The Effect of Feedback about Texting while Driving on Attitudes Towards Texting

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Introduction

Negative Effects of Cell Phones

Music < Less distracting

Conversing

- **Slower reaction times when conversing on a cell phone**
  - Bellinger et al., (2009)
    - Participants drove using a brake light simulator
    - Listened to music and conversed on a cell phone
    - Reaction times decreased (slower) when conversing on a cell phone

Conversing with passenger < Less distracting

Conversing on cell phone

- **Higher risk of making mistakes**
  - Drews et al., (2008)
    - Participants drove using a driving simulator
    - Conversed on a cell phone and conversed with a passenger
    - Made more mistakes when conversing on a cell phone

Conversing on cell phone < Less distracting

Texting on cell phone

- **Higher risk of mistakes while texting**
  - Drews et al., (2009)
    - Participants drove using a driving simulator
    - Drove while text messaging and without text messaging
    - Participants had slower reaction times and made more mistakes when text messaging on a cell phone

BUT students continue to text

- According to SADD, nearly 50% of teens text message while driving
  - *Number expected to increase over time*
- Nearly 200,000 car accidents per year are caused by text messaging while driving
  - *Reported by the National Safety Council (January 2010)*

Purpose

- Investigate the effects of feedback about texting and driving towards students attitudes on texting while driving

Hypothesis

- Giving students feedback about their ability to text and drive would:
  - Decrease confidence in texting
  - Decrease expectation to continue texting while driving

Method

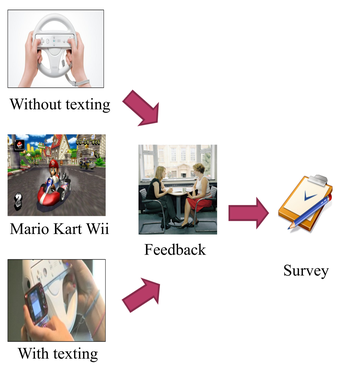
Participants

- 34 men and women
  - Owned mobile phones
  - Were able to send and receive text messages

Materials

- **Demographic questionnaire**
- **Text Messaging Survey created for this study**
  - Confidence in texting (6 categories)
    - Good at Texting while driving (2 questions)
      - Ex. *I think I am good enough at texting to be able to text while I am driving*
    - Like to text (1 question)
      - *Using my mobile phone for text messages under any condition is pleasant for me*
    - Important to them to text (1 question)
      - *Using my mobile phone to respond to a text message right away is important to me*
    - Successful at texting (2 questions)
      - Ex. *I can successfully send text messages under any condition*
    - Prefer to text while driving (1 question)
      - *I prefer texting to speaking on the phone when I am driving*
    - Scared to send/receive text messages (3 questions)
      - Ex. *Using my mobile phone to send/receive text messages intimidates me*
  - Expectation they would continue to text while driving (1 category)
    - Persist in behavior while driving (1 question)
      - *I am likely to text while driving in the future*
- **Mario Kart for Wii**
- **Texting Script**

Procedure

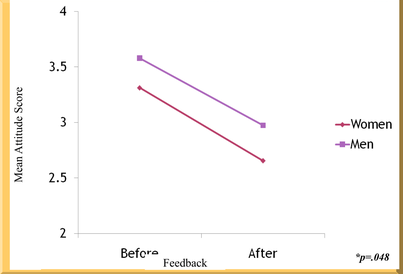


Results

- 2(sex) x 2(feedback) mixed design ANOVA
  - **"Good at texting while driving"**
    - Men and women's perceptions decreased after feedback ***(p=.007)***
  - **"Like to text"**
    - Women like to text more than men before and after feedback ***(p=.008)***
  - **"Important to them to text"**
    - Interaction between Sex and Feedback approached significance ***(p=.086)***
      - Post hoc paired t-tests ***(p<.05)***

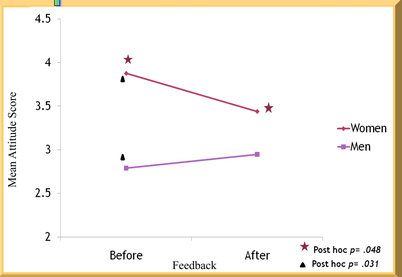
      ⇒These were done because the graph showed an interaction
  - **"Persist in behavior while driving"**
    - Men and women said they would not text and drive in the future after feedback ***(p=.031)***
  - No effect for other categories

"Good at texting while driving"

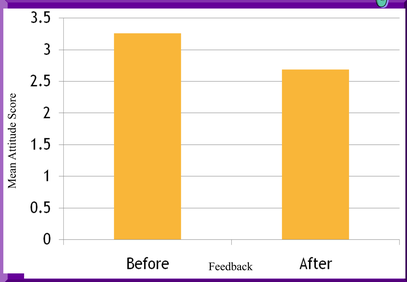


"Like to text"

"Important to them to text"



"Persist in behavior while driving"



Discussion

Hypothesis was supported

- Giving students feedback about their ability to text and drive would:
  - Decrease confidence in texting
    - Supported in "Good at texting while driving", "Like to text", and "Important to them to text"
  - Decrease expectation to continue texting while driving
    - Supported in "Persist in behavior while driving"

Implications

- Showing mistakes made while texting can change how young drivers feel about texting and driving
- Students will think about the consequences before texting
- Decreases in automobile accidents caused by text messaging

Future Research

- This study measured self-report, future research should measure behavior more directly by having students keep a daily log of behavior
- Measure behavior 3 months later in order to see if the effect of feedback lasts
- Focus on the type of phone used
  - Touch vs. Standard keypad
- Recruit a larger number of participants