Distracted Driving in Adolescents with ADHD

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Purpose of Study

This pilot study examined the frequency of engagement in Distracted Driving (DD) and identified factors related to willingness to engage in DD, such as perception of ability and perception of risk associated with DD, within a sample of adolescents with a childhood diagnosis of ADHD.

Background

• Motor vehicle collisions (MVCs) are the leading cause of death for adolescents, an age group that also has the greatest number of fatal crashes due to DD.1
• A contributing factor in most DD-related crashes is the use of electronic devices while driving.1,3
• While DD is common among adolescents, the magnitude of the problem remains unclear among those with ADHD, a group at risk for poor driving outcomes in general.4,5
• This study is third known study to explore distracted driving in adolescents with ADHD.

Study Participants & Methodology

Participants
• N = 22
• M age = 17.07 years, SD = .92
• 72.7% Male, 86.4% Caucasian
• Inclusion Criteria: 16 to 18 years of age with Combined Type ADHD, owns a cell phone with texting ability, and has a valid drivers license

Measures
• Laboratory Developed, Self-report Questionnaire
  • Frequency of Engagement
    • Asked how many days per week engage in DD behaviors
  • Perception of Ability
    • 7 items assessed adolescents' perceived ability to engage in DD behaviors as compared to their peers and parents
    • 5-point Likert scale, "1" = not as good as others to "5" = better than others
    • e.g. “When compared to others your age, how would you rate yourself on your ability to send texts while driving?”
  • Perception of Risk
    • 6 items assessed adolescents’ perceptions of risk associated with DD behaviors
    • 5-point Likert scale, "1" = very dangerous to "5" = not at all dangerous
    • e.g. “For someone your age and with about the same driving experience as you, how dangerous do you think it is to read texts while driving?”

Data Analysis
• Descriptive statistics were used to determine the frequency in which adolescents with ADHD engage in DD.
• Participants were divided into 2 groups:
  • 1. Adolescents with ADHD who reported texting while driving (DD ADHD)
  • 2. Adolescents with ADHD who did not report texting while driving (Non-DD ADHD).
• Differences between these two groups were examined across frequency of engagement, perception of ability, and perception of risk in DD using independent samples t-tests.

Results

Frequency of Weekly Cell Phone Use While Driving

- Results indicated 59% of adolescents with ADHD reported talking on the cell phone while driving.

Frequency of Weekly Texting While Driving

- Results also indicated 40% of adolescents with ADHD reported texting while driving.

Key Findings

Perception of DD Ability Compared to Parent

- DD ADHD adolescents rated themselves as better than their parents when sending text messages (t (20) = -6.90, p < .001), reading text messages (t (20) = -3.93, p < .01), and sending emails (t (20) = -2.19, p < .05) while driving than did their non-distraction counterparts.
- A trend emerged in which adolescents with ADHD who engage in distracted driving viewed themselves as better at talking on a cell phone (t (20) = -2.03, p = .056) when compared to their parents.

Perception of DD Ability Compared to Peer

- DD ADHD rated themselves as more adept when sending text messages (t (20) = -5.60, p < .001) while driving when compared to others their age.

Early Conclusions

- Our findings indicate that 4 out of 10 adolescents with ADHD engage in texting while driving, which is comparable to the national average of one-third adolescent drivers that report texting while driving.1
- Our findings also show that adolescents with ADHD who engage in DD rate themselves as better than others at engaging in DD behaviors when compared to their non-distraction counterparts.
- Factors associated with willingness to engage in DD include holding perceptions of increased ability to engage in DD and perceptions that DD is not nearly as dangerous as many are currently portraying it.

Although provisional, it is hoped these findings may be useful in the development of interventions targeting young drivers with ADHD who self-report frequently engaging in DD. Moreover, since it appears this group perceives that they are better able to engage in DD and that risks associated with DD are not as high compared to others, these findings might also prove useful in the development of a cognitive-behavioral intervention focusing on a challenging and changing such perceptions, resulting in safe driving behaviors.

References