Title: Distracted Driving Prevention Program for Undergraduate College Students

Summary Paragraph: Distracted driving is becoming more prevalent as the number of distractions for drivers due to cellular technology is increasing. Although no published research could be located, anecdotally the use of a distracted driving simulator as a part of a distracted driving program is believed to be an effective agent of behavior change as it vividly shows the user the consequences of distracted driving. Nurses and other health educators are in a unique position to develop, implement, and assess the effectiveness of a distracted driving program to encourage young adults to be more responsible drivers.

Background and Purpose: Each day in the United States, more than 9 people are killed and more than 1,153 people are injured in crashes that are reported to involve a distracted driver. In 2012, 3,328 people were killed in crashes involving a distracted driver, compared to 3,360 in 2011. An additional 421,000 people were injured in motor vehicle crashes involving a distracted driver in 2012, a 9% increase from the 387,000 people injured in 2011. In 2011, nearly one in five crashes (17%) in which someone was injured involved distracted driving (http://www.distraction.gov/content/get-the-facts/facts-and-statistics.html). Although many states are enacting laws that prohibit distractions while driving – such as talking on a cell phone, texting, and eating – young adults report that these laws are not impacting their behaviors because of the low likelihood that they will get caught (http://www.ghsa.org/html/stateinfo/laws/cellphone_laws.html). Drivers in their 20’s make up 27 percent of the distracted drivers in fatal crashes (www-nrd.nhtsa.dot.gov/Pubs/811737.pdf). Distracted driving programs using simulation have been developed in order to educate participants about the dangers of this serious life-threatening practice (http://www.driverinteractive.com). Although the results from these programs were neither empirically tested nor published, there have been prior published intervention studies regarding
distracted driving, but simulation was not part of the intervention. For example, one study utilized fear appeals (a persuasive communication attempting to arouse fear and promote precautionary motivation and self-protective action) which were not found to be an effective deterrent to distracted driving (Lennon, Rentfro, O’Leary, 2010). As there are no published findings from interventions including simulation, to our knowledge, the purpose of this project is to develop and implement a simulation-based Distracted Driving Prevention Program for undergraduate college students to reduce distracted driving behaviors and instill negative attitudes toward distracted driving. In addition to addressing these health behaviors, it is also our intention to initiate a pool of literature on this important topic.

**Design/Methods:** Initially, in July/August 2016, a pilot study using a sample of approximately 10 University of Michigan-Flint undergraduate students will be performed utilizing a pre and post intervention design. A questionnaire for use in this study will be adapted from the National Survey on Distracted Driving Attitudes and Behaviors (Schroeder, Meyers, & Kostyniuk, 2013). The Distracted Driving Program will consist of a lecture followed by a distracted driving simulation by each participant. Pilot subjects will complete a questionnaire evaluating their distracted driving behaviors and attitudes prior to the program and immediately after the program followed by a debriefing session with the pilot subjects. Based upon the feedback received, the program will be adjusted as needed.

In September - November of 2016, a total of 100 participants for the study (50 for the intervention group and 50 for the control group) will be recruited from the undergraduate student population at the University of Michigan-Flint, via email and contact with faculty. The participants will be randomly assigned to the control group or to the intervention group. They will be scheduled for Distracted Driving Program sessions. All participants in the intervention group will be asked to complete the questionnaire prior to the program, immediately following
the program, and again 3 months after the program to determine behavior and/or attitude change as a result of the program. The participants in the control group will complete the questionnaire in March/April 2016 and again 3 months later without participating in the Distracted Driving Program. Quantitative data analysis will be performed to determine the significance of the behavior and attitude change over time and ascertain if it can be attributed to participating in the Distracted Driving Program.

**Expected Outcomes**: Using a multifaceted distracted driving program including a didactic component as well as a distracted driving simulation, it is expected that the participants will self-report reduction of distracted driving behaviors and negative attitudes towards distracted driving when evaluated by a questionnaire prior to the program, immediately following the program, and 3 months after the program as compared to the control group. By the conclusion of the funding period, the project team expects to publish at least one scholarly article and also to apply for an external grant to expand this program to other young adult populations.