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Trends in driver licensing status and driving among high school seniors in the United States, 1996–2010☆

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Abstract

Introduction—Understanding the reasons for fluctuations in teenage driver crashes over time in the United States is clouded by the lack of information on licensure rates and driving exposure.

Methods—We examined results from the Monitoring the Future survey to estimate the proportion of high school seniors who possessed a driver's license and the proportion of seniors who did not drive "during an average week" during the 15-year period of 1996–2010.

Results—During 1996–2010, the proportion of high school seniors in United States who reported having a driver's license declined by 12 percentage points (14%) from 85% to 73%. Two-thirds of the decline (8 percentage points) occurred during 2006–2010. During the same 15-year period, the proportion of high school seniors who did not drive during an average week increased by 7 percentage points (47%) from 15% in 1996 to 22% in 2010, with essentially all of the increase occurring during 2006–2009.

Discussion—Findings in this report suggest that the economic recession in recent years has reduced rates of licensure and driving among high school seniors.

Keywords

Adolescent; Teenagers; Motor vehicles; Automobile driving; Licensure

1. Introduction

Understanding the reasons for fluctuations in teenage driver crashes over time in the United States is clouded by the lack of information on licensure rates and driving exposure. The National Household Travel Survey provides extensive data on exposure, but it is conducted

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only sporadically, the last two times in 2009 and 2001. Licensing data are provided yearly by the Federal Highway Administration. However, these data are not suitable for research purposes, especially for the youngest drivers, because of inconsistencies among states as to who qualifies as a licensed driver, and large, inexplicable year-to-year changes in counts in some states (Foss & Martell, 2013). In view of these limitations, we examined results from the Monitoring the Future survey to estimate the proportion of high school seniors who possessed a driver's license and the proportion of seniors who did not drive "during an average week" during the 15-year period of 1996–2010.

2. Methods

Since its inception in 1975, the self-administered Monitoring the Future survey has included questions about licensure and driving. In the spring of each year, the survey is administered to approximately 15,000 high school seniors attending approximately 130 public or private schools (Bachman, Johnston, & O'Malley, 2011). The survey uses a multi-stage sampling procedure to produce a representative sample of seniors in the 48 contiguous states. Students are randomly given one of six survey forms. Some of the survey questions are included on all six forms, whereas others are included on only one form. Further details about the survey methods and limitations are available elsewhere (Bachman, Johnston, O'Malley, & Schulenberg, 2006; Bachman et al., 2011; Johnston, O'Malley, Bachman, & Schulenberg, 2011).

For 1996–2010, the years included in this report, the survey response rate ranged between 79% and 85%. The licensure question read, "Do you have a driver's license?" The question was included in only one of six forms, and therefore, responses were based on annual sample sizes of between 2,103 and 2,547. The driving question read, "During an average week, how much do you usually drive a car, truck, or motorcycle?" This question was included on all six questionnaire forms and responses were based on annual sample sizes of between 12,098 and 14,692. The data were accessed from 15 separate reference volumes at http://monitoringthefuture.org/pubs.html#refvols. Results reported by race include only students who identified as "Black or African American" or "White (Caucasian)." All other analyses include students of all reported races and ethnicities. Confidence intervals for the proportions presented were estimated using the method described in Appendix A and Table A-1 of the 2010 Monitoring the Future reference volume (Bachman et al., 2011).

3. Results

During 1996–2010, the proportion of high school seniors in United States who reported having a driver's license declined by 12 percentage points (14%) from 85% to 73% (Fig. 1). Two-thirds of the decline (8 percentage points) occurred during 2006–2010. The age distributions of seniors were similar in 1996 and 2010; with 99% of seniors being 17 years or older in both years. Youth in every state and the District of Columbia can be licensed to drive by age 17 (Insurance Institute for Highway Safety [IIHS], 2013).

Licensure varied by both gender and race, with a higher proportion of males licensed compared with females and a higher proportion of whites licensed compared with blacks

(Table 1). The proportion of licensed black seniors varied substantially from year to year due to the small sample sizes, which ranged from 210 to 425.

During the same 15-year period, the proportion of high school seniors who did not drive during an average week increased by 7 percentage points (47%) from 15% in 1996 to 22% in 2010 (Fig. 2). The proportion who did not drive was essentially stable during 1996–2005, and then climbed during 2006–2009.

As with licensure, the proportion of seniors who reported not driving varied by gender and race, with a higher proportion of females not driving compared with males and a higher proportion of blacks not driving compared with whites (Table 2). In 2010, 1 in 4 female seniors and 1 in 3 black seniors did not drive during an average week.

4. Conclusions and Comment

Findings from the Monitoring the Future survey confirm the widely held belief that licensure rates among teenagers have declined over time. The results also suggest that fewer high school seniors are routinely driving, and that meaningful differences exist by gender and race in both licensure rates and driving. Much of the decline in licensing and driving has occurred since 2006, which coincides with the sharp decreases in driver deaths among 17–19-year-olds that occurred during the 2007–2010 period (Governors Highway Safety Association, 2013). It has been suggested that declines in teen licensure may be due to lesser interest because teens can connect with each other electronically (Sivak & Schoettle, 2012), and that some teens might be waiting until they reach age 18 to avoid graduated driver licensing requirements (Masten, Foss, & Marshall, 2011). However, contemporary surveys of teenagers indicate that the main reasons given for delaying licensure are the economic costs of licensure and driving (Williams, 2011; Williams & Tefft, 2013). The current report further suggests that the economic recession in recent years has reduced rates of licensure and driving among high school seniors. As the economy continues to recover, data from Monitoring the Future will help to confirm or refute this hypothesis.

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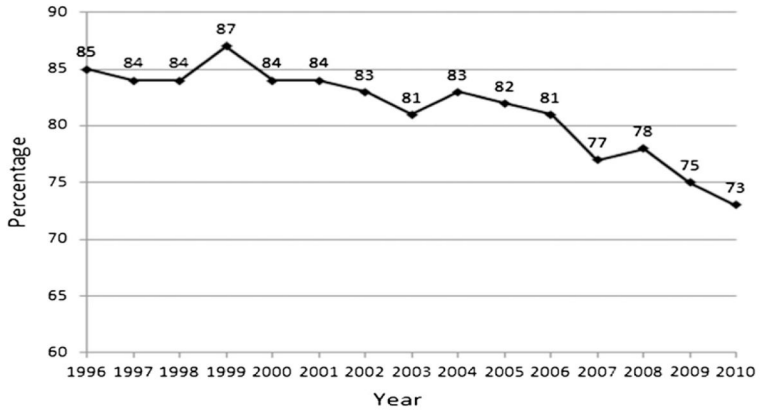

Fig. 1.

Proportion of U.S. high school seniors who had a driver's license, Monitoring the Future, 1996–2010.

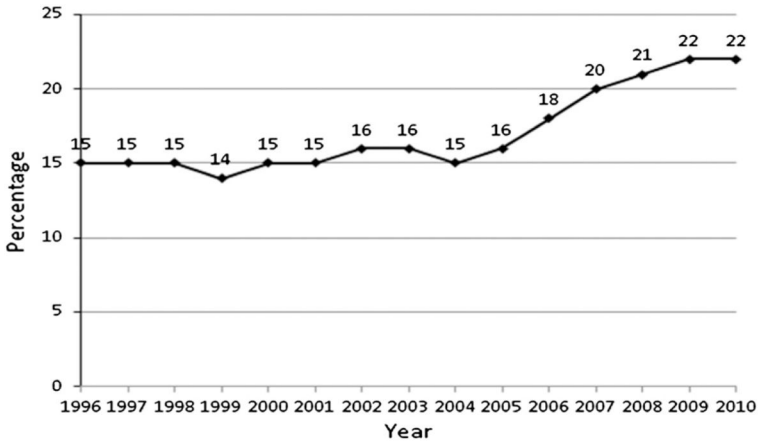

Fig. 2.

Proportion of U.S. high school seniors who did not drive during an average week, Monitoring the Future, 1996–2010.

Table 1

Proportion of U.S. high school seniors who had a driver's license, by gender and race, Monitoring the Future, 1996–2010.

	Total % (95% CI)*	Male % (95% CI)	Female % (95% CI)	White % (95% CI)	Black % (95% CI)
Year					
1996	85 (83, 87)	91 (88, 93)	80 (77, 83)	92 (90, 94)	74 (67, 80)
1997	84 (82, 86)	88 (86, 90)	81 (78, 84)	92 (90, 94)	65 (58, 71)
1998	84 (82, 86)	88 (85, 90)	81 (79, 84)	92 (90, 94)	66 (59, 72)
1999	87 (85, 89)	92 (89, 94)	84 (81, 86)	92 (90, 94)	74 (66, 82)
2000	84 (81, 85)	87 (84, 89)	80 (77, 83)	90 (88, 92)	66 (59, 72)
2001	84 (82, 86)	90 (87, 92)	79 (76, 82)	91 (89, 93)	73 (66, 79)
2002	83 (81, 85)	88 (85, 90)	79 (76, 82)	91 (89, 92)	57 (49, 66)
2003	81 (79, 83)	84 (81, 86)	78 (75, 81)	89 (87, 90)	65 (56, 72)
2004	83 (81, 85)	87 (84, 90)	79 (76, 82)	90 (88, 92)	66 (57, 73)
2005	82 (80, 84)	86 (83, 88)	79 (76, 82)	90 (88, 92)	59 (50, 68)
2006	81 (78, 83)	85 (82, 87)	77 (74, 79)	89 (87, 90)	68 (59, 75)
2007	77 (75, 80)	82 (78, 84)	74 (70, 77)	86 (84, 89)	60 (52, 68)
2008	78 (76, 80)	83 (80, 86)	74 (70, 77)	88 (86, 90)	57 (50, 64)
2009	75 (72, 77)	80 (77, 83)	70 (66, 73)	84 (82, 86)	65 (56, 72)
2010	73 (71, 75)	78 (75, 81)	68 (65, 72)	84 (82, 86)	61 (54, 67)

*95% CI: confidence interval.

Table 2

Proportion of U.S. high school seniors who did not drive during an average week, by gender and race, Monitoring the Future, 1996–2010.

	Total % (95% CI)*	Male % (95% CI)	Female % (95% CI)	White % (95% CI)	Black % (95% CI)
Year					
1996	15 (14, 16)	12 (11, 13)	17 (16, 19)	9 (8, 10)	28 (24, 32)
1997	15 (14, 16)	12 (11, 13)	17 (16, 19)	9 (8, 10)	28 (24, 31)
1998	15 (14, 16)	12 (11, 13)	18 (16, 19)	8 (8, 9)	33 (29, 36)
1999	14 (13, 16)	10 (9, 11)	18 (17, 20)	9 (8, 10)	32 (28, 35)
2000	15 (14, 16)	11 (10, 13)	18 (17, 20)	10 (9, 11)	27 (24, 31)
2001	15 (14, 16)	10 (9, 12)	19 (18, 21)	9 (8, 11)	28 (25, 32)
2002	16 (15, 17)	12 (11, 14)	19 (18, 21)	9 (8, 10)	37 (33, 41)
2003	16 (15, 17)	14 (13, 15)	18 (16, 19)	10 (9, 11)	29 (25, 33)
2004	15 (14, 16)	12 (11, 13)	17 (16, 18)	10 (9, 11)	30 (26, 34)
2005	16 (15, 18)	14 (12, 15)	19 (18, 20)	9 (8, 10)	36 (32, 40)
2006	18 (16, 19)	15 (13, 16)	20 (19, 22)	11 (10, 12)	30 (26, 33)
2007	20 (19, 22)	17 (15, 18)	23 (22, 25)	12 (11, 13)	37 (34, 41)
2008	21 (20, 22)	17 (16, 19)	24 (23, 26)	13 (11, 14)	36 (32, 39)
2009	22 (20, 23)	18 (16, 19)	25 (24, 26)	14 (12, 15)	34 (30, 39)
2010	22 (21, 24)	18 (17, 20)	26 (24, 28)	14 (13, 15)	37 (33, 41)

*95% CI: confidence interval.