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Authors: Nic Ward, Ph.D.
Jay Otto, M.S.
Kari Finley, Ph.D.
Kelly Green, M.P.A.

Center for Health and Safety Culture
Western Transportation Institute
Montana State University



An Assessment of Traffic Safety Culture Related to Engagement Efforts to Improve Traffic Safety

<http://www.mdt.mt.gov/research/projects/trafficsafety.shtml>

Introduction

Traditional strategies to reduce risky or unhealthy behaviors focus on changing the behaviors of those individuals at risk. For example, drunk driving is a common topic in the Strategic Highway Safety Plans (SHSP) of many states. The primary strategies applied to this issue are education and enforcement, both focused on changing the behavior of those people who decide to drink and drive. Drinking and driving, speeding, and not wearing a seat belt are major contributing factors to roadway fatalities. However, the proportion of the U.S. population that engages in such behaviors tends to be small relative to the proportion that abstains. To achieve zero deaths, we must reach these smaller groups of individuals who continue to engage in unsafe behaviors.

A novel approach is to empower the vast majority

of safe road users to engage in prosocial behaviors to impact this smaller group. Instead of trying to reduce risky behaviors among a small group of individuals, the goal is to instill a sense of responsibility in everyone for the safety of others. This strategy is known as “safety citizenship” (Hofmann, Morgeson, and Gerras 2003; Dov 2008; Didla, Mearns, and Flin 2009). In essence, safety citizenship among a group of individuals is about creating a shared commitment to the value of safety and the social obligation to behave in ways that support the safety of one another (Safety Institute of Australia Ltd 2013).

The goal of this study was to better understand which specific aspects of traffic safety culture (the values and beliefs shared among groups of road users and stakeholders that influence their decisions to behave or act in ways that affect traffic safety) predict engagement in traffic safety citizenship

behaviors. The research sought to:

1. Measure the prevalence of the specific prosocial, traffic safety behaviors among adults in the U.S.;
2. Identify values, attitudes, and beliefs predictive of these traffic safety citizenship behaviors; and
3. Identify values, attitudes, and beliefs associated with higher levels of support for strategies to address seat belt usage and texting while driving.

What We Did

The Center for Health and Safety Culture at Montana State University developed a survey to investigate the traffic safety culture related to engagement in traffic safety citizenship behaviors. The development of the survey was based on an augmented form of the integrated behavioral model (Fishbein and Ajzen 2010; Gerrard et al. 2008).

The questions were developed to measure each component of the model. Highway safety staff from participating state DOTs were asked to rank potential behaviors to address. The top two behaviors chosen were asking someone to wear a seat belt and asking the driver to refrain from reading or typing on a cell phone while driving. Engagement in these behaviors was examined in the context of four social relationships: with a family member, with a friend, with an acquaintance or coworker, and with a stranger.

An initial draft of the survey was pilot tested with 75 participants who were 18 and older and who had driven in the past 30 days (recruited online). Based on these results, the questions were narrowed and refined. Additional input was gathered from highway safety staff from participating state DOTs.

This nationwide survey was administered by two methods: a mailed paper version and an online version. The same survey instrument was used for each method. The online version was included to obtain responses from younger adults as mailed surveys often lack responses from this group. The overall response rate of the mailed survey was 24.4%.

Overall, more females responded to the survey than males, and respondents tended to be older and more educated than the general population. The proportion of respondents from rural areas was higher than the general population.

The survey responses were analyzed to provide a general overview about which values, beliefs, and attitudes regarding traffic safety citizenship behaviors were “shared” within the sample. The analysis also revealed which components of the behavioral

model were most associated with traffic safety citizenship behaviors. Means of various groups were compared to better understand how values, beliefs, and attitudes varied.

What We Found

The survey provided additional understanding about the shared values and beliefs regarding traffic safety citizenship. The analysis revealed the range of values, beliefs, and attitudes about intervening with others to promote traffic safety. In particular, about half of the people who responded to the survey indicated they had been in a situation in the past 12 months when someone was not wearing a seat belt or was reading or texting while driving. Of those who indicated they were in a situation to intervene, more than half did. They were more likely to intervene with others who were socially closer to them (e.g., family and friends) than with those more socially distant (e.g., acquaintances or strangers).

Therefore, a significant number of individuals are in a position to improve traffic safety by intervening with someone engaging in a potentially risky behavior. This establishes an important opportunity to improve traffic safety. If more people choose to intervene (even with strangers), then the prevalence of risky behaviors could be reduced.

Overall, most people had favorable attitudes and beliefs about intervening. Correlations revealed that the perception of whether most people do intervene (e.g., the perceived descriptive norm) was most strongly associated with intervening behavior. Furthermore, a comparison of the means of survey components among those who intervened more often compared to

those who intervened rarely or never revealed significant differences in the respondents’ sense of comfort and confidence in intervening.

Based on these results, significant efforts are not required to grow positive attitudes supportive of intervening or a sense that people should intervene (i.e., injunctive norms). These already exist among those who do and do not report intervening. Instead, people do need to learn that intervening is typical (normative), and they need guidance on how to do it successfully to bolster their comfort and confidence.

Similarly, most people who responded to the survey had favorable attitudes about strategies involving policy or rules to increase seat belt use or decrease reading or typing on a cell phone while driving. Those who were more likely to intervene and who had more favorable attitudes and beliefs about intervening were more supportive of the strategies.

Therefore, various jurisdictions (states, counties, cities, towns) should establish primary laws, which allow law enforcement to issue a citation to a driver for not wearing their seat belt without any other offenses occurring. More workplaces should establish policies, and more families should establish rules. These strategies will create a stronger context to support intervening behaviors and improve traffic safety.

What the Researchers Recommend

Recommendation #1: Develop interventions to bolster comfort and confidence in engaging in these protective behaviors and to grow the perception that speaking up is typical.

An intervention is an intentional experience specifically designed to change beliefs. Interventions can include a wide variety of activities including classroom instruction (in a driver's education program, for example), experiential activities like role playing, education campaigns, one-on-one counseling, etc.

The specific beliefs to be addressed include:

- Most people will ask someone to wear a seat belt or not read or type on a cell phone when driving.
- Examples can be provided to "teach" people how to intervene and that they can be successful. This will increase comfort and confidence.

Recommendation #2: Couple efforts with policy strategies that include primary laws, workplace policies, and family rules.

This survey revealed that most people support these strategies. Establishing laws, policies, and rules can create a context across the social environment (Figure 1) that empowers people to act when they see someone else violating the policy. This notion, called "expressive law," recognizes that the adoption of laws can impact culture by moving beyond the notion that a law is seeking to deter individuals from engaging in a behavior by creating a penalty. Instead, expressive law recognizes that laws can codify norms shared by a group. In this way, the law creates a

shared understanding that certain behaviors are undesirable whereby empowering individuals to speak up or engage with individuals who violate the laws (Geisinger 2009). Thus, policies coupled with training on how to intervene may increase traffic safety citizenship.

Examples of policy strategies that would bolster efforts to increase traffic safety citizenship engagement include establishing workplace rules requiring all employees wear their seatbelts and never text while driving, encouraging families to establish rules about safe driving practices, and working with policymakers to establish primary seatbelt and distracted driving laws. Workplace training could also include guidance on how to speak to coworkers about traffic safety behaviors (such as wearing a seatbelt or not texting). These examples address different layers of the social environment (Figure 1) and will help facilitate community wide culture change.

Elected officials, community and workplace leaders, and families should be informed of policies and rules that support traffic safety, and those policies should be coupled with training on how to intervene when someone witnesses risky behavior.

While the surveys and analyses provided a greater understanding of traffic safety citizenship beliefs and behaviors, there are important questions that future research should address. Specifically, research should seek to develop a better understanding of the factors that influence engagement in asking someone to wear a seat belt or not type or read on a cell phone while driving. In addition, studies with more populations and even observational designs should be conducted. Furthermore, additional research needs to better understand how these factors apply to additional traffic safety citizenship behaviors such as adopting workplace policies or establishing family rules.



Figure 1: Social Environment.

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For More Details . . .

The research is documented in Report FHWA/MT-16-012/8882309-03, <http://www.mdt.mt.gov/research/projects/trafficsafety.shtml>

MDT Project Manager:

Sue Sillick, ssillick@mt.gov, 406.444.7693

Researcher's Organization Project Manager:

Nic Ward, nward@montana.edu, 406.994.5942

To obtain copies of this report, contact MDT Research Programs, 2701 Prospect Avenue, PO Box 201001, Helena MT 59620-1001, mdtresearch@mt.gov, 406.444.6338.

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