Social Networking Site Use While Driving: ADHD and the Mediating Roles of Stress, Self-Esteem and Craving

Ofir Turel, Antoine Bechara

Front. Psychol., 30 March 2016
DOI: http://dx.doi.org/10.3389/fpsyg.2016.00455

Background:
Adults who present ADHD symptoms have an increased risk for vehicle accidents. One conceivable overlooked account for this association is the possibility that people with ADHD symptoms use rewarding technologies such as social networking sites (SNS) while driving, more than others. The objective of this study was to understand if and how ADHD symptoms can promote SNS use while driving and specifically to conceptualize and examine mechanisms which may underlie this association. To do so, ADHD is viewed in this study as an underlying syndrome that promotes SNS use while driving in a manner similar to how addictive syndromes promote compulsive seeking of drug rewards.

Methods:
Time-lagged survey data regarding ADHD, stress, self-esteem, SNS craving experience, SNS use while driving, and control variables were collected from a sample of 457 participants who use a popular SNS (Facebook) and drive, after face-validity examination with a panel of five users and pretest with a sample of 47. These data were subjected to structural equation modeling (SEM) analyses using the frequency of ADHD symptoms measured with ASRS v1.1 Part A as a continuous variable, as well as multivariate analysis of variance using ADHD classification based on ASRS v1.1 scoring guidelines.

Results:
ADHD symptoms promoted increased stress and reduced self-esteem, which in turn, together with ADHD symptoms, increased one’s cravings to use the SNS. These cravings ultimately translated into increased SNS use while driving. Using the ASRS v1.1 classification, people having symptoms highly consistent with ADHD presented elevated levels of stress, cravings to use the SNS, and SNS use while driving, as well as decreased levels of self-esteem. Cravings to use the SNS among men were more potent than among women.

Conclusion:
SNS use while driving may be more prevalent than previously assumed and may be indirectly associated with ADHD symptoms. It is a new form of impulsive and risky behavior which is more common among people with symptoms compatible with ADHD than among others. Consistent with addiction and decision making models, SNS use while driving can be viewed as a form of a compensatory reward seeking behavior. As such, prevention and reduction interventions that target the mediating perceptions and states should be devised.