# Driving Simulators - More than a Video Game!

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This study aimed to investigate teenager, young adult, and adult knowledge levels on distracted and impaired driving through the use of educational driving simulators. The distracted and impaired driving simulators were customized to instruct participants on the dangers of driving distracted or impaired utilizing consequence videos. The simulators were taken to high schools, colleges/universities, and businesses over a four year period where we hypothesized that they would play a significant role in raising knowledge about the dangers and penalties of these risky driving behaviors and would also help to increase seat belt usage.

#### **Setting**:

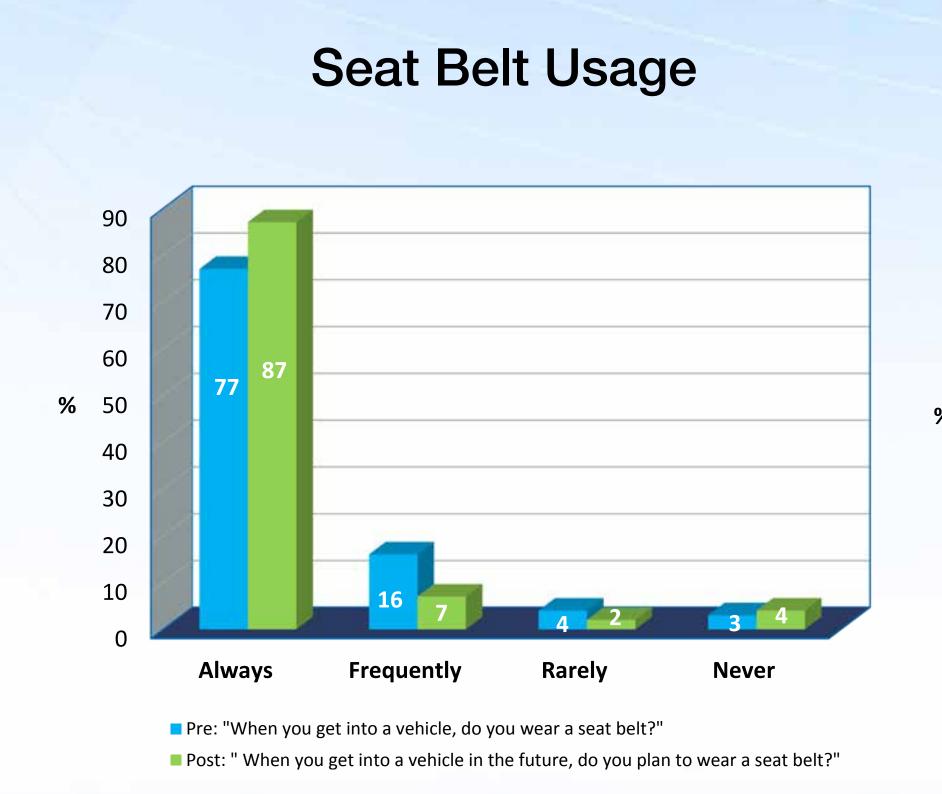
High schools, colleges / universities, and businesses in northeastern central Pennsylvania September 2012 through May 2016.

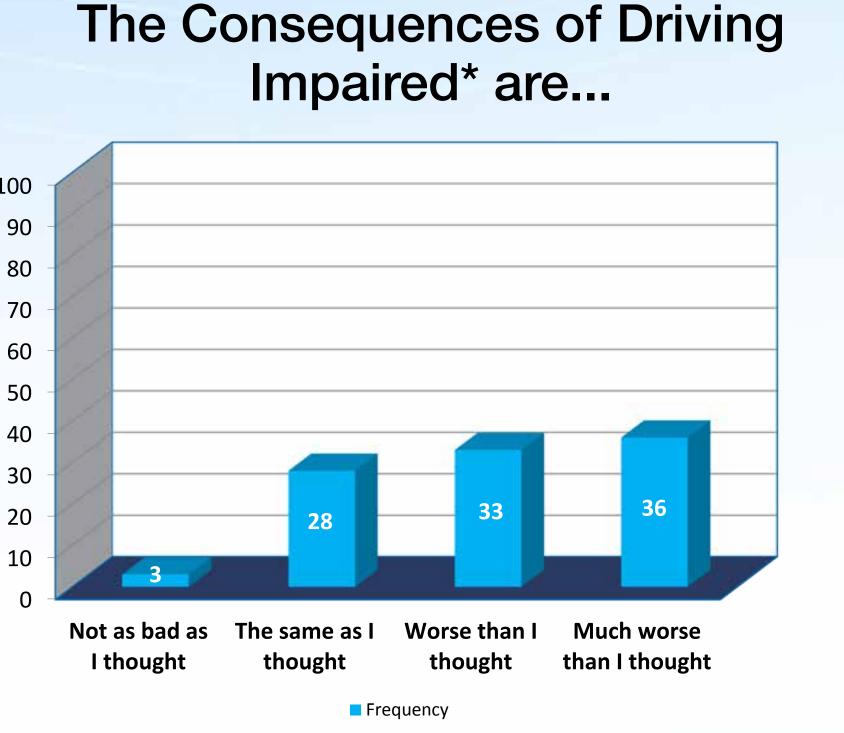
### Sample:

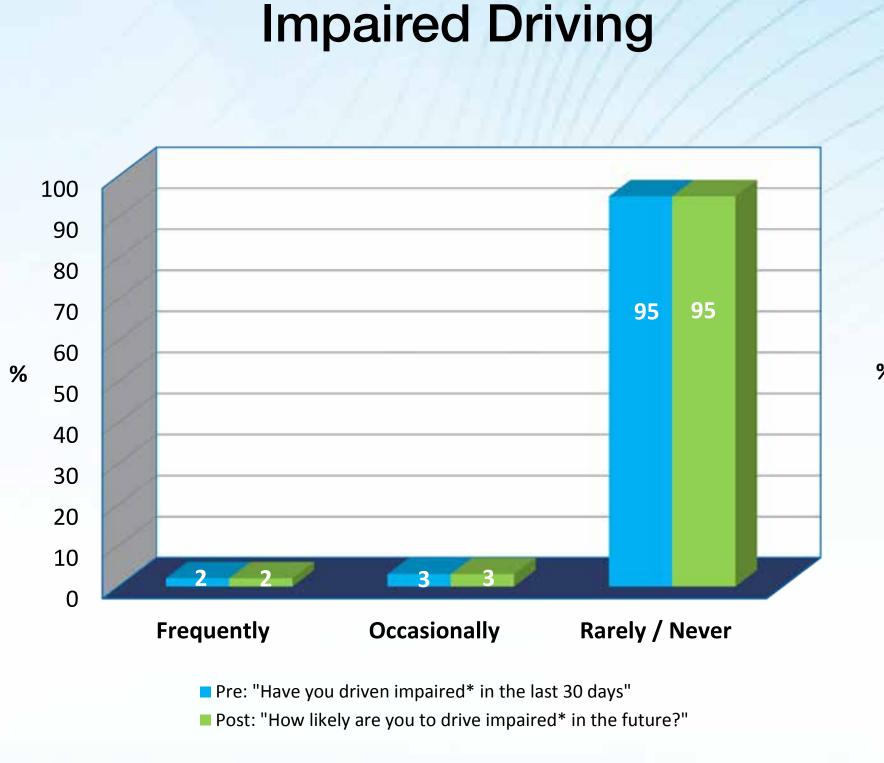
22,801 pre-surveys were taken by mainly students that participated through their high school or college.

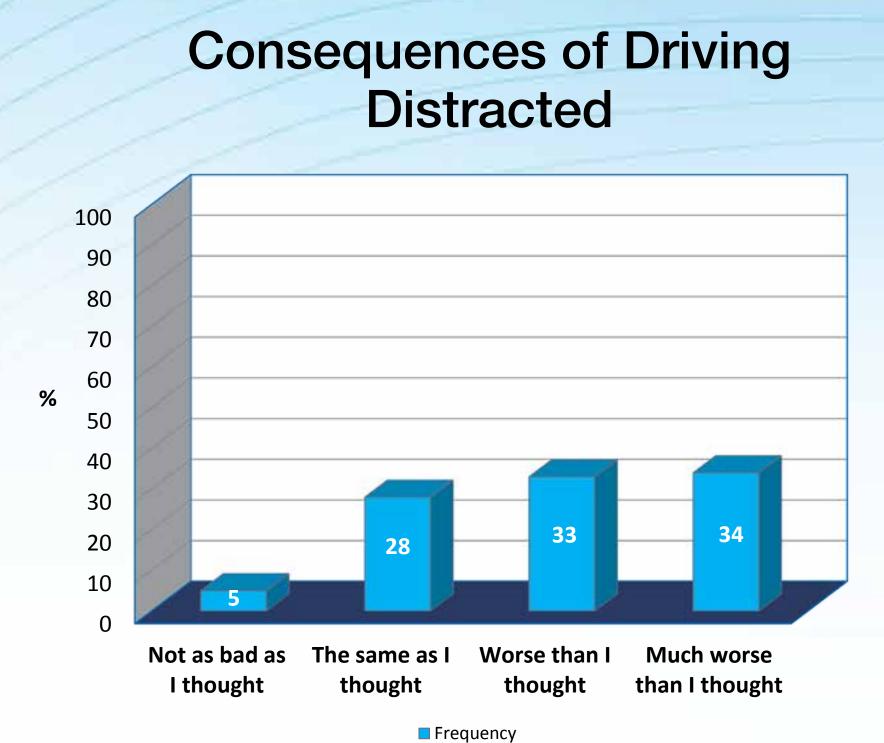
# RESULTS

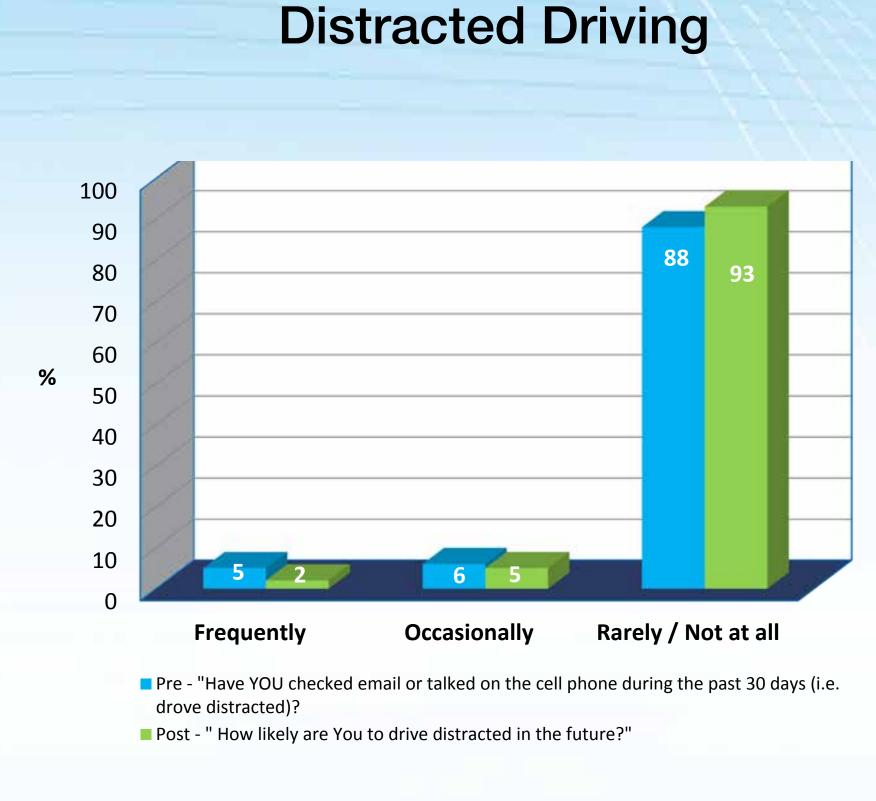
In the 22,801 completed pre-surveys, males completed 53% of the surveys, females 47%. Participants of teen driver age (16 to 18) made up the largest number of participants at 49%, with 30% being of non-driver age, and 21% over age 18; 88% of participants have not or rarely checked e-mail or talked on the cell phone within the last 30 days while driving; while 44% have ridden with a driver that was frequently or occasionally texting, checking email, or talking on a cell phone while driving in the last 30 days. Understanding that impaired includes: alcohol, over the counter prescription or other drugs, and drowsy/overly tired, 95% have rarely or not driven impaired in the last 30 days and 95% reported rarely or never going to drive impaired in the future. Those who stated they always wear a seat belt when getting into a vehicle were 77%; however post survey reports showed in the future 87% said they would always wear a seat belt, a 10% gain in knowledge after their driving experience.











## METHODS

An electronic pre-survey was administered to all participants wanting to drive the simulators. The survey questions were designed to test the participant's knowledge of driving distracted while driving alone or with somebody else, driving impaired while driving alone or with somebody else, and the use of a seat belt every time they get into

a vehicle. Demographic information was collected prior to driving the simulators such as the driver's age and gender. Based upon their driving outcome, the post survey collected data was based on which drive they did (distracted vs. impaired) and if they thought the consequences for their actions were what they thought they would be. Also questioned was how likely they were to wear their seat belt in the future.



## CONCLUSIONS

Driving simulators used on new drivers showing real life consequences, does raise awareness about texting, cellphone use, impaired driving, and not wearing a seat belt. Sixty seven percent of the participants stated the consequences to driving distracted were worse or much worse than they thought. They also thought the consequences for driving impaired were worse or much worse than they originally thought. Importantly, the simulators must be kept up to date as the law and technology changes. Adults must work with the students while operating the simulators to remind the students that the simulators are more than a video game. In order to get effective change, our state may have to adopt a primary seat belt law to get the remaining 13% to buckle up or adopt stricter cell phone use laws to get people to stop texting and using electronics while driving.

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