



The Association Between Age, Sex, and Phone Traffic Violations in Connecticut

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Introduction

- Over 3,000 people die every year as a result of distracted driving (CDC, 2022)
- There is a general consensus that teens are more likely to become distracted. Drivers under the age of 18 are even prohibited from using hands-free devices (CT, 2022).
- Studies examining the association between texting while driving and age are contradictory.
- Some studies have found that teens are more likely to use their phones while driving compared to adults (McBride & Carter, 2016).
- On the contrary, in a study conducted by AT&T composed of over 1,200 participants, researchers found that teens are "smarter" than adults when it comes to texting and driving (Zeman, 2013).
- It is important to note that the vast majority of research investigating a variable potentially associated with phone usage has been focused on age, not sex.

Research Questions

- Of the individuals stopped, is there a significant association between age and phone usage while driving?
- Of the individuals stopped, does the relationship between age and phone usage differ between males and females?

Methods

Sample

- Respondents (n= 3,061,664) were drawn from a 2018 study conducted by the Institute for Municipal and Regional Policy examining every single traffic stop in Connecticut.

Measures

- Age, although quantitative, was grouped into different categories: Young (16-36), middle-aged (37-57), & elderly (58-77).
- The above three groups comprised our Age variable. Age was treated as a categorical variable and recorded by police at each traffic stop based on one's license.
- Sex was treated as a categorical variable and was recorded by police as male or female at each traffic stop.
- Phone Usage: While there were initially over 15 different levels for this categorical variable, the reason for the stop was collapsed and coded dichotomously to whether or not one was stopped for a phone violation.

Results

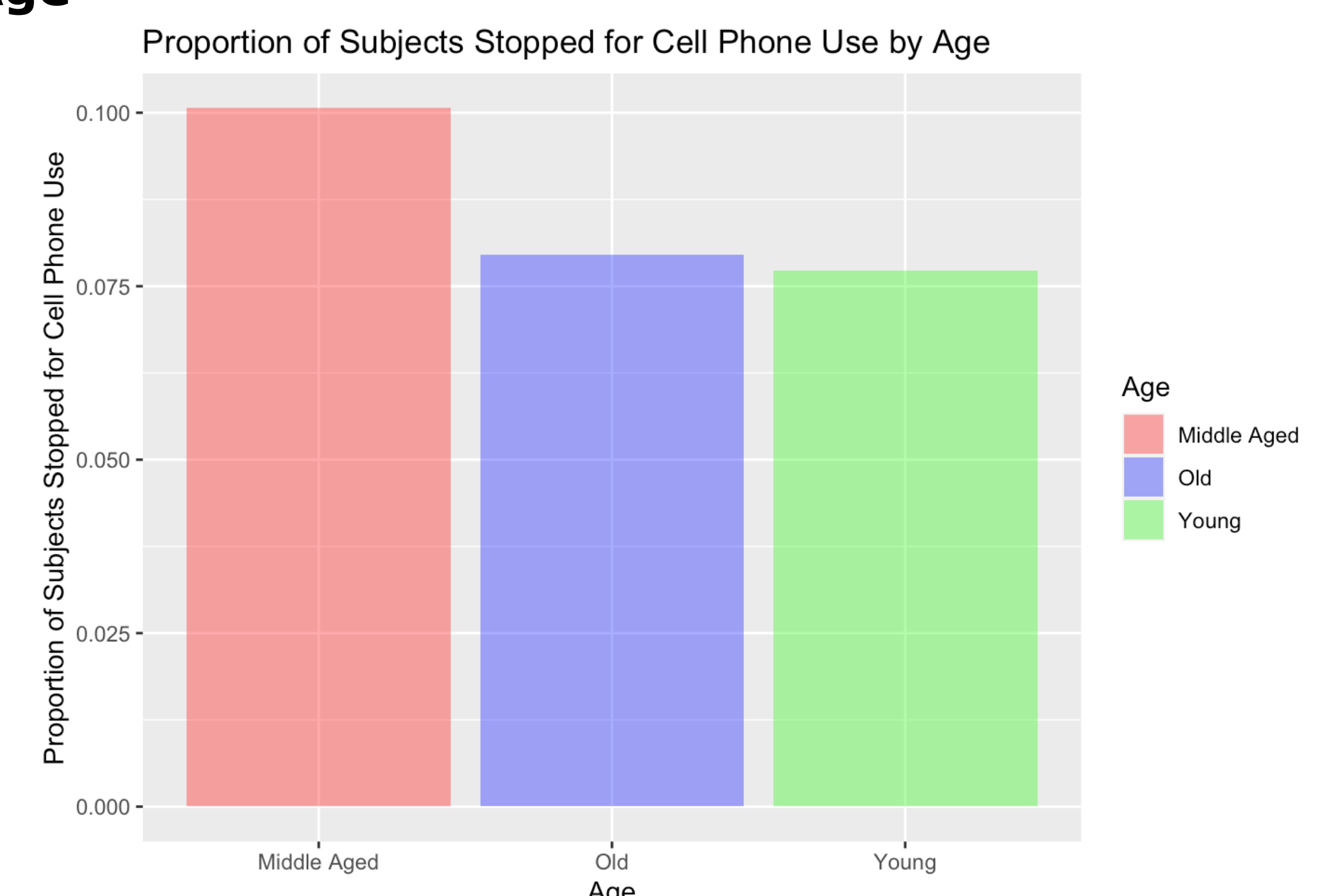
Univariate

- 50.9% of respondents are young
- 36.5% of respondents are middle-aged
- 12.6% of respondents are elderly
- 36.7% of respondents are female
- 63.3% of respondents are male
- Cell Phone Violations (n=262,836)

Bivariate

- A Chi-squared test showed that **age was significantly associated with whether one is stopped for phone usage** ($p < 0.001$).

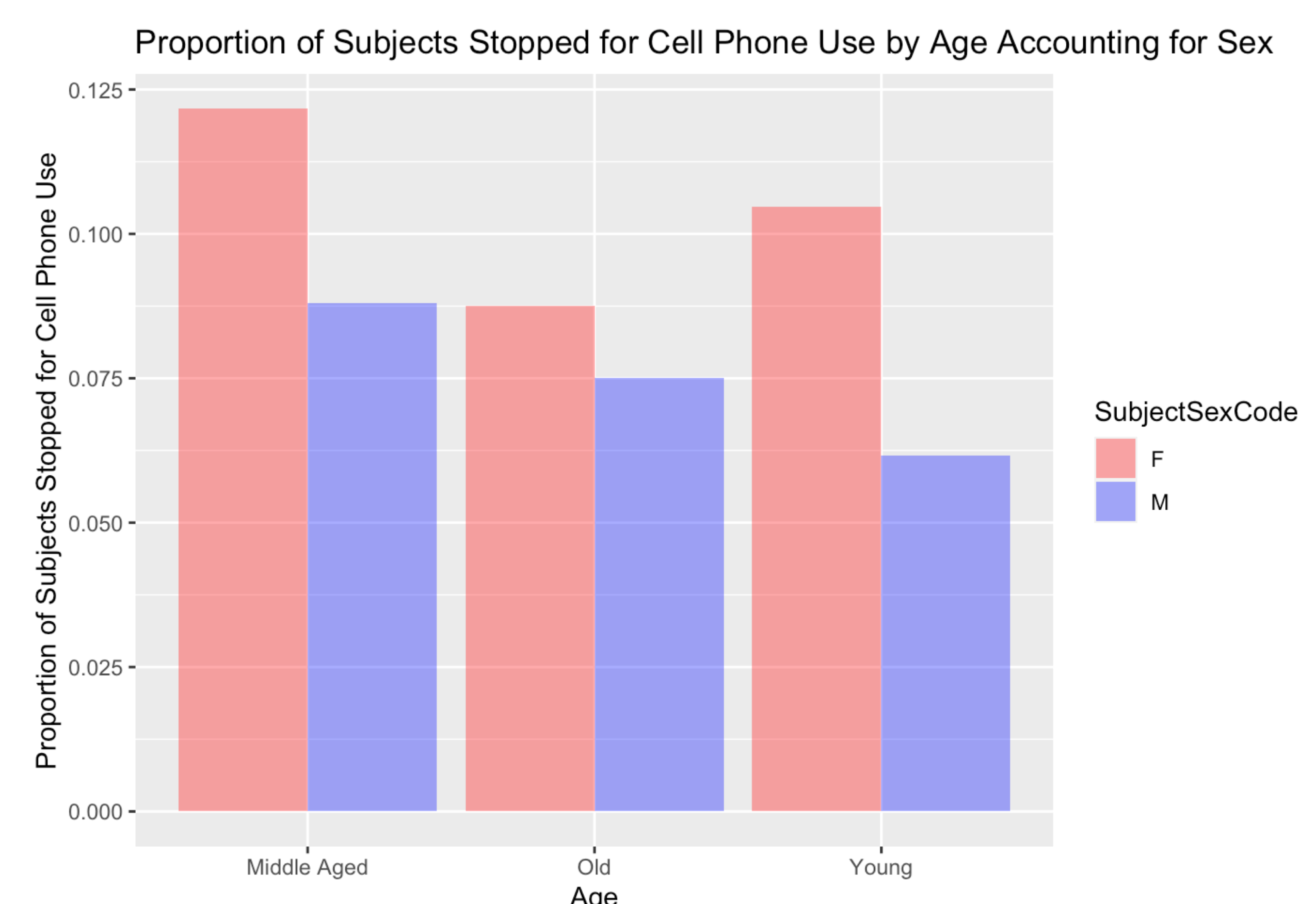
Figure 1: Proportion of Subjects Stopped for Cell Phone Usage by Age



Multivariate

- Sex is a moderator for the association between age and whether one is stopped for cell phone use (Figure 2).
- After controlling for subject sex, driver age is significantly associated with whether one is stopped for cell phone use ($p < 0.001$).

Figure 2: Proportion of Subjects stopped for Cell Phone Use by Age Accounting for Sex



Discussion

- Just because certain age groups are stopped more frequently, it does not guarantee that they are more frequently using their phones while driving
- Regardless, given that middle-aged individuals are stopped most frequently, legislators and companies targeting texting and driving may want to focus on individuals outside of the "young" age group.
- Moreover, given that subject sex is a significant moderator, sex is another demographic that should be focused on by companies targeting texting and driving to keep individuals safe.
- Further research is needed to determine what interventions would be most effective in preventing phone usage while driving. An experiment that can produce more concrete conclusions about who texts and drives would be beneficial.

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