Guidance to Promote Family Rules and Workplace Policies to Reduce Cell Phone Use While Driving and Promote Engaged Driving

Task 2 Report

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Table of Contents

List of Figures

List of Tables

1 INTRODUCTION

Distracted driving is a traffic safety concern. Distraction includes any activity that takes the driver's attention away from the task of driving (National Highway Traffic Safety Administration [NHTSA], 2019). While there are many activities that could divert attention away from driving, the use of mobile cell phones is one common distraction for drivers. Cell phones are often used to communicate with others, and drivers may feel social pressure to answer calls or respond to texts. For example, research has shown that youth, even when told not to use their cell phones while driving, feel compelled to answer their cell phones when their parents call them (LaVoie, Lee, & Parker, 2016). Similarly, some workplaces have expectations that drivers are to respond to work-related calls or participate in conference calls while driving (Richardson & Benbunan-Fich, 2011). These examples demonstrate social expectations that impact decisions about distractions and reveal potential opportunities to reduce distracted driving and increase traffic safety.

Cultural-based strategies seek to change the behaviors of individuals by connecting their social identity to nested layers of relationships. Relationships between family members (e.g., parent to parent, parent to child) or employers and employees provide opportunities to engage people who are not in the vehicle to influence the behavior of a driver with whom they are communicating. Thus, family rules about not using a cell phone while driving need to apply to everyone in the family and on both sides of a conversation (in and out of the vehicle). Research has shown that parent modeling and expectations influence adolescent cell phone use while driving (Carter, Bingham, Zakrajsek, Shope, & Sayer, 2014). A similar strategy can be applied to workplaces; research has shown that policy interventions can be effective at impacting employee safety-related behaviors (Sinelnikov & Wells, 2017).

The focus of this project is to design tools and strategies that address distracted driving and foster engagement by families and workplaces. To design these tools and strategies, we need to understand the beliefs associated with distracted driving and with engaging as a parent or supervisor to prevent distracted driving. This report summarizes the development of two surveys to measure these beliefs.

2 BACKGROUND

Distraction negatively impacts safety and is a major contributing factor in crashes. In a recent naturalistic driving study, it was found that distraction is a factor in approximately 68% of crashes (Dingus et al., 2016). A driver's odds of crash involvement nearly double when engaging in any form of cell phone use and more than double when they are texting (Owens et al., 2018). Further, a meta-analysis of 16 studies on cell phone use and driving performance concluded that there are "clear costs to driving performance when drivers are engaged in cell phone conversations" (Horrey & Wickens, 2004, p. 2,304).

Cell phone use and text messaging may be the most commonly discussed driving distractions; however, researchers have also studied other distracting behaviors such as dealing with children or animals, eating and drinking, changing the radio station, or using a navigation device (Hurwitz et al., 2016; Dingus et al., 2016). Table 1. Major Distraction Subcategories (observed in crash events) shows crash risk based on major distraction subcategories observed in crash and baseline events using naturalistic driving data.

Table 1. Major Distraction Subcategories (observed in crash events)

Distraction Subcategories	Risk*
Cell handheld (dialing, texting, talking)	High Risk
Reading/writing (includes tablet)	High Risk
Reaching for an object (non-cell phone)	High Risk
Extended glance duration to external object	High Risk
In-vehicle device (radio, climate control, other)	Moderate Risk
Eating	Moderate Risk
Drinking (non-alcohol)	Moderate Risk
Personal hygiene	Moderate Risk
Dancing in seat to music	Moderate Risk

*Risk based on Odds Ratios (O.R 1.0 – 3.0 = Moderate Risk, O.R. 3.1 or greater = High Risk). Modified from Dingus et al., 2016.

Distracted driving is a concern among families. Distracted driving is a major cause of motor vehicle crashes among young novice drivers (Klauser et al., 2014). Young drivers (ages 15 to 19) have the highest occurrence of distraction at the time of fatal crashes (National Center for Statistics and Analysis, 2019). In addition to being inexperienced drivers, young drivers believe they are less susceptible than others to distraction, and they "disproportionately believe that they are effective drivers even when distracted or using a cell phone" (Aguilar & Shoji, 2013, p. 4). Carter et al. (2014) found that risk perception is a predictor of distracted driving among adolescent drivers. Beck and Watters (2016) found that college-aged texting drivers "perceived less risk in texting and driving and felt more immune to traffic risks" (p. 119).

There is concern in workplaces as well. A leading cause of workplace death is motor vehicle crashes, and it is estimated that approximately one-quarter of these crashes involve cell phone use (Occupational Safety & Health Administration, 2019). A non-fatal injury crash costs over $90,000 in direct monetary costs, and there are other significant costs of a crash-related injury such as lost work time, lower productivity, and decreases in employee health and wellbeing

(National Safety Council, 2019). Swedler, Pollack, and Gielen (2015) found that the management culture around safety and the organizational norms surrounding distracted driving influence the decisions of drivers. Addressing distracted driving is a necessary focus as it is increasingly becoming an expectation that safety is a priority and a responsibility of workplaces.

Many organizations like the U.S. Department of Transportation, AAA Foundation, and the National Safety Council have created educational tools to promote intervention strategies designed for families. One tool that is often promoted is pledges/agreements. Parent/teen driving agreements capitalize on the essential role parents play in influencing the behaviors of their children. Research evidence supports that parenting practices like family rules influence adolescent health behaviors (de Looze et al., 2014; Goldberg-Looney et al., 2015; Bylund, Baxter, Imes, & Wolf, 2010).

Policy is the most common response to reduce distracted driving in workplaces. While ample resources from trusted safety organizations have published information about how to create workplace polices, it is a growing discussion that policy alone is not enough to address distracted driving in the workplace (Farrell, 2015). The combination of workplace policies about distracted driving along with other strategies to support those policies such as education, processes, and procedures to monitor compliance, address violations, and reinforce positive behaviors are increasingly suggested for workplaces (Farrell, 2015).

The Task 1 Report revealed common elements found in interventions designed to change behavior and identified strategies that can increase these elements to support the behavior change process. These common elements can inform the design of tools and strategies to address distracted driving and foster workplace and family engagement. Six common elements include:

1. Cognitive engagement
2. Building knowledge and skills
3. Practice
4. Support
5. Motivation
6. Locus of control

These common elements are supported by behavior change theories and behavior change models. Research suggests that interventions based on a strong theoretical foundation are more likely to produce desired outcomes than interventions that are not (Rimer & Glanz, 2005). Interventions are more likely to be successful when there is a clear understanding of the behavior and the context in which the behavior occurs (Rimer & Glanz, 2005).

3 MATERIALS AND METHODS

3.1 Introduction

Two surveys were developed: one for parents as they interact with children who can drive and one for supervisors in workplaces who supervise employees who drive as a component of their work. Figure 1 shows the behavioral model that was used to design the two surveys. The behavioral model is based on the theory of reasoned action (Fishbein & Aizen, 2010), the prototype willingness model (Gerrard, Gibbons, Houlihan, Stock, & Pomery, 2008), and the role of values (Spates, 1983; Oreg & Katz-Gerro, 2006). Table 2 summarizes the definitions of the components in the behavioral model. The literature review completed in Task 1 of this project guided the development of the surveys.

Each survey includes two models: one to explore behaviors and beliefs associated with distracted driving and one to explore behaviors and beliefs associated with preventing others from driving distracted by teaching about the dangers of distracted driving, establishing clear expectations, and following up on those expectations. Both models are important as beliefs about distracted driving may influence beliefs and actions taken by parents and supervisors to prevent distracted driving. The items used on the surveys are described below. The complete surveys are included in Appendix A and Appendix B.

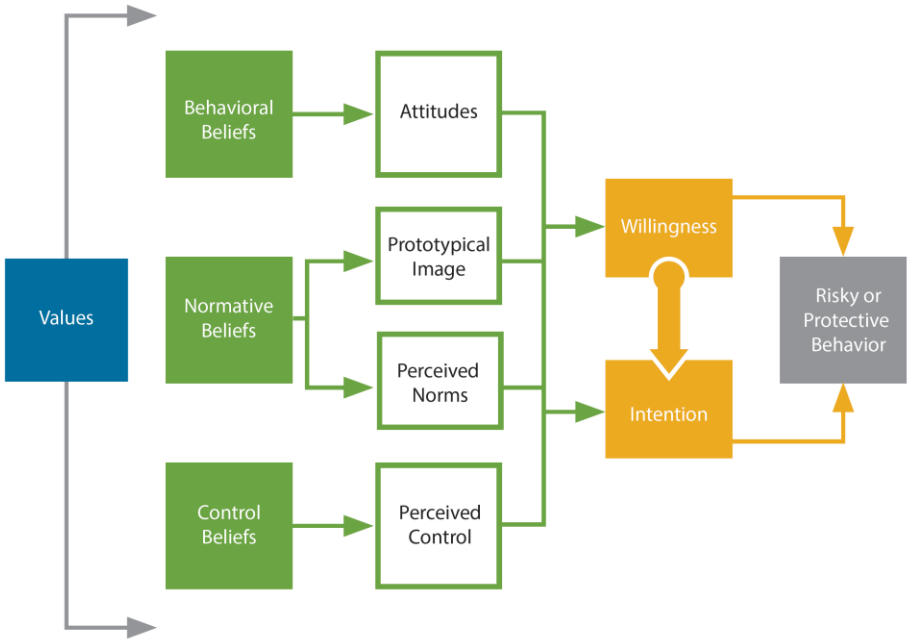

Figure 1. Behavioral Model

Table 2. Definitions of Components Used in Behavioral Model

Values	Ideals to which we aspire that define the goals for our behavioral choices and direct the formation of our belief systems (e.g., "I must protect my family," "I desire a life without stress").
Behavioral Beliefs	Expectations about the physical and social consequences of a behavior (e.g., "If I speed, I will likely get an expensive fine," "If I drink and drive, my friends will exclude me").
Attitudes	Subjective evaluation of an object or behavior in terms of emotional reaction (e.g., "Speeding is exciting") and perceived utility (e.g., "Seat belts are useless").
Normative Beliefs	Beliefs about what behaviors are most common in a group (e.g., "All my friends speed") and what important people in that group expect (e.g., "My parents expect me to wear a seat belt").
Perceived Norms	The behavior believed to be common and expected in a given context (e.g., wearing a seat belt when driving with parents).
Prototypical Image	The stereotype of people perceived to typically engage (or not engage) in the behavior (e.g., "People who speed are cool").
Control Beliefs	Beliefs about an individual's ability to engage or not engage in the behavior based on factors that are either internal or external to oneself (e.g., "Crashes are determined by fate," "I am comfortable not speeding even if everyone around me is").
Perceived Control	Perception of our ability to determine our own behaviors (e.g., "I can choose my own speed in traffic").
Intention	The deliberate decision to commit a behavior in an anticipated situation (e.g., "I intend to wear my seat belt every time I am in a vehicle").
Willingness	The predisposition to commit a behavior if an unexpected situation arises (e.g., "I am more willing to speed if everyone else around me is speeding").

3.2 Distracted Driving Model

Each survey included similar questions to understand beliefs and behaviors associated with distracted driving. Behavior was measured by asking how often the respondents had engaged in five different distracting behaviors while driving (in the past 30 days).

1. Had a conversation on a cell phone while holding it in your hand
2. Had a conversation on a cell phone without holding it ("hands free")
3. Typed or read on a cell phone
4. Adjusted the radio, sound system, or vehicle devices
5. Reached for an object in the vehicle

Answer choices used a seven-point scale ranging from "never" to "every time I drive."

Willingness was measured with one question (with five parts): "Imagine you are driving and a situation came up where you needed to do each of the following things. How willing would you be to do the following while driving and the vehicle is moving?" and asked about the same five behaviors. Answer choices used a seven-point scale ranging from "not at all willing" to "extremely willing."

Attitude was measured with one question (with five parts): "Imagine you are a PASSENGER in a vehicle. How would you feel about the DRIVER doing the following while the vehicle is moving?" and asked about the same five behaviors. Answer choices used a seven-point scale ranging from "extremely dangerous" to "extremely safe."

Perceived injunctive norms were measured with one question (with five parts): "In your opinion, how do you think most people important to you feel about you doing the following while driving and the vehicle is moving?" and asked about the same five behaviors. Answer choices used a seven-point scale ranging from "absolutely unacceptable" to "absolutely acceptable."

Perceived descriptive norms were measured with one question (with five parts): "How often do you think MOST drivers in your community do the following while driving and the vehicle is moving?" and asked about the same five behaviors. Answer choices used a seven-point scale ranging from "never" to "every time they drive."

Perceived control was measured using two questions. The first requested the respondent to indicate how much of a choice they feel they have about doing each of the five behaviors while driving and the vehicle is moving. Answer choices used a seven-point scale ranging from "no choice at all" to "total choice." The second question asked: "How easy or difficult is it for you to AVOID each of the following behaviors while driving and the vehicle is moving?" and referenced each of the five behaviors. Answer choices used a seven-point scale ranging from "extremely easy to avoid" to "extremely difficult to avoid."

In addition, respondents were asked if they have a family rule (or workplace policy) to address each of the five distracting driving behaviors. Answer choices were "yes," "no," and "I don't know."

For values, respondents were asked two questions: their level of concern about driving safety in their community (or workplace) and their level of agreement that the only acceptable number of deaths and serious injuries among their family and friends (or coworkers) should be zero. Answer choices used seven-point scales ranging from "not at all concerned" to "extremely concerned" and "strongly disagree" to "strongly agree," respectively.

3.3 Parenting Model

The parenting model explored beliefs associated with four key behaviors parents can use to grow beliefs among their children to prevent distracted driving: getting input, teaching, supporting, and recognizing. These core behaviors were identified in the Task 1 Report. Getting input is critical to getting the child cognitively engaged with the issue of distracted driving so that they are really thinking about it. Teaching is critical as young drivers may not understand how dangerous distracted driving is. Supporting involves providing reminders about the rules, addressing challenges that come up (like "What do I do if someone important calls when I am driving?"), and enforcing consequences for not following the rules. Recognizing involves recognizing safe behaviors and good choices to provide lasting motivation for behavior change (especially for when the youth leaves home and may not feel bound by the same rules).

Parenting behaviors were assessed using four questions (each with three parts). The question asked: "How often do you do the following with this child?" (where this child refers to a child living in their home with a license to drive). Getting input was assessed using three examples: "ask if this child thinks distracted driving is dangerous," "ask this child about what they think is OK and not OK to do while driving," and "ask this child about whether and how they use a cell phone while driving." Teaching was assessed using three examples: "establish clear expectations about what is acceptable and not acceptable while driving," "establish clear rules about never using a cell phone while driving," and "model not driving distracted." Supporting was assessed using three examples: "check-in with this child about whether they are using a cell phone or not while driving," "remind this child about your expectations about not using a cell phone while driving," and "follow up with appropriate consequences if this child breaks your rules about using a cell phone while driving." Recognizing was assessed using three examples: "positively recognize this child when they don't use their cell phone while driving," "encourage this child when they make good choices about not driving distracted," and "positively recognize this child when they choose to focus on driving and ignore their cell phone."

Attitudes about teaching children not to drive distracted were measured with semantic differentials using six pairs of words. The respondent was asked to indicate how they felt as a parent teaching their child about not driving distracted using these six pairs of words: silly vs. sensible, useful vs. useless, dangerous vs. safe, foolish vs. wise, boring vs fun, and worthless vs. valuable.

Behavioral beliefs were assessed by asking how important each of the 12 example behaviors (three examples for each of the four parenting behaviors) were to reducing distracted driving by their child. Answer choices used a seven-point scale ranging from "not at all important" to "extremely important."

Perceived injunctive norms were assessed by asking the level of agreement with three statements: "Parents should establish clear expectations about what is acceptable and not acceptable while driving;" "Parents should establish clear rules about never using a cell phone while driving;" and "Parents should model not driving distracted." Answer choices used a seven-point scale ranging from "strongly disagree" to "strongly agree."

Perceived descriptive norms were assessed by asking how many parents they thought engaged in the following behaviors: establishing clear expectations about what is acceptable and not acceptable while driving, establishing clear rules about never using a cell phone while driving, and modeling not driving distracted. Answer choices used a seven-point scale ranging from "none" to "all."

Questions about perceived control included assessing the quality of their relationship and communication with their child and how comfortable they felt engaging in the 12 example behaviors. The quality of their relationship was assessed with one question: "How would you rate your relationship with this child?" Answer choices used a seven-point scale ranging from "not at all good" to "extremely good." The quality of their communication with this child was assessed with one question: "How would you rate your communication with this child?" Answer

choices used a seven-point scale ranging from "not at all good" to "extremely good." Their comfort with engaging in the 12 example behaviors was assessed by asking: "How comfortable are doing the following? (This includes knowing what to say and being comfortable talking about it with this child.)" Answer choices used a seven-point scale ranging from "not at all comfortable" to "extremely comfortable."

Assumptions were assessed by asking the level of agreement with four statements: "As a parent, I play a critical role in teaching my child how to drive safely;" "Children learn a lot about driving as they ride with their parents;" "As a parent, there really isn't much I can do to teach my child how to drive safely," and "There is no point in me talking to my child about safe driving because they don't listen to me." Answer choices used a seven-point scale ranging from "strongly disagree" to "strongly agree."

3.4 Supervisor Model

The supervisor model explored beliefs associated with four key behaviors supervisors can use to grow beliefs among their staff to prevent distracted driving: getting input, teaching, supporting, and recognizing. These core behaviors were identified in the Task 1 Report. Getting input is critical to getting the employee cognitively engaged with the issue of distracted driving so that they are really thinking about it. Teaching is critical as employees may not understand how dangerous distracted driving is. Supporting involves providing reminders about rules and policies, addressing challenges that come up (like "What do I do if someone important calls when I am driving?"), and enforcing consequences for not following the rules/policies. Recognizing involves recognizing safe behaviors and good choices to provide lasting motivation for behavior change.

Supervisor behaviors were assessed using four questions (each with three parts). The question asked: "How often do you do the following with those you supervise?" Getting input was assessed using three examples: "ask if they think distracted driving is dangerous," "ask about what they think is OK and not OK to do while driving," and "ask about whether and how they use a cell phone while driving." Teaching was assessed using three examples: "teach them about the dangers of distractions while driving," "establish clear rules about never using a cell phone while driving," and "model not driving distracted." Supporting was assessed using three examples: "check-in about whether they are using a cell phone or not while driving," "remind them about your expectations about not using a cell phone while driving," and "follow-up with appropriate consequences if they violate workplace policies about using a cell phone while driving." Recognizing was assessed using three examples: "positively recognize them when they don't use their cell phone while driving," "encourage them when they make good choices about not driving distracted," and "positively recognize them when they choose to focus on driving and ignore their cell phone."

Attitudes about teaching employees not to drive distracted were measured with semantic differentials using six pairs of words. The respondent was asked to indicate how they felt as a supervisor teaching those they supervise about not driving distracted using these six pairs of

words: silly vs. sensible, useful vs. useless, dangerous vs. safe, foolish vs. wise, boring vs fun, and worthless vs. valuable.

Behavioral beliefs were assessed by asking how important each of the 12 example behaviors (three examples for each of the four supervising behaviors) were to reducing distracted driving by those they supervise. Answer choices used a seven-point scale ranging from "not at all important" to "extremely important."

Perceived injunctive norms were assessed by asking how much they thought the people that they report to in their organization would agree or disagree with three statements: "Supervisors should establish clear expectations about what is acceptable and not acceptable while driving;" "Supervisors should establish clear rules about never using a cell phone while driving;" and "Supervisors should model not driving distracted." Answer choices used a seven-point scale ranging from "strongly disagree" to "strongly agree."

Perceived descriptive norms were assessed by asking how many supervisors in their organization engaged in the following behaviors: establishing clear expectations about what is acceptable and not acceptable while driving, establishing clear rules about never using a cell phone while driving, and modeling not driving distracted. Answer choices used a seven-point scale ranging from "none" to "all."

Questions about perceived control included assessing the quality of their relationship and communication with those they supervise and how comfortable they felt engaging in the 12 example behaviors. The quality of their relationship was assessed with one question: "How would you rate your relationship with those you supervise?" Answer choices used a seven-point scale ranging from "not at all good" to "extremely good." The quality of their communication was assessed with one question: "How would you rate your communication with those you supervise?" Answer choices used a seven-point scale ranging from "not at all good" to "extremely good." Their comfort with engaging in the 12 example behaviors was assessed by asking: "How comfortable are doing the following with those you supervise? (This includes knowing what to say and being comfortable talking about it with those you supervise.)" Answer choices used a seven-point scale ranging from "not at all comfortable" to "extremely comfortable."

Assumptions were assessed by asking the level of agreement with three statements: "As a supervisor, I play a critical role in teaching those I supervise how to drive safely;" "As a supervisor, there really isn't much I can do to teach workers how to drive safely;" and "There is no point in me talking to those I supervise about safe driving because they don't listen to me." Answer choices used a seven-point scale ranging from "strongly disagree" to "strongly agree."

3.5 Demographics

The survey for parents asked the respondent's age, geography (i.e., urban, suburban, and rural), sex, education attainment, income, ethnicity (i.e., Hispanic), and race. The workplace survey asked about sex, age, whether they were required to have a commercial driver's license (CDL), and whether they supervised other employees.

3.6 Samples

The survey for parents was tested with a convenience sample of 160 parents recruited online by Qualtrics between November 19 and December 5, 2020. To participate, respondents had to indicate they were the parent of a child between the ages of 16 and 19 who lived at home and had a license to drive. The median age was 40 years (mean 42.1 years, standard deviation 7.9 years). Two-thirds (66%) were male; most (71%) lived in urban settings (24% suburban, 6% rural); 10% were Hispanic; 93% were white; and 7% were black. More than half (56%) had a post-graduate degree; only 8% had a high school education or less.

The survey for supervisors was tested with a convenience sample of 160 supervisors recruited online by Qualtrics on November 20, 2020. To participate, respondents had to indicate they drove as a part of their work and that they supervised employees. The median age was 40 years (mean 38.7 years, standard deviation 10.0 years). Six out of 10 were male; three-quarters (76%) were required to have a commercial driver's license (CDL).

Both surveys were conducted during the COVID-19 pandemic. The pandemic has significantly impacted workplace behaviors, ways young people engage in education, and driving practices. The surveys did not attempt to understand how the pandemic may have impacted responses.

4 RESULTS

To assess the quality of the surveys, we examined the means and standard deviations of all scales to identify potential "ceiling" and "floor" effects (questions where most participants responded at one extreme of an answer choice), internal reliability of the scales, correlations between the scales, and linear regression models.

4.1 Results From the Engaged Driving Survey for Families

Table 3 summarizes the means, standard deviations, and internal reliabilities (as measured by Cronbach's alpha) for each of the scales.

Most of the means were at least one standard deviation away from the maximum value of the scale. The means of the responses to the questions to assess the quality of the relationship and communication (in perceived control) were high. In a future version, the question may benefit from modification to drive the responses lower on the scale.

Overall, the internal reliability of the scales is strong; all have a Cronbach's alpha greater than 0.75 (and most were greater than 0.80). Cronbach's alpha provides a measure of internal consistency of several items (three or more) used to measure a construct. It's value ranges from 0 to 1. It is based on the number of items, the average covariance between the item pairs, and the average variance (Tavakol & Dennick, 2011).

Table 4 summarizes the Spearman correlation coefficients between the various scales used in the distracted driving model. As expected, willingness strongly correlated with behavior ($r= .85$, $p < .01$). Willingness strongly correlated with attitude ($r= .84$, $p < .01$), perceived injunctive norms ($r= .83$, $p < .01$), and perceived descriptive norms ($r= .69$, $p < .01$). Willingness was weakly correlated with perceived control (sense of choice and easy/difficult to avoid) and concern. Behavior, willingness, and other beliefs were negatively correlated with age (that is, they decreased as age increased).

Table 5 summarizes the Spearman correlation coefficients between the various scales used in the parenting model. Parenting behavior correlated with attitude ($r= .46$, $p < .01$), behavioral beliefs ($r= .76$, $p < .01$), perceived injunctive norms ($r= .55$, $p < .01$), perceived descriptive norms ($r= .48$, $p < .01$), perceived control ($r= .59$, $p < .01$), concern for traffic safety ($r = .46$, $p < .01$), and age ($r= .24$, $p < .01$). As supportive beliefs, concern, and age increased, parents reported more engagement in the parenting behaviors.

Linear regression indicated a significant effect between willingness to drive distracted and distracted driving behavior ($F(1, 158) = 444.39$, $p < .001$, $R^2= .74$). Multiple linear regression indicated a significant effect between the willingness scale and attitude, perceived injunctive norms, perceived descriptive norms, and perceived control ($F(5,154)= 113.43$, $p < .001$, $R^2= .79$). Examination of the individual belief scales indicated that attitude ($t= 5.36$, $p < .001$), perceived injunctive norms ($t= 3.96$, $p < .001$), and perceived descriptive norms ($t= 4.16$, $p < .001$) were significant predictors. Overall, the model is predicting a significant portion of the variation.

Multiple linear regression indicated a significant effect between parenting behavior and parenting attitude, parenting behavioral beliefs, parenting perceived injunctive norms, parenting perceived descriptive norms, and parenting perceived control ($F(5,153)= 36.142$, $p < .001$, $R^2= .54$). Examination of the individual belief scales indicated that parenting behavioral beliefs ($t= 7.39$, $p < .001$) and perceived descriptive norms ($t= 3.85$, $p < .001$) were significant predictors. Overall, the model is predicting a significant portion of the variation.

Table 3. Summary of Parenting Survey Scales

Scale	Number of Items	Mean	Standard Deviation	Cronbach's alpha
Distracted Driving Model				
Distracted Driving Behavior	5	4.1	1.60	0.855
Willingness	5	4.3	1.57	0.838
Attitude	5	4.1	1.66	0.855
Perceived injunctive norms	5	4.1	1.64	0.870
Perceived descriptive norms	5	4.6	1.45	0.881
Perceived control (sense of choice)	5	5.3	1.60	0.896
Perceived control (easy/difficult to avoid)	5	5.3	1.31	0.848
Concern about traffic safety	2	5.9	1.22	NA
Parenting Model				
Parenting behavior – get input	3	5.3	1.50	0.906
Parenting behavior – teach	3	5.6	1.25	0.859
Parenting behavior – support	3	5.5	1.30	0.856
Parenting behavior – recognize	3	5.6	1.15	0.861
Parenting behavior – combined	4	5.5	1.17	0.919
Attitude	6	6.1	0.97	0.824
Behavioral beliefs – get input	3	5.9	1.17	0.870
Behavioral beliefs – teach	3	6.1	1.01	0.836
Behavioral beliefs – support	3	6.0	1.00	0.823
Behavioral beliefs – recognize	3	5.8	1.14	0.856
Behavioral beliefs – combined	4	5.9	0.98	0.929
Perceived injunctive norms	3	6.3	0.95	0.824
Perceived descriptive norms	3	5.2	1.24	0.897
Perceived control – relationship	1	6.4	0.90	NA
Perceived control – communication	1	6.3	0.96	NA
Perceived control – get input	3	6.1	1.03	0.830
Perceived control – teach	3	6.1	1.00	0.852
Perceived control – support	3	6.2	0.88	0.788
Perceived control – recognize	3	6.1	0.99	0.831
Perceived control – combined	4	6.1	0.89	0.929

n=160. Scales range from 1 to 7.

Table 4. Spearman Correlation Coefficients for Distracted Driving Model Among Parents

Scale	1	2	3	4	5	6	7	8	9
1. Behavior	1.00	.85**	.83**	.79**	.58**	0.02	-0.03	.19*	-.27**
2. Willingness		1.00	.84**	.83**	.69**	0.09	0.05	0.11	-.17*
3. Attitude			1.00	.87**	.63**	.16*	0.10	0.14	-.20*
4. Perceived injunctive norms				1.00	.69**	.16*	0.11	0.06	-.21**
5. Perceived descriptive norms					1.00	.35**	.20*	0.11	-0.04
6. Perceived control (choice)						1.00	.58**	0.02	.18*
7. Perceived control (avoid)							1.00	.28**	.24**
8. Concern for traffic safety								1.00	-0.11
9. Age									1.00

n=160. *p < .05 (two-tailed) **p < .01 (two-tailed)

Table 5. Spearman Correlation Coefficients for Parenting Model

Scale	1	2	3	4	5	6	7	8
1. Parenting behavior	1.00	.46**	.76**	.55**	.48**	.59**	.46**	.24**
2. Parenting attitude		1.00	.61**	.51**	.28**	.55**	.29**	.29**
3. Parenting behavioral beliefs			1.00	.76**	.37**	.76**	.40**	.40**
4. Parenting perceived injunctive norms				1.00	.20**	.77**	.26**	.46**
5. Parenting perceived descriptive norms					1.00	.35**	.38**	0.04
6. Parenting perceived control						1.00	.31**	.45**
7. Concern for traffic safety							1.00	-0.11
8. Age								1.00

n=160. **p < .01 (two-tailed)

4.2 Results from the Engaged Driving Survey for Workplaces

Table 6 summarizes the means, standard deviations, and internal reliabilities (as measured by Cronbach's alpha) for each of the scales.

Most of the means were at least one standard deviation away from the maximum value of the scale. The means of the responses to the questions to assess the quality of the relationship and communication (in perceived control) were high. In a future version, the question may benefit from modification to drive the responses lower on the scale.

Overall, the internal reliability of the scales is strong; all have a Cronbach's alpha greater than 0.85 (and most were greater than 0.90).

Table 7 summarizes the Spearman correlation coefficients between the various scales used in the distracted driving model. As expected, willingness strongly correlated with behavior ($r = .87$, $p < .01$). Willingness strongly correlated with attitude ($r = .90$, $p < .01$), perceived injunctive norms ($r = .88$, $p < .01$), and perceived descriptive norms ($r = .90$, $p < .01$) and moderately correlated with perceived control (choice) ($r = .46$, $p < .01$) and perceived control (avoid) ($r = .53$, $p < .01$). Willingness was moderately correlated with concern ($r = .47$, $p < .01$) which seems contradictory that as people are more concerned, they would report more willingness to drive distracted. Behavior, willingness, and other beliefs were not significantly correlated with age.

Table 8 summarizes the Spearman correlation coefficients between the various scales used in the supervising model. Supervising behavior correlated with attitude ($r = .45$, $p < .01$), behavioral beliefs ($r = .77$, $p < .01$), perceived injunctive norms ($r = .61$, $p < .01$), perceived descriptive norms ($r = .66$, $p < .01$), perceived control ($r = .73$, $p < .01$), and concern for traffic safety ($r = .51$, $p < .01$). As supportive beliefs and concern increased, supervisors reported more engagement in the supervising behaviors.

Linear regression indicated a significant effect between willingness to drive distracted and distracted driving behavior ($F(1, 157) = 504.73$, $p < .001$, $R^2 = .76$). Multiple linear regression indicated a significant effect between the willingness scale and attitude, perceived injunctive norms, perceived descriptive norms, and perceived control ($F(5,153) = 159.75$, $p < .001$, $R^2 = .84$). Examination of the individual belief scales indicated that attitude ($t = 4.81$, $p < .001$) and perceived descriptive norms ($t = 5.79$, $p < .001$) were significant predictors. Overall, the model is predicting a significant portion of the variation.

Multiple linear regression indicated a significant effect between supervising behavior and supervising attitude, supervising behavioral beliefs, supervising perceived injunctive norms, supervising perceived descriptive norms, and supervising perceived control ($F(5,151) = 51.95$, $p < .001$, $R^2 = .63$). Examination of the individual belief scales indicated supervising behavioral beliefs ($t = 5.99$, $p < .001$) and perceived descriptive norms ($t = 3.34$, $p = .001$) were significant predictors. Overall, the model is predicting a significant portion of the variation.

Table 6. Summary of Workplace Survey Scales

Scale	Number of Items	Mean	Standard Deviation	Cronbach's alpha
Distracted Driving Model				
Distracted Driving Behavior	5	4.8	1.72	0.902
Willingness	5	4.9	1.80	0.921
Attitude	5	4.9	1.83	0.929
Perceived injunctive norms	5	4.9	1.80	0.924
Perceived descriptive norms	5	5.0	1.71	0.928
Perceived control (sense of choice)	5	5.3	1.61	0.909
Perceived control (easy/difficult to avoid)	5	5.4	1.46	0.880
Concern about traffic safety	2	5.5	1.54	NA
Parenting Model				
Supervising behavior – get input	3	5.0	1.76	0.927
Supervising behavior – teach	3	5.4	1.58	0.889
Supervising behavior – support	3	5.2	1.77	0.923
Supervising behavior – recognize	3	5.3	1.76	0.929
Supervising behavior – combined	4	5.2	1.64	0.929
Attitude	6	5.5	1.42	0.878
Behavioral beliefs – get input	3	5.5	1.56	0.921
Behavioral beliefs – teach	3	5.6	1.51	0.894
Behavioral beliefs – support	3	5.6	1.57	0.912
Behavioral beliefs – recognize	3	5.7	1.55	0.905
Behavioral beliefs – combined	4	5.6	1.47	0.968
Perceived injunctive norms	3	5.7	1.47	0.881
Perceived descriptive norms	3	5.4	1.50	0.902
Perceived control – relationship	1	6.1	1.23	NA
Perceived control – communication	1	5.8	1.50	NA
Perceived control – get input	3	5.8	1.32	0.905
Perceived control – teach	3	5.6	1.41	0.892
Perceived control – support	3	5.7	1.44	0.914
Perceived control – recognize	3	5.8	1.40	0.914
Perceived control – combined	4	5.7	1.32	0.964

n=159. Scales range from 1 to 7.

Table 7. Spearman Correlation Coefficients for Distracted Driving Model Among Supervisors

Scale	1	2	3	4	5	6	7	8	9
1. Behavior	1.00	.87**	.84**	.82**	.84**	.43**	.50**	.47**	-0.04
2. Willingness		1.00	.90**	.88**	.90**	.46**	.53**	.42**	0.02
3. Attitude			1.00	.93**	.90**	.47**	.58**	.42**	0.03
4. Perceived injunctive norms				1.00	.91**	.46**	.55**	.38**	-0.03
5. Perceived descriptive norms					1.00	.54**	.61**	.46**	0.09
6. Perceived control (choice)						1.00	.68**	.31**	0.12
7. Perceived control (avoid)							1.00	.49**	0.08
8. Concern for traffic safety								1.00	-0.04
9. Age									1.00

n=159. **p < .01 (two-tailed)

Table 8. Spearman Correlation Coefficients for Supervisor Model

Scale	1	2	3	4	5	6	7	8
1. Supervising behavior	1.00	.45**	.77**	.61**	.66**	.73**	.51**	-0.08
2. Supervising attitude		1.00	.66**	.59**	.44**	.61**	.43**	0.08
3. Supervising behavioral beliefs			1.00	.83**	.74**	.89**	.50**	0.11
4. Supervising perceived injunctive norms				1.00	.69**	.79**	.45**	0.16
5. Supervising perceived descriptive norms					1.00	.74**	.39**	0.09
6. Supervising perceived control						1.00	.49**	0.12
7. Concern for traffic safety							1.00	-0.04
8. Age								1.00

n=160. **p < .01 (two-tailed)

5 CONCLUSIONS

The family and workplace contexts offer two important opportunities to implement cultural-based strategies that seek to reduce distracted driving behavior. Two surveys to assess the beliefs of parents and supervisors about distracted driving and actions they can take to prevent distracted driving were developed and tested with convenience samples.

An examination of the means and standard deviations of all scales, the internal reliability of the scales, correlations between the scales, and linear regression models showed the surveys performed well with the convenience samples.

The next task in this project is to repeat the surveys with larger samples, analyze the responses, and develop resources for parents and supervisors to reduce distracted driving and promote effective interactions with their young drivers and those they supervise.

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7 APPENDICES

7.1 Appendix A – Engaged Driving Survey for Parents

The following is the contents of the survey for parents. As this survey is implemented online, the following text does not reflect actual formatting.

1. How old are you?

2. What is your gender?
   - Male
   - Female
   - Other / choose not to answer

3. In a typical month, how often did you drive a vehicle?
   - Never
   - Rarely
   - Some days
   - About half
   - Often
   - Most days
   - Daily

4. What are the ages of children living in your household?
   - 0 to 5 years of age
   - 6 to 10 year
   - 11 to 15 years
   - 16 to 19 years
   - 20 years or older
   - no children in the household

5. Do any of the children ages 16 to 19 living in your household have a license to drive?
   - Yes
   - No
   - I don't know

6. How concerned are you about driving safety in your community?
   - Not at all concerned (1)
   - (2)
   - (3)
   - Moderately concerned (4)
   - (5)
   - (6)
   - Extremely concerned (7)

7. "I believe the only acceptable number of deaths and serious injuries among my family and friends should be zero."

- Strongly disagree
- Moderately disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Moderately agree
- Strongly agree

8. Thinking back over the past 30 days, how often did you engage in the following while driving and the vehicle was moving?
[Never…Every time I drove]

A. had a conversation on a cell phone while holding it in your hand
B. had a conversation on a cell phone without holding it ("hands free")
C. typed or read on a cell phone
D. adjusted the radio, sound system, or vehicle devices
E. reached for an object in the vehicle

9. Imagine you are DRIVING and a situation came up where you needed to do each of the following things. How willing would you be to do the following while driving and the vehicle is moving?
[Not at all willing…Extremely willing]

A. Have a conversation on a cell phone while holding it in your hand
B. Have a conversation on a cell phone without holding it ("hands free")
C. Type or read on a cell phone
D. Adjust the radio, sound system, or vehicle devices
E. Reach for an object in the vehicle

10. Imagine you are a PASSENGER in a vehicle. How would you feel about the DRIVER doing the following while the vehicle is moving?
[Extremely dangerous…Extremely safe]

A. Having a conversation on a cell phone while holding it in their hand
B. Having a conversation on a cell phone without holding it ("hands free")
C. Typing or reading on a cell phone
D. Adjusting the radio, sound system, or vehicle devices
E. Reaching for an object in the vehicle

11. In your opinion, how do you think most people important to you feel about YOU doing the following while driving and the vehicle is moving?
[Absolutely unacceptable…Absolutely acceptable]

A. Having a conversation on a cell phone while holding it in their hand
B. Having a conversation on a cell phone without holding it ("hands free")
C. Typing or reading on a cell phone
D. Adjusting the radio, sound system, or vehicle devices
E. Reaching for an object in the vehicle

12. How often do you think MOST drivers in your community do the following while driving and the vehicle is moving?
[Never…Every time they drive]

A. Have a conversation on a cell phone while holding it in your hand
B. Have a conversation on a cell phone without holding it ("hands free")
C. Type or read on a cell phone
D. Adjust the radio, sound system, or vehicle devices
E. Reach for an object in the vehicle

13. Indicate how much of a choice you feel you have about doing each of the following while driving and the vehicle is moving?
[No choice at all…Total choice]

A. Have a conversation on a cell phone while holding it in your hand
B. Have a conversation on a cell phone without holding it ("hands free")
C. Type or read on a cell phone
D. Adjust the radio, sound system, or vehicle devices
E. Reach for an object in the vehicle

14. How easy or difficult is it for you to AVOID each of the following behaviors while driving and the vehicle is moving?
[Extremely difficult to avoid…Extremely easy to avoid]

A. Have a conversation on a cell phone while holding it in your hand
B. Have a conversation on a cell phone without holding it ("hands free")
C. Type or read on a cell phone
D. Adjust the radio, sound system, or vehicle devices
E. Reach for an object in the vehicle

15. Do you have a family rule about NOT doing the following?
[yes, no, I don't know]

A. Having a conversation on a cell phone while holding it in your hand while driving
B. Having a conversation on a cell phone without holding it ("hands free") while driving
C. Typing or reading on a cell phone while driving
D. Adjusting the radio, sound system, or vehicle devices while driving
E. Reaching for an object in the vehicle while driving

In this section, we want to ask about things you might do to reduce distracted driving by your child who is between the ages of 16 and 19 and who has a license to drive.
If you have more than one child who has a license to drive, think about the youngest who has a license.

16. How often do you do the following with this child?
[Never… All the time]

A. Ask if this child thinks distracted driving is dangerous
B. Ask this child about what they think is OK and not OK to do while driving
C. Ask this child about whether and how they use a cell phone while driving

17. How often do you do the following with this child?
[Never… All the time]

A. Establish clear expectations about what is acceptable and not acceptable while driving
B. Establish clear rules about never using a cell phone while driving
C. Model not driving distracted (like not using your cell phone while driving)

18. How often do you do the following with this child?
[Never… All the time]

A. Check-in with this child about whether they are using a cell phone or not while driving
B. Remind this child about your expectations about not using a cell phone while driving
C. Follow-up with appropriate consequences if this child breaks your rules about using a cell phone while driving

19. How often do you do the following with this child?
[Never… All the time]

A. Positively recognize this child when they don't use their cell phone while driving
B. Encourage this child when they make good choices about not driving distracted
C. Positively recognize this child when they choose to focus on driving and ignore their cell phone

20. We want to learn about how you feel as a parent about teaching your child not to drive while distracted. Does it feel….

	1	2	3	4	5	6	7	
Silly								Sensible
Foolish								Wise
Worthless								Valuable
Boring								Fun
Useless								Useful
Dangerous								Safe

21. In your opinion, how important is each of the following in reducing distracted driving by your child?
[Not at all important…Extremely important]

A. Asking if this child thinks distracted driving is dangerous
B. Asking this child about what they think is OK and not OK to do while driving
C. Asking this child about whether and how they use a cell phone while driving

22. In your opinion, how important is each of the following in reducing distracted driving by your child?
[Not at all important…Extremely important]

A. Establishing clear expectations about what is acceptable and not acceptable while driving
B. Establishing clear rules about never using a cell phone while driving
C. Modeling not driving distracted for your child (like not using your cell phone while driving)

23. In your opinion, how important is each of the following in reducing distracted driving by your child?
[Not at all important…Extremely important]

A. Asking this child about whether they are using a cell phone or not while driving
B. Reminding this child about your expectations about not using a cell phone while driving
C. Following-up with appropriate consequences if this child breaks your rules about using a cell phone while driving

24. In your opinion, how important is each of the following in reducing distracted driving by your child?
[Not at all important…Extremely important]

A. Positively recognizing this child when they don't use their cell phone while driving
B. Encouraging this child when they make good choices about not driving distracted
C. Positively recognizing this child when they choose to focus on driving and ignore their cell phone

25. How much do you agree or disagree with each of the following statements?
[Strongly disagree… Strongly agree]

A. "As a parent, I play a critical role in teaching my child how to drive safely."
B. "Children learn a lot about driving as they ride with their parents."
C. "As a parent, there really isn't much I can do to teach my child how to drive safely."
D. "There is no point in me talking to my child about safe driving because they don't listen to me."

26. In your opinion, how much do you think most people important to you agree or disagree with the following statements?
[Strongly disagree… Strongly agree]

A. Parents should establish clear expectations about what is acceptable and not acceptable while driving
B. Parents should establish clear rules about never using a cell phone while driving
C. Parents should model not driving distracted

27. In your opinion, about how many parents…
[None… All]

A. Establish clear expectations about what is acceptable and not acceptable while driving
B. Establish clear rules about never using a cell phone while driving
C. Model not driving distracted

28. How would you rate your relationship with this child?

- Not at all good (1)
- (2)
- (3)
- Moderately good (4)
- (5)
- (6)
- Extremely good (7)

29. How would you rate your communication with this child?

- Not at all good (1)
- (2)
- (3)
- Moderately good (4)
- (5)
- (6)
- Extremely good (7)

30. How comfortable are doing the following? (This includes knowing what to say and being comfortable talking about it with this child.)
[Not at all comfortable...Extremely comfortable]

A. Asking if this child thinks distracted driving is dangerous
B. Asking this child about what they think is OK and not OK to do while driving
C. Asking this child about whether and how they use a cell phone while driving

31. How comfortable are doing the following? (This includes knowing what to say and being comfortable talking about it with this child.)
[Not at all comfortable...Extremely comfortable]

A. Establishing clear expectations about what is acceptable and not acceptable while driving
B. Establishing clear rules about never using a cell phone while driving
C. Modeling not driving distracted for your child (like not using your cell phone while driving

32. How comfortable are doing the following? (This includes knowing what to say and being comfortable talking about it with this child.)
[Not at all comfortable...Extremely comfortable]

A. Asking this child about whether they are using a cell or not while driving
B. Reminding this child about your expectations about not using a cell phone while driving
C. Following-up with appropriate consequences if this child breaks your rules about using a cell phone while driving

33. How comfortable are doing the following? (This includes knowing what to say and being comfortable talking about it with this child.)
[Not at all comfortable...Extremely comfortable]

A. Positively recognizing this child when they don't use their cell phone while driving
B. Encouraging this child when they make good choices about not driving distracted
C. Positively recognizing this child when they choose to focus on driving and ignore their cell phone

34. What best describes where you live?

- Urban (population of 50,000 or more)
- Suburban (population between 2,500 and 50,000)
- Rural

35. What is the highest level of school you have completed or the highest degree you have received?
- □ High school or less
- □ Technical or vocational school
- □ Some college
- □ College graduate
- □ Post graduate work or advanced degree
- □ Refused

36. Are you Spanish, Hispanic, or Latino or none of these?
- □ Yes
- □ None of these

37. Choose one or more races that you consider yourself to be:
- □ White
- □ Black or African American
- □ American Indian or Alaska Native
- □ Asian
- □ Native Hawaiian or Pacific Islander
- □ Other _____

38. Is your annual household income from all sources?
- □ Less than $25,000
- □ $25,000 to less than $35,000
- □ $35,000 to less than $50,000
- □ $50,000 to less than $75,000
- □ $75,000 or more

Thank you for completing the survey!

7.2 Appendix B – Engaged Driving Survey for Supervisors

The following is the contents of the survey for parents. As this survey is implemented online, the following text does not reflect actual formatting.

1. How old are you?

2. What is your gender?
   - Male
   - Female
   - Other / choose not to answer

3. What best describes your current work status?
   - I work full time
   - I work part time
   - I am retired
   - I don't work
   -

4. In a typical month, how often do you drive a vehicle as a part of your work?
   - Never
   - Rarely
   - Some days
   - About half
   - Often
   - Most days
   - Daily

5. Do you supervise or manage other employees who drive for work?
   - yes
   - no
   - I don't know

6. Are you required to have a Commercial Driver's License (CDL) for your current position?
   - Yes
   - No
   - I don't know

7. How concerned are you about driving safety at your workplace?
   - Not at all concerned (1)
   - (2)
   - (3)
   - Moderately concerned (4)
   - (5)
   - (6)
   - Extremely concerned (7)

8. "I believe the only acceptable number of deaths and serious injuries at my workplace should be zero."

- Strongly disagree
- Moderately disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Moderately agree
- Strongly agree

9. Thinking back over the past 30 days, how often did you engage in the following while driving for work and the vehicle was moving?
[Never…Every time I drove]

A. had a conversation on a cell phone while holding it in your hand
B. had a conversation on a cell phone without holding it ("hands free")
C. typed or read on a cell phone
D. adjusted the radio, sound system, or vehicle devices
E. reached for an object in the vehicle

10. Imagine you are DRIVING FOR WORK and a situation comes up where you need to do each of the following things. How willing would you be to do the following while driving and the vehicle is moving?
[Not at all willing…Extremely willing]

A. Have a conversation on a cell phone while holding it in your hand
B. Have a conversation on a cell phone without holding it ("hands free")
C. Type or read on a cell phone
D. Adjust the radio, sound system, or vehicle devices
E. Reach for an object in the vehicle

11. Imagine you are a PASSENGER in a WORK vehicle. How would you feel about the DRIVER doing the following while the vehicle is moving?
[Extremely dangerous…Extremely safe]

A. Having a conversation on a cell phone while holding it in their hand
B. Having a conversation on a cell phone without holding it ("hands free")
C. Typing or reading on a cell phone
D. Adjusting the radio, sound system, or vehicle devices
E. Reaching for an object in the vehicle

12. How would you say that your immediate supervisor feels about YOU doing the following while driving and the vehicle is moving?
[Absolutely unacceptable…Absolutely acceptable]

A. Having a conversation on a cell phone while holding it in their hand
B. Having a conversation on a cell phone without holding it ("hands free")
C. Typing or reading on a cell phone
D. Adjusting the radio, sound system, or vehicle devices
E. Reaching for an object in the vehicle

13. How often do you think MOST of your coworkers (who drive for work) do the following while driving for work and the vehicle is moving?
[Never…Every time they drive]

A. Have a conversation on a cell phone while holding it in your hand
B. Have a conversation on a cell phone without holding it ("hands free")
C. Type or read on a cell phone
D. Adjust the radio, sound system, or vehicle devices
E. Reach for an object in the vehicle

14. Indicate how much of a choice you feel you have about doing each of the following while driving for work and the vehicle is moving?
[No choice at all…Total choice]

A. Have a conversation on a cell phone while holding it in your hand
B. Have a conversation on a cell phone without holding it ("hands free")
C. Type or read on a cell phone
D. Adjust the radio, sound system, or vehicle devices
E. Reach for an object in the vehicle

15. How easy or difficult is it for you to AVOID each of the following behaviors while driving for work and the vehicle is moving?
[Extremely difficult to avoid…Extremely easy to avoid]

A. Have a conversation on a cell phone while holding it in your hand
B. Have a conversation on a cell phone without holding it ("hands free")
C. Type or read on a cell phone
D. Adjust the radio, sound system, or vehicle devices
E. Reach for an object in the vehicle

16. Do you have a workplace policy or rule about NOT doing the following?
[yes, no, I don't know]

A. Having a conversation on a cell phone while holding it in your hand while driving
B. Having a conversation on a cell phone without holding it ("hands free") while driving
C. Typing or reading on a cell phone while driving
D. Adjusting the radio, sound system, or vehicle devices while driving
E. Reaching for an object in the vehicle while driving

In this section, we want to ask about things you might do to reduce distracted driving by those you supervise at work.

17. How often do you do the following with those you supervise at work?
[Never… All the time]

A. Ask if they think distracted driving is dangerous
B. Ask about what they think is OK and not OK to do while driving
C. Ask about whether and how they use a cell phone while driving

18. How often do you do the following with those you supervise at work?
[Never… All the time]

A. Teach them about the dangers of distractions while driving
B. Establish clear rules about never using a cell phone while driving
C. Model not driving distracted (like not using your cell phone while driving)

19. How often do you do the following with those you supervise at work?
[Never… All the time]

A. Check in with them about whether they are using a cell phone or not while driving
B. Remind them about your expectations about not using a cell phone while driving
C. Follow up with appropriate consequences if they violate workplace policies about using a cell phone while driving

20. How often do you do the following with those you supervise at work?
[Never… All the time]

A. Positively recognize them when they don't use their cell phone while driving
B. Encourage them when they make good choices about not driving distracted
C. Positively recognize them when they choose to focus on driving and ignore their cell phone

21. We want to learn about how you feel as a supervisor about teaching those you supervise not to drive while distracted. Does it feel…?

	1	2	3	4	5	6	7	
Silly								Sensible
Foolish								Wise
Worthless								Valuable
Boring								Fun
Useless								Useful
Dangerous								Safe

22. In your opinion, how important is each of the following in reducing distracted driving by those you supervise?
[Not at all important…Extremely important]

A. Asking if they think distracted driving is dangerous
B. Asking about what they think is OK and not OK to do while driving
C. Asking about whether and how they use a cell phone while driving

23. In your opinion, how important is each of the following in reducing distracted driving by those you supervise?
[Not at all important…Extremely important]

A. Teaching them about the dangers of distractions while driving
B. Establishing clear rules about never using a cell phone while driving
C. Modeling not driving distracted (like not using your cell phone while driving)

24. In your opinion, how important is each of the following in reducing distracted driving by those you supervise?
[Not at all important…Extremely important]

A. Asking them about whether they are using a cell phone or not while driving
B. Reminding them about your expectations about not using a cell phone while driving
C. Following up with appropriate consequences if they violate workplace policies about using a cell phone while driving

25. In your opinion, how important is each of the following in reducing distracted driving by those you supervise?
[Not at all important…Extremely important]

A. Positively recognizing them when they don't use their cell phone while driving
B. Encouraging them when they make good choices about not driving distracted
C. Positively recognizing them when they choose to focus on driving and ignore their cell phone

26. How much do you agree or disagree with each of the following statements?
[Strongly disagree… Strongly agree]

A. "As a supervisor, I play a critical role in teaching those I supervise about how to drive safely."
B. "As a supervisor, there really isn't much I can do to teach workers how to drive safely."
C. "There is no point in me talking to those I supervise about safe driving because they don't listen to me."
D.

27. In your opinion, how much do you think the people that you report to in your organization agree or disagree with the following statements?
[Strongly disagree… Strongly agree]

A. Supervisors should establish clear expectations about what is acceptable and not acceptable while driving
B. Supervisors should establish clear rules about never using a cell phone while driving
C. Supervisors should model not driving distracted

28. In your opinion, about how many supervisors in your organization…
[None…All]

A. Establish clear expectations about what is acceptable and not acceptable while driving
B. Establish clear rules about never using a cell phone while driving
C. Model not driving distracted

29. Overall, how would you rate your relationships with those you supervise?

- Not at all good (1)
- (2)
- (3)
- Moderately good (4)
- (5)
- (6)
- Extremely good (7)

30. Overall, how would you rate your communication with those you supervise?

- Not at all good (1)
- (2)
- (3)
- Moderately good (4)
- (5)
- (6)
- Extremely good (7)

31. How comfortable are doing the following? (This includes knowing what to say and being comfortable talking about it with those you supervise.)
[Not at all comfortable...Extremely comfortable]

A. Asking if they think distracted driving is dangerous
B. Asking about what they think is OK and not OK to do while driving
C. Asking about whether and how they use a cell phone while driving

32. How comfortable are doing the following? (This includes knowing what to say and being comfortable talking about it with those you supervise.)
[Not at all comfortable...Extremely comfortable]

A. Teaching them about the dangers of distractions while driving
B. Establishing clear rules about never using a cell phone while driving
C. Modeling not driving distracted (like not using your cell phone while driving)

33. How comfortable are doing the following? (This includes knowing what to say and being comfortable talking about it with those you supervise.)
[Not at all comfortable...Extremely comfortable]

A. Asking them about whether they are using a cell or not while driving
B. Reminding them about your expectations about not using a cell phone while driving
C. Following up with appropriate consequences if they violate workplace policies about using a cell phone while driving

34. How comfortable are doing the following? (This includes knowing what to say and being comfortable talking about it with those you supervise.)
[Not at all comfortable...Extremely comfortable]

A. Positively recognizing them when they don't use their cell phone while driving
B. Encouraging them when they make good choices about not driving distracted
C. Positively recognizing them when they choose to focus on driving and ignore their cell phone

Thank you for completing the survey!