16.400/453 Project #1

Driving While Distracted

Due: Session 9

The primary objective of this project is to determine how well people can divide their attention across two tasks on the visual channel.

Go to http://www.nytimes.com/interactive/2009/07/19/technology/20090719-driving-game.html and familiarize yourself with this game. Because this link is from 2009, you will probably have to access it using the following steps:

1. Go to http://topics.nytimes.com/top/news/technology/series/driven_to_distraction/index.html
2. Click on the "GAME Gauging Your Distraction" logo below the intro paragraphs and above the Overview section.

Once you have played it several times, recruit 5 friends to play the game. Let each person do the 20 second warm up, and then have each person play the game 5 times. Be sure to do a print screen of the final results for each person's 5 runs, since you will need to use individual data points to generate both a mean (which should be fairly close to the one reported), as well as a standard deviation. It is understood that your times are estimates given the scale provided, as well as the fact that there is a slight bias in the data due to capping of reaction times at 2.5 seconds.

Conduct the appropriate statistical test to determine if the reaction times to the gate changes are indeed slower in the presence of texting, as well as for the number of missed gates (assume both variables are parametric). In addition, conduct the appropriate statistical test to determine if there is any difference between a person's first and last runs. You should be sure to expand upon your findings in the discussion and discuss the implications from both sets of tests.

As far as the actual report write-up, as is typical of research reports in human factors settings, your report should contain an introduction, background, methods, results & discussion, and conclusion sections.

In addition, you must formally include references. Visualization of results matters in your grade! There is no minimum or maximum page requirement. You should be thorough but concise.

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