



Effect of North Carolina's restriction on teenage driver cell phone use two years after implementation

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ABSTRACT

A majority of states now restrict teenagers from using a mobile communication device while driving. The effect of these restrictions is largely unknown. In a previous study, we found North Carolina's teenage driver cell phone restriction had little influence on young driver behavior four months after the law took effect (Foss et al., 2009). The goal of the present study was to examine the longer-term effect of North Carolina's cell phone restriction. It was expected that compliance with the restriction would increase, as awareness of the restriction grew over time. Teenagers were observed at high schools in North Carolina approximately two years after the law was implemented. Observations were also conducted in South Carolina, which did not have a cell phone restriction. In both states, there was a broad decrease in cell phone use. A logistic regression analysis showed the decrease in cell phone use did not significantly differ between the two states. Although hand-held cell phone use decreased, there was an increase in the likelihood that drivers in North Carolina were observed physically manipulating a phone. Finally, a mail survey of teenagers in North Carolina showed awareness for the cell phone restriction now stands at 78% among licensed teens. Overall, the findings suggest North Carolina's cell phone restriction has had no long-term effect on the behavior of teenage drivers. Moreover, it appears many teenage drivers may be shifting from talking on a phone to texting.

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1. Introduction

Cell phone restrictions for teenage drivers are now commonplace. As of December 2011, 30 states and the District of Columbia had laws restricting at least some teenagers from using a mobile communication device while driving (IIHS, 2011). To date, only one study has investigated the effect of such a restriction on young driver behavior. Foss et al. (2009) examined the short-term effect of North Carolina's cell phone restriction for teenage drivers. Observational surveys conducted at high schools prior to the restriction, and approximately four months after the restriction took effect, found essentially no change in phone use. Telephone interviews with teenagers revealed only about 60% were aware of the restriction, and most believed the law was being enforced rarely or not at all (Foss et al., 2009).

Typically, the effects of new laws and programs peak at their beginning and erode over time. In this situation, however, a different pattern was expected. First, there was no "grandfather clause" for the cell phone restriction. Hence, the law was an attempt to change an already-established behavior. This is always a daunting

task, but is particularly difficult when the behavior is a central feature in the lives of those affected. Second, there was essentially no publicity of the cell phone restriction other than a number of brief news stories when the restriction initially took effect. Consequently, the lack of change observed in young driver behavior a few months after the prohibition took effect was not surprising.

In recognition of the difficulty publicizing a law that applies to a tiny fraction of the driving population, the North Carolina cell phone restriction was incorporated as an explicit provision for each licensing level of North Carolina's graduated driver licensing (GDL) system. This provided an institutionalized mechanism by which parents and teenagers could learn about the restriction without the need for special promotional efforts. GDL provisions are discussed in mandatory driver education classes, the driver's handbook, information distributed through licensing offices, and other sources of information about licensing such as insurance companies, community safety programs, and various web sites. Apparently as a result of these multiple information channels, there is extensive awareness among teens and parents alike of the main requirements and restrictions embodied in North Carolina's GDL system (Goodwin et al., 2006). Accordingly, it was expected that awareness of the cell phone restriction would increase over time as new teenage drivers entered the GDL process and were alerted to the cell phone restriction via the various mechanisms noted above.

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