# RESOURCES AND TOOLS TO REDUCE MULTIPLE RISKY DRIVING BEHAVIORS

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### INTRODUCTION

There is growing recognition that drivers involved in fatal crashes are often engaged in multiple risky behaviors – not wearing a seat belt, speeding, distraction, and driving impaired.1 To reach our collective goal of zero deaths on our nation's roadways, we must seek to understand factors associated with multiple risky driving behaviors and then develop and test interventions that can effectively reduce these risky driving behaviors and improve overall driving safety. This research project sought to address this gap by creating and testing an intervention to address multiple risky driving behaviors - speeding, driving under the influence, seat belt use, and distracted driving.

#### RANDOMIZED CONTROLLED TRIAL

- Participants were recruited through direct email advertising and screened for eligibility. Inclusion criteria: age 18-25, holding a valid driver's license, reporting driving at least once a week, reporting engaging in at least two risky driving behaviors in the past month
- Participants were randomly assigned to condition control (n=126) or intervention (n=232). The Computerized Intervention Authoring System (CIAS) was used as the platform for delivering the brief intervention.<sup>2</sup>
- Participants were asked to complete measures at three timepoints baseline, postintervention (immediately following intervention), and follow-up (3 months following post-intervention).
- A total of 43 participants completed assessments and were included in the study (17) participants were randomized to control and 26 to intervention).
- Overall, no significant difference was found between intervention and control participants in risky driving behavior or other study variables (e.g., impulsivity, emotional intelligence, beliefs), likely due to a small sample size and inadequate power.
- Participants learned relevant information and applied the information to their driving. See Table 1.

Table 1 Intervention Participant Feedback

Statement	%Disagree or Strongly Disagree	%Agree or Strongly Agree
I learned relevant information about driving.	8%	60%
I think about the information from the sessions when I'm driving.	20%	72%
I have been able to apply the information from the sessions.	12%	64%
I am motivated to improve my driving.	24%	68%
I have changed my driving as a result of participating in this study.	20%	44%

Participants described changes to their driving as a result of participating in the intervention. They described increased attention during driving, improved awareness of emotions and the effect on driving, increased risk perceptions, and reduced engagement in risky driving behaviors. Example quotes from participants include:

"I am using my cell phone less, and not following other vehicles as closely."

"I am working on being more present and mindful when I am driving because driving distracted can be dangerous to myself and others."

"I do not speed so often anymore and I am more aware of my driving. Also think about consequences of bad driving and that helps me not to."

- Participants in the brief intervention to reduce multiple risky driving behaviors utilized both primary and secondary strategies to address their risky driving behaviors. See Table 2.
  - Primary strategies are intended to directly reduce engagement in risky driving behaviors. For example, a primary strategy for distracted driving is "I will put my phone away and out of reach before I start driving."
  - Secondary strategies are those intended to reduce harm and mitigate the risk of the driving behavior by limiting the potential negative consequences. For example, a secondary strategy for distracted driving is "I will choose to not use my cell phone when I am driving at high speeds."

Table 2. Type of Strategy Selected by Risky Driving Behavior

Risky Behavior	n	Primary	Secondary
Speeding	23	56.5%	43.5%
Distracted Driving	24	58.3%	41.7%
Seat Belt	1		100%
Driving Under the Influence	4	50.0%	50.0%

Participants in the intervention continued to utilize the strategies they had selected three months later with 48% reporting utilizing both strategies and an additional 44% utilizing their selected strategy for one risky driving behavior. See Figure 1.

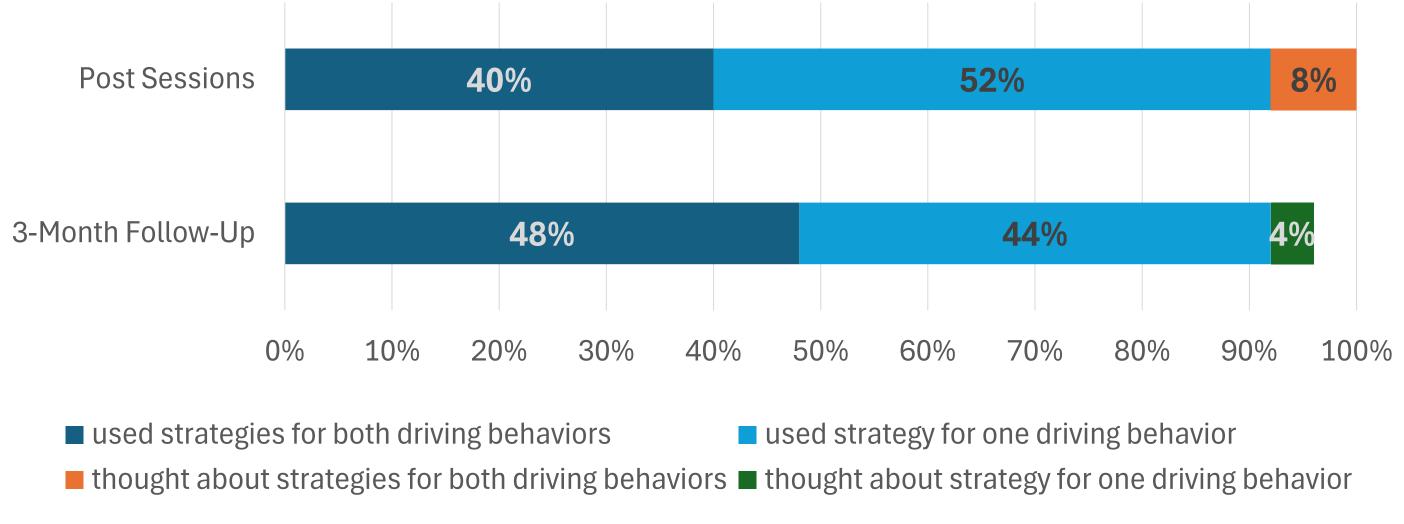


Figure 1. Participants who received the intervention reported utilizing the strategies after session delivery and three months later.

### KEY RECOMMENDATIONS

Based on the research findings, traffic safety professionals can address multiple risky driving behaviors.

Consider providing primary strategies and secondary strategies that mitigate risk and reduce harm when engaging young adults. Those engaging in multiple risky driving behaviors may benefit from recommendations and strategies that allow more choices, including harm reduction strategies.

Support emotion regulation among youth and young adults in your communities and states and consider leveraging existing infrastructures to integrate emotion regulation skill-building. Emotion regulation is defined as changing one's response to emotions to better their well-being. 3 Emotion regulation was identified as a potentially effective way to reduce impulsivity, 456 a factor associated with multiple risky driving behaviors. 7

Additional recommendations can be found in the Multiple Risky Driving Behaviors Final Report (DOI: <a href="https://doi.org/10.21949/1529562">https://doi.org/10.21949/1529562</a>)





## A RESOURCE TO REDUCE MULTIPLE RISKY DRIVING BEHAVIORS AMONG YOUNG ADULTS

- This resource was created to help traffic safety professionals engage young adults in growing skills and utilizing practical strategies to reduce engagement in multiple risky driving behaviors.
- The resource helps young adults
  - learn to identify and regulate their feelings,
  - explore cognitions related to multiple risky driving behaviors (speeding, distracted driving, not wearing a seatbelt, and driving under the influence of substances), and
  - learn and use behavioral strategies to increase safe driving behaviors.



https://tinyurl.com/Risky-Driving-Resource

#### References

<sup>1</sup>FARS. (2020). Fatality Analysis Reporting System (FARS) | NHTSA. https://www.nhtsa.gov/researchdata/fatality-analysis-reporting-system-fars

<sup>2</sup>Ondersma, S., Broderick, B., Spiller, A., Marcu, G., & Buis, L. (n.d.). *The Computerized Intervention Authoring* System (CIAS), v. 3.0, www.cias.app. CIAS is an open-source research resource funded by NIH/NIBIB grant 7U24EB028990 and administered by Michigan State University.

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