may not have sufficient deterrent effect. Research in Canada has revealed that parents feel the night-time driving restriction is easy to monitor and enforce.^{19 20} Therefore, efforts should be made to increase parental enforcement of restrictions that are difficult for law enforcement agencies to monitor, such as the night-time driving restriction and the adult supervision requirement. In addition, measures are needed to increase the hours of driving practice for permit level drivers.

Specific legislative enhancements and educational components are supported by the findings in this study. Kentucky, and other jurisdictions implementing GDL programs, should consider the specific recommendations listed in table 5 and address issues identified in table 4 by participants in this study to increase the effectiveness of the program.

In addition, the results indicate that jurisdictions with GDL programs should conduct process evaluations at intervals to help identify and remove barriers to effective local implementation of the GDL program. Qualitative research is an important component of policy process evaluations and can help identify problems with enforcement, awareness, and compliance with an existing policy as well as help identify legislative changes and educational efforts needed to help maximize the benefits of the injury prevention program. Follow up surveys can help to validate and prioritize issues identified through interviews.

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