* * * * Safety Culture

Distracted and Risk-Prone Drivers

Select Findings from the 2012 Traffic Safety Culture Index



January 2013



Car crashes rank among the leading causes of death in the United States.

Title

Distracted and Risk-Prone Drivers (January 2013)

Authors

Bruce C. Hamilton Lindsay S. Arnold Brian C. Tefft AAA Foundation for Traffic Safety

About the Sponsor

AAA Foundation for Traffic Safety 607 14th Street, NW, Suite 201 Washington, DC 20005 202-638-5944 www.aaafoundation.org

Founded in 1947, the AAA Foundation in Washington, D.C. is a not-for-profit, publicly supported charitable research and education organization dedicated to saving lives by preventing traffic crashes and reducing injuries when crashes occur. Funding for this report was provided by voluntary contributions from AAA/CAA and their affiliated motor clubs, from individual members, from AAA-affiliated insurance companies, as well as from other organizations or sources.

This publication is distributed by the AAA Foundation for Traffic Safety at no charge, as a public service. It may not be resold or used for commercial purposes without the explicit permission of the Foundation. It may, however, be copied in whole or in part and distributed for free via any medium, provided the AAA Foundation is given appropriate credit as the source of the material. The AAA Foundation for Traffic Safety assumes no liability for the use or misuse of any information, opinions, findings, conclusions, or recommendations contained in this report.

If trade or manufacturer's names are mentioned, it is only because they are considered essential to the object of this report and their mention should not be construed as an endorsement. The AAA Foundation for Traffic Safety does not endorse products or manufacturers.

Introduction

Distracted driving remains a significant and high-profile traffic safety concern, with cell phone use and text messaging among its most visible manifestations. Studies have shown, for example, that driver use of cell phones impairs reaction times and roughly quadruples crash risk. Additionally, the National Highway Traffic Safety Administration (NHTSA) reports that more than 3,000 people are killed and nearly half a million are injured each year in distraction-related crashes. This is, in fact, likely a large underestimate given data limitations and the challenge of determining the presence and impact of distraction in motor vehicle crashes.

In 2008, the AAA Foundation for Traffic Safety (AAAFTS) began surveying the American public in an effort to measure attitudes and behaviors related to driving habits, safety concerns, traffic laws, and other highway safety issues. The findings, published in the Foundation's annual *Traffic Safety Culture Index*, have consistently shown widespread cell phone use by drivers, and this continues to be demonstrated by the latest data. In the 2012 survey, more than two-thirds (68.9%) of licensed drivers* reported having talked on a cell phone while driving at least once within the previous 30 days, and nearly one-third (31.9%) said they had done so fairly often or regularly during this time.³ This is the case despite the fact that nearly nine-in-ten respondents (88.5%) said that drivers talking on cell phones were a somewhat or very serious threat to their safety.³

In August 2012, researchers at MIT published results from a study that found that drivers who frequently used cell phones behind the wheel were more likely than those who did so infrequently to report or be observed engaging in other risky behaviors, such as frequent lane changing, speeding, and hard acceleration.⁴ Based on the findings, the researchers suggested that cell phone use itself may not account for the entire crash risk increase associated with this behavior, and that drivers who used their phones were more likely to engage in a range of other relatively risky activities, as well.⁴

This report presents the latest data on distracted driving from the *Traffic Safety Culture Index* survey, and examines select 2012 findings in light of the MIT study to determine whether the self-reported behaviors and attitudes documented in the *Index* corroborate the concern that distracted driving may simply be one manifestation of risk-prone driving more broadly. This report finds that, as in previous years, the safety culture in the United States surrounding distracted driving can best be described using the phrase "do as I say, not as I do," owing to the high numbers of people who object to certain behaviors, yet admit that they, themselves, engage in them. Moreover, the findings in this report are broadly consistent with those of MIT, and offer additional evidence that drivers who talk on their cell phones are more likely to engage in a range of other dangerous behaviors behind the wheel as well.

_

^{*} Who reported driving in the previous 30 days

Methods

Distraction data from 2012 Index

The distraction data reported here were collected as part of the AAA Foundation's 2012 Traffic Safety Culture Index, a web-enabled nationally-representative probability-based survey of 3,896 U.S. residents ages 16 and older, conducted in English and in Spanish from September 7, 2012 through September 24, 2012 by GfK for the AAA Foundation. A sample of respondents ages 16 and older was recruited from GfK's KnowledgePanel®⁵ to complete an online questionnaire. KnowledgePanel® consists of members of households recruited by GfK using standard probability-based random digit dial (RDD) and address-based survey methods. The sampling frame includes all U.S. households reachable by telephone or by regular mail, irrespective of Internet access or use. If a sampled household lacks Internet access or Internet-capable computer, GfK provides Internet access and a netbook computer at no cost to the household. Individuals not sampled by GfK cannot volunteer to join the panel. Because each individual respondent's probability of selection into the panel and probability of selection for a particular survey are known, statistics can be weighted to reflect the entire population of the United States. The questionnaire was made available in English and Spanish, and respondents were able to complete it in the language of their choice. In total, 8,173 KnowledgePanel® members were invited to complete the questionnaire.

In the 2012 *Index*, licensed drivers who reported having driven in the past 30 days (n=3,303) were asked a number of questions pertaining to distracted driving. These included items addressing attitudes (e.g., "How acceptable do you, personally, feel it is for a driver to talk on a hand-held cell phone while driving?"), as well as behaviors (e.g., "In the past 30 days, how often have you read a text message or email while you were driving?") For questions that asked about the frequency with which a respondent engaged in a given behavior, response options were *never*, *just once*, *rarely*, *fairly often*, or *regularly*.

GfK weighted the data to account for probability of selection for recruitment into KnowledgePanel®, probability of selection for this survey, non-response at both stages, and to align the characteristics of the respondents to those of the population of U.S. residents ages 16 and older nationwide with respect to gender, age, race/hispanic ethnicity, education, census region, metropolitan area, number of 16+ year olds in the household, and household income using data from the Current Population Survey (U.S. Census Bureau, August 2012). All analyses were based on weighted data.

Risk-prone driver analysis

To examine risk-prone drivers – those who exhibit an overall pattern of hazardous behaviors, rather than discrete, specific bad habits – data from the 2012 *Index* on self-reported driving behaviors were tabulated in relation to self-reported frequency of cell phone use while driving. To report frequency, participants were able to indicate that they never, just once, rarely, fairly often, or regularly engaged in the following behaviors:

- Driven 15 mph over the speed limit on a freeway;
- Driven 10 mph over the speed limit on a residential street;

- Read a text message or email while driving;
- Typed or sent a text message or email while driving;
- Driven without wearing a seatbelt;
- Driven when so tired it was difficult to keep eyes open;
- Driven through a light that had just turned red when it was possible to stop safely;
- Checked social media while driving;
- Used the internet while driving;
- Talked on a cell phone while driving; and
- Driven when BAC was close to or possibly over the legal limit.

For nearly all items, respondents were asked to report behaviors from the previous 30 days; however, the timeframe of interest pertaining to driving after consuming alcohol was the previous 12 months. Additionally, drivers were asked if they had been involved in any motor vehicle crashes in the previous two years.

For data presentation and analysis, reported cell phone use was grouped into three categories: "never," "once/rarely," and "fairly often/regularly." Respondents in each of these categories were then tallied according to whether they had reported engaging in the other behaviors listed. Note that neither the frequency nor concurrency of these other behaviors was examined; of interest was whether these drivers had engaged in the activity at least once, regardless of whether they were using a cell phone at the time or not. Each behavior was initially reported separately by the survey participant.

Findings

Distracted driving in 2012

Distracted driving remains a concern for the motoring public, with nearly nine-in-ten licensed drivers (88.5%) reporting that they believe drivers talking on cell phones to be a "somewhat" or "very" serious threat to their personal safety. That proportion increases, to 95.7 and 95.1 percent, with regards to drivers text messaging or emailing behind the wheel, and checking or updating social media, respectively. Additionally, the situation is perceived to be getting worse: nine-in-ten (90.3%) respondents believe that distracted drivers are a somewhat or much bigger problem today compared to three years ago.

Social disapproval of various distracted driving behaviors remains high, and this is particularly true of those that involve manual (hands off the wheel), visual (eyes off the road), and cognitive (mind off the task) distraction components. For example, 94.5 percent of licensed drivers said that it was *somewhat* or *completely* unacceptable for a driver to type a text message or email while driving, and 95.4 percent felt this way about drivers checking or updating social media.

With regard to social disapproval of cell phone use while driving, the motoring public is more divided. Roughly two-thirds (66%) of licensed drivers said that driver use of hand-held cell phones was *somewhat* or *completely* unacceptable; however, more than half (56.2%) said that hands-free device use behind the wheel was *somewhat* or *completely* **acceptable**. This is consistent with the fact that, when asked to compare the relative safety of hands-free and hand-held cell phone use while driving, 71.3 percent said hands-free devices were *somewhat*

or *much* safer. In addition, more than a quarter (26.6%) said they were *about the same* from a safety standpoint.

As has been the case in previous years, high numbers of licensed drivers admit to engaging in the same potentially dangerous behaviors for which they criticize other motorists. For example, despite the near-universal disapproval of texting and emailing behind the wheel, more than one-in-four licensed drivers (26.6%) reported typing or sending a text or email at least once in the past 30 days, and more than one-in-three (34.6%) said they read a text or email while driving during this time.

Cell phone use by drivers is even more prevalent: more than two-thirds (68.9%) of respondents reported talking on the phone (hand-held or hands-free) at least once in the past 30 days (almost one-third [31.9%] said they did so *fairly often* or *regularly*). Despite greater social disapproval of hand-held cell phone use behind the wheel, over half (57.4%) of those drivers who reported using a cell phone at least once in the past 30 days said that they *usually* or *always* held the phone rather than using a hands-free device.

Support for legislative and regulatory action against distracted driving is mixed. Whereas 86.4 percent of licensed drivers said they *somewhat* or *strongly* support a law banning texting or emailing while driving, less than half (48.7%) expressed such support for a total cell phone ban (including hand-held and hands-free) for drivers of all ages. This may reflect, at least in part, an impression that cognitive sources of distraction do not greatly impair driving. Slightly over half (51.3%) of drivers who reported owning or regularly using a vehicle with a speech-based system (e.g., stereo, phone), for example, said that using the technology was *not distracting at all*. Bans only of hand-held cell phones for all drivers were viewed more favorably, with two-thirds (66.4%) of licensed drivers *somewhat* or *strongly* supportive of such a law.

Responses to several items on the survey tended to vary with respondent age, including the frequency with which drivers engaged in distracting behaviors behind the wheel, the level of disapproval expressed for such behaviors, and the amount of support indicated for legal interventions to address the problem. The most extreme response variations by age pertained to frequency of reported texting, emailing, and checking social media behind the wheel. For example, whereas 61 percent of licensed drivers ages 16-24, and 53.3 percent of those ages 25-39, reported having read a text or email while driving at least once in the past 30 days, this proportion fell to just 10.6 percent for drivers ages 60-74, and 1.9 percent for those 75 and older. Likewise, whereas more than a quarter (26.2%) of the 16-24 year-old drivers reported checking or updating social media while driving in the past 30 days, just one percent of drivers 75 and older did so.

Perceived acceptability of distracted driving behaviors also varied with age. For example, a similar percentage of drivers ages 16-24 (67.4%) said that hands-free device use behind the wheel was *somewhat* or *completely* acceptable as did drivers 75 and older (63.7%) who said this was *somewhat* or *completely* unacceptable. Likewise, whereas less than half (49.8%) of drives ages 16-24 said that hand-held device use behind the wheel was *somewhat* or *completely* unacceptable, nearly two-thirds (64.9%) of drivers ages 40-59 did so. Disapproval of drivers sending texts and emails was high among all populations, but nevertheless

ranged from 87.6 percent for the youngest segment (16-24) to a near-universal 97.3 percent for the oldest segments (60-74, and 75+).

Consistent with age-related variations in disapproval of distracted behaviors, support for anti-distracted driving laws tends to be higher among older driving populations. For example, whereas more than nine-in-ten drivers ages 60-74 (93.8%) *somewhat* or *strongly* support a texting-while-driving ban, fewer than three-in-four (73.5%) drivers ages 16-24 do so. Likewise, while less than half (44.8%) of these younger drivers support a hand-held cell phone ban, more than two-thirds of drivers ages 40-59 (67.9%), and more than four-in-five (81.3%) drivers ages 60-74 do so.

Complete findings from the 2012 Traffic Safety Culture Index, including tables of responses to all questions on the survey, will be released in a full report in January 2013.

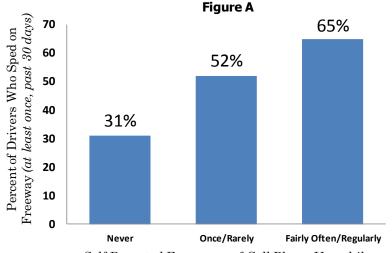
Risk-prone drivers

For all risky behaviors examined, respondents who reported a greater frequency of cell phone use while driving were more likely to report also having engaged in that behavior. For example, 65 percent of drivers who talked on a cell phone while driving fairly often or regularly within the past 30 days also reported driving 15 mph or more over the speed limit on a freeway at least once during this time. In contrast, only 31 percent of drivers who reported never using a cell phone behind the wheel admitted to such speeding (Figure A).

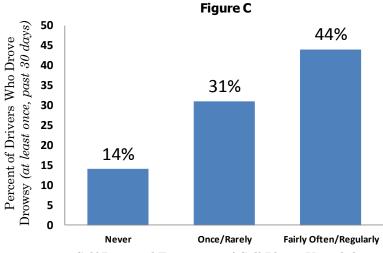
This pattern was consistent across all behaviors. Nearly half (47%) of drivers who regularly talked on their phones also ran a red light, compared to just 25 percent of drivers who never used their phones (Figure B). Likewise, 44 percent of frequent cell phone users also admitted to drowsy driving, whereas only 14 percent of those who reported not talking on their phones while driving did so (Figure C).

Data for all 10 risky behaviors (as well as crash involvement) in relation to cell phone use are presented in the following figures, and are summarized in Table 1 (Appendix). As is shown, each risky behavior followed the same pattern discussed here. Additionally, drivers who reported never talking on a cell phone while driving were less likely than drivers who reported ever doing so (either once/rarely, or fairly often/regularly) to report crash involvement within the previous two years.

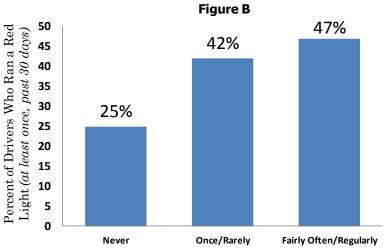
Proportion of drivers who **A)** Drove 15 mph over the speed limit on a freeway, **B)** Ran a red light, **C)** Drove drowsy, and **D)** Read a text message or email while driving, in relation to frequency of cell phone use while driving, United States, 2012.



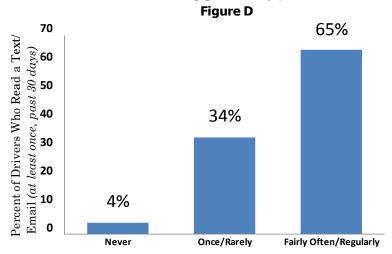
Self-Reported Frequency of Cell Phone Use while Driving (past 30 days)



Self-Reported Frequency of Cell Phone Use while Driving (past $30 \ days$)

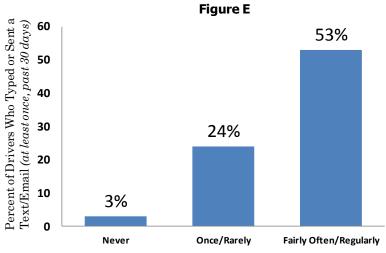


Self-Reported Frequency of Cell Phone Use while Driving (past 30 days)

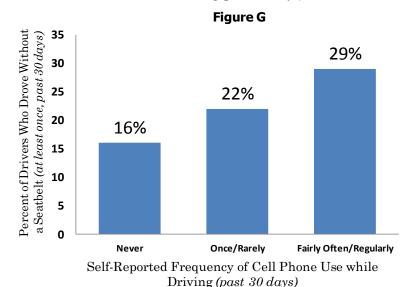


Self-Reported Frequency of Cell Phone Use while Driving (past 30 days)

Proportion of drivers who **E)** Typed or sent a text message or email while driving, **F)** Drove 10 mph over the speed limit on a residential street, **G)** Drove without wearing a seatbelt, and **H)** Checked social media while driving, United States, 2012.

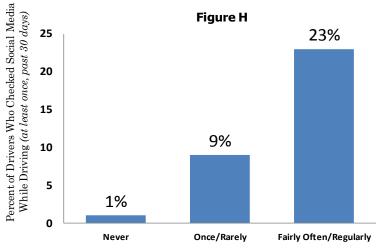


Self-Reported Frequency of Cell Phone Use while Driving (past 30 days)



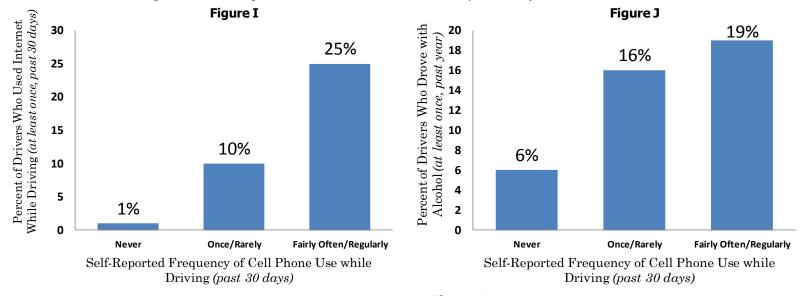
Percent of Drivers Who Sped on Residential Figure F Street (at least once, past 30 days) 70 60% 60 50% 50 40 30% 30 20 10 0 Once/Rarely Fairly Often/Regularly Never

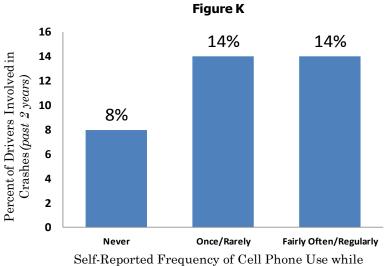
Self-Reported Frequency of Cell Phone Use while Driving (past 30 days)



Self-Reported Frequency of Cell Phone Use while Driving (past 30 days)

Proportion of drivers who **I)** Used the internet while driving, **J)** Drove when they thought their blood alcohol level might have been close to, or over, the legal limit, and **K)** Were involved in a crash in the past two years, United States, 2012.





Driving (past 30 days)

Conclusions

As in previous years, the AAA Foundation's *Traffic Safety Culture Index* finds that distracted driving remains both a major concern and a prevalent behavior of the American motoring public. As such, the nation's safety culture is still best described by the phrase "do as I say, not as I do." Additionally, the findings serve as an important reminder that certain drivers may pose a traffic safety threat not simply because of a specific risky habit, but because of an overall pattern of behaving recklessly or hazardously behind the wheel. Despite differences in sample size, methodology, and core study purpose, the findings of this analysis and the MIT study are broadly complementary, and indicate that the "risk-prone driver" situation deserves additional research in order to better understand the issue and devise strategies for managing and reducing the risks posed by these drivers.⁴

Differences in age tended to impact the attitudes and behaviors of licensed drivers, with younger drivers generally engaging in distracted behaviors more frequently, reporting less disapproval of these actions, and showing weaker support for laws intended to curb distracted driving, than middle-aged and older drivers. However, behaviors incorporating multiple components of distraction (i.e., manual, visual, and cognitive) tended to be reported less, receive stronger disapproval, and engender stronger support for legal countermeasures by all age groups, even if variation between the segments still existed.

Use of hands-free devices continues to receive more approval from the public than other behaviors do, and this may be due in part to a perception that such technologies are less distracting behind the wheel. This is suggested by the fact that over half of the licensed drivers who owned or regularly used a vehicle with speech-based systems reported that they were not distracted by such technologies, and nearly three-quarters of all respondents said hands-free devices were safer than hand-held ones. Such claims, however, have not been substantiated by scientific research. To explore this issue in more depth, AAAFTS will be releasing findings from a landmark study of cognitive distraction in 2013.

The AAA Foundation's efforts to benchmark and strengthen the traffic safety culture in the United States are intended to raise political and social awareness of this issue, and diminish the prevalence of risky attitudes and behaviors among motorists. To date, the findings from the annual *Index* reports indicate there is much work to be done. The 2011† *Index* found, for example, that nearly one-in-two Americans had been involved in a serious traffic crash, had had a friend or relative involved in a serious crash, or both, and 70 percent of respondents said the U.S. Government should pay more attention to making roads and highways safer.⁶

The finding that numerous dangerous behaviors may be observed in risk-prone drivers underscores the importance of enhancing traffic safety culture. While there are certain limitations to these findings – self-reported data, for example, should always be viewed with a degree of caution, and the reporting of numerous behaviors by the same driver may in part reflect that certain people are simply more willing to admit to "bad habits" – the clear and consistent patterns shown here seem to indicate that greater efforts to enhance safety consciousness and to reach particularly risk-prone drivers may be needed.

_

[†] Findings from 2012 *Index* will be released with the full report, January 2013

Appendix

TABLE 1. Risky Behavior of Drivers in Relation to Talking on a Cell Phone while Driving in Past 30 Days, United States, 2012.

	Frequency of Talking on Cell Phone While Driving (Past 30 days)		
	Never (n=1,057)	Once / Rarely (n=1,248)	Fairly Often / Regularly (n=985)
	% Reporting Action or Behavior		
Drove 15 mph over speed limit on freeway (past 30 days)	31	52	65
Read text message or email while driving (Past 30 days)	4	34	65
Typed or sent text message or email while driving (Past 30 days)	3	24	53
Ran red light when could have stopped safely (Past 30 days)	25	42	47
Drove while so tired that had hard time keeping eyes open (Past 30 days)	14	31	44
Drove 10 mph over speed limit on residential street (Past 30 days)	30	50	60
Drove without wearing seatbelt (Past 30 days)	16	22	29
Checked social media while driving (Past 30 days)	1	9	23
Used internet while driving (Past 30 days)	1	10	25
Drove when thought alcohol level might have been close to or over legal limit (Past year)	6	16	19
Involved in crash (Past 2 years)	8	14	14

Source: 2012 Traffic Safety Culture Index (AAA Foundation for Traffic Safety).3

References

- 1. AAA Foundation for Traffic Safety. *Cell Phones and Driving: Research Update*. (December 2008). Washington, DC: AAA Foundation for Traffic Safety. Available: http://www.aaafoundation.org/pdf/CellPhonesandDrivingReport.pdf.
- 2. U.S. Department of Transportation, National Highway Traffic Safety Administration. Distraction.gov: "Key Facts and Statistics." [Cited September 5, 2012]. Available: http://www.distraction.gov/content/get-the-facts/facts-and-statistics.html.
- 3. AAA Foundation for Traffic Safety. 2012 Traffic Safety Culture Index. (In Press). Washington, DC: AAA Foundation for Traffic Safety.
- 4. Nan Zhao, Nan, Bryan Reimer, Bruce Mehler, Lisa A. D'Ambrosio, and Joseph F. Coughlin. "Self-reported and observed risky driving behaviors among frequent and infrequent cell phone users." *Accident Analysis and Prevention*. August 6, 2012 (epublication ahead of print).
- 5. GfK Knowledge Networks (n.d.). *Knowledge Panel* Design Summary. Retrieved November 26, 2012, from http://www.knowledgenetworks.com/knpanel/docs/KnowledgePanel%28R%29-Design-Summary-Description.pdf.
- 6. AAA Foundation for Traffic Safety. 2011 Traffic Safety Culture Index. (January 2012). Washington, DC: AAA Foundation for Traffic Safety. Available: http://www.aaafoundation.org/pdf/2011TSCindex.pdf.