Prevalence of Novice Teenage Driver Cell Phone Use

Driving Assessment
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Novice Teen Drivers

- 3x crash rate per mile driven than drivers 20+*
- More likely to engage in cell phone related secondary tasks than older drivers

Previous Prevalence Estimates

- 16-17-year-olds
  - 2009 - 52% talked and 34% texted while driving (Pew)
  - 2012 - 43% texted or emailed while driving (YRBS)

- Limitations
  - “Have you ever” (Pew) “In the last 30 days” (YRBS)
  - No talking measure (YRBS) or measure of intensity
  - Surveyed all teens, rather than teen drivers


Aim

Describe the prevalence of self-reported cell phone use while driving among newly-licensed teen drivers
Method

- **NEXT Generation Health Study Survey**
  - Self-report questionnaire

- **Outcomes**
  - *Talking* (making and receiving calls)
  - *Texting* (sending and reading text messages)

- **Predictors**
  - Gender, Ethnicity, Family Affluence, Vehicle Access, Driving Exposure
Analysis

- Conducted in SAS 9.3
- Accounted for complex survey sampling
- Estimated using Generalized Estimating Equations, accounting for:
  - binomial distribution of data
  - $N$ days used phone while driving $\div N$ days driven
Results – All Teens \((N = 2,439)\)

- **42.0%** reported *talking* while driving at least once in the last 30 days

- **36.8%** reported *texting* while driving at least once in the last 30 days
Sample of Licensed Drivers ($n = 881$)

<table>
<thead>
<tr>
<th>Age M = 17.4 years ($SD = .5$ years)</th>
<th>%</th>
<th>Family Affluence</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>47.6</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>52.4</td>
<td>Moderate</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>White</td>
<td>71.8</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Hispanic</td>
<td>10.5</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>African American</td>
<td>13.2</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>4.5</td>
<td>High</td>
</tr>
</tbody>
</table>

Driving exposure - Number of days driven in the last 30 days: Low ≤ 10 days, Medium 11 – 20 days, High ≥ 20 days
Results – Licensed Drivers ($n = 881$)

- 75% reported **talking** while driving at least once in the last 30 days

- 67% reported **texting** while driving at least once in the last 30 days

- Ethnicity and driving exposure significantly associated with talking and texting
Days Driven vs Days Received Text

Days Drive Vehicle Previous 30 Days vs Days Received Text Previous 30 days
Results – Licensed Drivers ($n = 881$)

- Teens reported *talking* while driving on 32.0% of days drove

- Teens reported *texting* while driving on 40.6% of days drove

- Ethnicity, family affluence, and driving exposure significantly associated with talking and texting
Summary

- Overall prevalence similar to previous studies
- Among licensed drivers, prevalence of talking and texting while driving is high
- Ethnicity and driving exposure were significantly associated with ever talking and texting while driving
- Ethnicity, family affluence and driving exposure were significantly associated with percent of days talked or texted while driving
Strengths and Limitations

- Two different prevalence estimates:
  1. Ever talked in last 30 days
  2. Days talked/texted out of days driven

- Self reported behavior
- Cross sectional
Future Directions

- Prevalence of cell phone use while driving in states where cell phone restrictions in effect versus no restrictions
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