Livesavers Conference 2018

Distracted Driving Among Teens, Latest Data & Solutions

Dr. Kelly K. Browning, Ph.D., Executive Director, Impact Teen Drivers

April 24 (Tuesday) 9-10:30 AM
Saving Lives: Engagement, Education, & Empowerment
Impact Teen Drivers (ITD) Approach

- Multifaceted approach
- Using engaging, evidence-based strategies and education to empower teens and their influencers
- Creating behavior change in individuals that ultimately results in a culture change
What Do You Consider Lethal?


#1 Killer of Teens in America

- Each dot represents a teen who lost their life. The color represents how they lost their lives.
- Think about all the people behind each dot...their families, friends, classmates, and community.
- Car crashes are 100% PREVENTABLE!
What is Your Risk?

Every day behaviors can become lethal when done behind the wheel of a car.
4,000 Teens Each Year Lose Their Life to Reckless and Distracted Driving

50% of those teens would still be alive today had they chosen to wear their seatbelt.

75% of those crashes did not involve drugs or alcohol.

The #1 Killer of Teens in America - Reckless and Distracted Driving
Evidence-Based Curricula
Program Evaluation

- Important to evaluate learning
- Need to quantify attitude and behavior change
- ITD provides rigorous survey instrument for teens
- Survey is based on the Theory of Planned Behavior
Theory of Planned Behavior (TPB)

- Assumes people make rational decisions
- Assumes their actual behavior is a product of their attitudes, social norms, and perceptions of behavior control
- Mathematically, these factors combine to predict behavior intention, which in turn is the most reliable predictor of future behavior.
Survey

- Utilizes Likert Scale responses (e.g., Strongly Agree – Strongly Disagree)
- Pairs for before and after responses to allow calculation of contrasts for individuals
- Multiple questions from survey are used to create Perception of Behavior, Behavior Intention, Knowledge, and Safety Skill variables
<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Survey Item</th>
<th>Scale Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre_DB_Belt</td>
<td>Seatbelts are important to my safety.</td>
<td></td>
</tr>
<tr>
<td>Post_DB_Belt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre_DB_Speed</td>
<td>Speeding can be lethal.</td>
<td></td>
</tr>
<tr>
<td>Post_DB_Speed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre_DB_Gloss</td>
<td>Doing something simple like applying lip gloss while driving a vehicle can be lethal</td>
<td></td>
</tr>
<tr>
<td>Post_DB_Gloss</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre_DB_Cell</td>
<td>Cell phone use while driving can be lethal.</td>
<td>0 No Answer</td>
</tr>
<tr>
<td>Post_DB_Cell</td>
<td></td>
<td>1 Strongly Disagree</td>
</tr>
<tr>
<td>Pre_DB_Cell</td>
<td>Texting, messaging, or using any kind of social media app while driving can be lethal</td>
<td>2 Disagree</td>
</tr>
<tr>
<td>Post_DB_Cell</td>
<td></td>
<td>3 Neutral</td>
</tr>
<tr>
<td>Pre_DB_Night</td>
<td>Driving at night is more lethal than driving during the day.</td>
<td>4 Agree</td>
</tr>
<tr>
<td>Post_DB_Night</td>
<td></td>
<td>5 Strongly Agree</td>
</tr>
<tr>
<td>Pre_DB_Pass</td>
<td>Having too many passengers in the car can be lethal for teen drivers.</td>
<td></td>
</tr>
<tr>
<td>Post_DB_Pass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre_JEM_Laws</td>
<td>Following traffic laws is important to me.</td>
<td></td>
</tr>
<tr>
<td>Post_JEM_Laws</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre_DB_Rowdy</td>
<td>Passengers that act rowdy or distract the driver in any way can be lethal for teen drivers.</td>
<td></td>
</tr>
<tr>
<td>Post_DB_Rowdy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre_PBC</td>
<td>Pre Perception of Behavior Control Score (summed)</td>
<td>9-45</td>
</tr>
<tr>
<td>Post_PBC</td>
<td>Post Perception of Behavior Control Score (summed)</td>
<td>9-45</td>
</tr>
</tbody>
</table>
### Behavior Intention (BI) Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre_BI_Drive</td>
<td>I will make safe choices whenever I drive a vehicle.</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Post_BI_Drive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre_BI_Pass</td>
<td>I will speak up as a passenger to promote safe driving.</td>
<td></td>
</tr>
<tr>
<td>Post_BI_Pass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre_BI</td>
<td>Pre Behavior Intentions (summed)</td>
<td>2-10</td>
</tr>
<tr>
<td>Post_BI</td>
<td>Post Behavior Intentions (summed)</td>
<td>2-10</td>
</tr>
</tbody>
</table>
Methods & Analysis

- Surveys are administered post program
- Data were analyzed in two ways:
  - First, Ordinal Logistic Regression which examines the probability of a more positive response post program
    - Limitation – doesn’t match individual’s responses
  - Second, Paired t-Test which examines the difference between pre- and post- response averages after pairing them by individual
Knowledge: OLR

Knowledge: Lethal Passenger Behaviors

Knowledge: Graduated Driver Licensing Laws
Impact
Teen Drivers

Perception of Behavior Control Before and After Program

- Seatbelts: Important
- Speeding: Lethal
- Simple Behaviors: Lethal
- Cell Phone: Lethal
- Texting: Lethal
- Nighttime Driving: Dangerous
- Too Many Passengers: Lethal
- Rowdy Passengers: Lethal
- Traffic Laws: Important

Mean Response Before vs. Mean Response After

Legend:
- Red: Mean Response Before
- Blue: Mean Response After
Behavior Intentions

Behavior Intentions Before and After Program

Make Safe Choices as Driver

Speak Up as Passenger

Mean Response Before
Mean Response After
Knowledge & Skill Level

Knowledge and Skills Before and After Program

- Lethal Passenger Behaviors
- Lethal Driver Behaviors
- GDL Laws
- Risks and Consequences of Unsafe Driving

Mean Response Before
Mean Response After
Safety Skills

Self-assessment of Safety Skills Before and After Program

- Make Good Decisions as a Passenger
- Make Good Decisions as a Driver
- Talk with Friends about Safe Driving

Mean Response Before Mean Response After
Student Responses to Program Quality

- 94% of students responded this presentation was either Great or Good.
- 90% of students felt the length and organization of the program was Great or Good.
- 82% of students felt their level of engagement was Great or Good.
- 89% of students responded the effectiveness of the educational materials used were Great or Good.
- 94% of students responded that the information presented during the program was Great or Good.
- 92% of students responded that the presentation style of the program was Great or Good.
Thank you for what you do on behalf of our kids and communities!

Kelly K Browning, Ph.D., Executive Director

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