

Traffic Safety Facts

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Increasing Seat Belt Use Among 8- to 15-Year-Olds

Motor vehicle crashes are the leading cause of injury and death among children and teenagers in the United States. Proper use of vehicle restraints is an effective means to prevent many of these injuries. The objective of this project was to identify the best approaches for increasing seat belt usage among 8- to 15-year-olds.

Methods

This was a three-phased research project. The first phase was a systematic review of published literature to identify interventions that encourage seat belt use among children in the 8-15 age range. In addition, information was gathered on each component of the theoretical model guiding this project, which was derived from the theory of reasoned action and theory of planned behavior. Areas were isolated where little research exists and future primary research will be needed.

The second phase of research entailed conducting 28 in-home immersion sessions with families having at least one child 8 to 15 years old living in their household. The immersions involved questioning the parents and children while also observing the extent to which attention to safety was incorporated within the home environment. During a 90-minute visit, the contractors probed youth motivations for wearing or not wearing seat belts, as well as parents' impressions of how their children could be influenced to wear seat belts.

The third and final phase of qualitative research involved building intervention concepts based upon the model and results from the immersion sessions, and testing the viability of these concepts with youth, parents, and adult and teen influencers. A total of 293 youth 8 to 15 years old participated in 96 triad sessions (mini focus groups) of usually 3 children each. Triad participants were matched by sex, age/grade, and race, and included regular and non-regular belt wearers. Each triad session ran about 75 minutes. Also, six focus groups were conducted with parents and two focus groups were conducted with other influencers. One influencer group consisted of adult influencers (e.g., teachers, youth leaders, caregivers) and the other influencer group was teen influencers (e.g., friends, relatives). Each focus group was approximately two hours in length.

Major Results

The literature review revealed a dearth of information on the factors influencing child safety restraint use, particularly for "tweens" and teens 8 to 15. The few studies that focused on child safety restraint use tended to present the results of inter-

ventions aimed at changing non-use behaviors, without necessarily addressing specific attitudes or motivations associated with restraint use or non-use. The message strategies guiding these interventions were also rarely described in any detail.

The immersion sessions were conducted to begin to fill these gaps in information. Among the major findings:

- In general, younger tweens (8 to 10) demonstrated a simpler understanding of why they wore seat belts and were typically driven by parental influence and a desire to comply with the rules. Older tweens (11 and 12) began to show a more sophisticated understanding of why they wore safety restraints and were more likely to begin making independent decisions to wear their seat belts. Young teens (13 to 15) were the most likely to be willing to ask their friends to buckle up.
- Regardless of age, tweens and teens in the 8- to 15-year-old group were still largely influenced by their parents. Yet there appeared to be a gap in messages on seat belt safety directed to parents.
- The majority of children who were regular seat belt users indicated that wearing a seat belt was a habit.
- There were several barriers identified by parents and children that undermined the development of habitual seat belt use. For both parents and children the main set of barriers was the absence of conditions conducive to developing the habit – sporadic/no reminders, lack of modeling by parents, and exceptions to the rule. Other barriers included lack of seat belts or properly functioning ones, and the feeling that seat belts were restricting or uncomfortable.

The immersion sessions led to a variety of conclusions that guided development of 13 intervention concepts that were presented to children in the 96 triad sessions. Two concepts clearly surpassed the others in perceived effectiveness:

Concept A (*Assembly conducted by peers in schools*): You are at school, and your class attends an assembly in the auditorium. The speaker is a kid your age. They talk about the importance of wearing a seat belt to prevent injuries. They were injured in a car accident because they were not wearing their seat belt, and want other kids to learn from their experience.

Concept R (*Radio interlock device*): You get into the car and when the car starts up you don't hear the radio like usual. In this car, the radio doesn't go on until everyone riding in the car buckles their seat belt.

Across age groups, the main reason youth reacted favorably toward Concept A was because the speaker in the assembly would be someone their age or slightly older. Respondents explained that they were more likely to pay attention at an assembly where the speaker was young because they could relate to the person. Therefore, children said that to hear about a child's or teenager's experience in a car crash would probably have a greater impact on their perceptions and behaviors regarding seat belt use than an adult's experience.

Concept R received mostly positive reactions from youth, while some said that they would dislike an interlock device. Older tweens and younger teens said an interlock that did not enable them to listen to music until they buckled up would motivate them to do so. However, some said they would not like having the device in the car because it would be irritating if they did not always buckle in or someone else in the car refused to wear their seat belt. Regardless, most youth agreed it would be effective. (Note: There are possible limitations to the concept in the future as in-car technology and music delivery channels are constantly evolving and may result in obsolescence of the interlock).

The children also expressed interest in other intervention concepts. Children differed in the concepts toward which they gravitated according to their sex, age, and race/ethnicity.

Of the four main concepts tested among parents in focus groups, three concepts earned relatively strong positive reactions. Concept O was a communications intervention called "In the blink of an eye you can fasten your seat belt. In a blink of an eye you can lose your child." Most parents reacted favorably to this idea, saying the message was powerful and realistic. Some said if they saw this on a billboard, it would remind them of the need to protect their children and to consistently demand that their children wear their seat belts. Concept I (insurance discount) was favored because parents said that saving money was a strong motivator for seat belt use. However, if a tracking device monitored the families' seat belt use, some respondents said that they would feel like "big brother" was watching and would be concerned about their privacy. Parents said they liked Concept R because a radio interlock device was relevant to their children. Although respondents said it might not work for them personally, they said that it would help their children, especially teenagers, wear their seat belt more frequently. They also said it would be even better if the interlock device were controlled by the parent.

Of the youth-targeted concepts, parents reacted most favorably to several concepts, but liked Concept A (Assembly conducted by peers) and S (safety promotion by Sports Coaches) most because they leveraged outside influences on their children. Parents said the assembly was good peer-to-peer influence for their children. Parents also said that their children sometimes listened to other adults or coaches more than

their parents. Therefore, hearing about seat belt safety from a coach could be beneficial.

Adult and teen influencers said that Concept I (Insurance Discount) was good because it gave a monetary discount on your car insurance for buckling up. However, some adult influencers raised a concern over the cost of the tracking device or the cost of cars that would be manufactured with this device. In general, if the device were free, influencers said they would consider using it. Concept O (Blink of an Eye message) struck adult and teen influencers as it did the parents. Teen influencers said that although it would not affect them, it would definitely draw attention to seat belt safety amongst their parents. Adult influencers envisioned the message on a billboard with a strong visual to support the statement.

Recommendations

Suggestions for future directions included the following:

- Target some portion of safety restraint interventions for 8- to 15-year-olds to parents, as they still retain considerable influence over their children.
- Address barriers that undermine the development of habitual seat belt use by children.
- Direct interventions to this age group through both traditional and newer media channels.
- Introduce a continuous stream of seat belt campaigns and interventions to keep restraint use top-of-mind for youth.
- Specifically target interventions to youth by age/grade, sex, race/ethnicity, and usage status. While some concepts tested well among all children, others tested well among more specific groups.
- Explore additional interventions that capitalize on the effectiveness of negative consequences to seat belt non-use.
- Create interventions to alert adult and teen influencers about the roles they can play.
- Explore the possibility of insurance discounts for seat belt use.

How to Order

For a copy of **Increasing Seat Belt Use Among 8- to 15-Year-Olds, Volume I, Findings** (34 pages) and **Volume II, Appendices** (121 pages), prepared by Aeffect, Inc., write to the Office of Behavioral Safety Research, NHTSA, NTI-130, 1200 New Jersey Avenue, SE., Washington DC 20590 or send a fax to 202-366-7394 or download www.nhtsa.dot.gov. Alan Block was the Contracting Officer's Technical Representative on this project.



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