Project Title: Longitudinal Study of the Effect of Simulator Experience on the Behavior Modification of Adult Drivers

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Project Description: During 2013-2014, the MSU Sub-Award funded a research study to assess the impact of the driving simulator and safety education on adult drivers. A sample of 100 adult drivers chosen by the Hampton University Accident Research Center (HUARC) was subjected to a driving simulator treatment to demonstrate the deterioration of driving judgment due to texting-while-driving. Results show that drivers were not aware of texting-while-driving’s impact on their driving quality. After the simulator impact, a significant majority of the drivers in the sample also affirmed that they will control texting while driving in future. However, due to time constraints only a cross-sectional study could be completed. This does not give any long-term impact of such treatment.

In this extension, we propose a new longitudinal study to measure the impact of the simulator experience on drivers over a period of time. During the month of April 2016, the investigators will contact these same drivers to assess the magnitude of long-term behavior change resulting from a one-time simulator treatment. Pre-treatment data has been collected during 2013-2014 study. In this study, pre-post true experimental design will be employed. The pre-treatment instrument will be modified to collect data on the drivers’ present attitude towards texting-while-driving. The instrument will include questions on drivers participating in driving related studies during the intervening period to eliminate confounding of such factors element. The sampling frame will be same 100 drivers who have participated in the previous study. All these drivers will be contacted via telephone. Drivers will be asked to complete a new survey instrument. The data collected by the survey instrument will be analyzed using related statistical tools provided by the IBM SPSS STANDARD software.

The results would be compared with results from the earlier study to assess any significant behavioral changes toward texting-while driving after a time lapse. The results could be used by transportation safety departments in designing and implementing effective training programs. This project will deliver a research report on longevity of the attitudinal change due to simulator education in drivers’ propensity to texting while driving.