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Editorial

Parents Are the Key to Improving Teen Driving Safety



Motor vehicle crashes are overwhelmingly the leading cause of adolescent death and serious injury, yet the issue has not received the thoughtful research attention it deserves. Newly licensed teenage drivers have highly elevated crash rates that decline rapidly over at least the first 6–12 months of licensure and then gradually until the midtwenties [1]. This “teen driver problem,” as it is often described, is best understood to reflect two deficiencies among young novice drivers: experience and judgment.

Crash investigations indicate that teenage crashes commonly involve driver error, mainly related to judgment [2]. Indeed, the major causes of motor vehicle crashes among drivers of all ages are judgment related, including managing speed; following distance, intersections, and potential hazards; and paying attention to the road or to other tasks [3–5]. This indicates that the cause of teenage crashes is not the skill with which they can drive, but the judgment they exercise while driving. With age and experience, driving judgment improves, consistent with the decline in crash rates.

Driving is inherently risky and the more one drives the greater the exposure to that risk. Learning to drive introduces a dilemma: driving safety improves with experience, but more driving equates to more exposure on the road and greater crash risk. Effective safety programs seek to allow teenagers to gain experience under relatively safe driving conditions.

Graduated driver licensing (GDL) systems are guided by this principle of balancing the need for novices to gain experience while setting limits that reduce exposure and minimize the riskiest driving conditions, such as driving at night and driving with teenage passengers. The effectiveness of GDL is now established; states with the strictest limits have the best outcomes [6]. GDL systems require supervised practice driving to support driving skill development and set age restrictions for independent licensure to support better driving judgment that comes with age. However, GDL may be only as effective as parents make it [7]. The long practice driving period required by GDL provides an important opportunity for parents to teach their teenagers to drive by providing substantial and diverse experience, establishing expectations for safe driving, setting limits on driving conditions (e.g., teenage passengers; night driving), and otherwise preparing their teenagers for the responsibility of independent driving.

In the article by Mirman et al. [8] in this issue of the *Journal of Adolescent Health*, the authors report findings from a well-

designed randomized trial of *TeenDrivingPlan*, which has the goal of increasing the quantity and diversity of parent-supervised practice driving before licensure. Previous such efforts have proven ineffectual. There is clear evidence that parents are not particularly adept at teaching their teenagers to drive and are uncertain about what to do, although by and large the practice driving experience is a positive one for teenagers and parents [9]. Moreover, the evidence that links the amount and type of supervised practice driving with independent driving outcomes is weak [10,11]. Nevertheless, practice driving is potentially an important element of the young driver problem and the rigor of the study by Mirman et al. is a model for future studies.

Mirman et al. examine possible mechanisms for the positive effect of *TeenDrivingPlan*, including social support, parent engagement, and the quantity and diversity of practice and find that the diversity of practice (the range of environments where practice occurs) accounted for the effect, measured as successfully passing an on-road driving test. The *TeenDrivingPlan* appropriately emphasizes parents as the key to improving teenage driving safety. The amount and diversity of a teenager's supervised practice driving is a good measure of parental involvement and essential for preparing teenagers for independent driving performance. In addition, effective parental supervised practice should reinforce judgment-related skills that are related to crash risk such as managing speed, space between vehicles, and potential road hazard. Parents also have the opportunity to communicate expectations that teenagers exercise safe driving judgment and establish parental management of independent driving. Teenagers of parents who set limits on their novice teenage driver report less risky driving [12].

There are several future directions for improving teenage safety behind the wheel. First, there is a need to identify the strength of the relationship between driving skill and safety outcomes. The intervention by Mirman et al. effectively increased driving skill but does not determine whether these effects translate to safe driving behavior or fewer crashes and injuries. Increased independence on passing a driving test or inflated confidence in driving skill could increase exposure and risky driving behavior, with negative effects on crash risk. Our obligation is to do no harm by increasing exposure or increasing perceptions of novices and their parents that passing a road test is evidence they are safe drivers.

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Second, as we identify evidenced-based approaches to improve driving skill, we need equal attention to improving teenage driving judgment. Parents will continue to be critical for providing sufficient and diverse practice as teenagers learn how to drive, instilling teenagers with the ability to exercise good judgment while driving, and establishing expectations for safe driving as teenagers transition to independent driving. Research and prevention efforts should continue to focus on improving guidance to parents on how best to foster teenage driving safety. To that end, Mirman et al.'s contribution is an important one.

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