Background

Alcohol-impaired driving is a leading contributor to death and injury on Canadian roads.

Rates of drunk driving are highest among young adults, especially those who attend university.

Previous research has focused on between-person risk factors of alcohol-impaired driving, which tell us who is at risk.

To build on this research, it is important to identify within-person risk factors, which tell us when this risk is greatest.

Thus, this project examined if well-established between-person risk factors of drunk driving (impulsivity, mental health, binge drinking) are also risk factors at the within-person level in first-year students.

Methods

Participants were 633 first-year undergraduate students at the University of Victoria (75% female, 72% White, Mage = 18).

Participants completed monthly online surveys measuring alcohol-impaired driving (item developed for this study), impulsivity (UPPS-P), binge drinking (item developed for this study), and depression, anxiety, and stress (DASS-21).

Results

**8.7%** of first-year students reported drinking and driving

Between-person elevations in impulsivity (negative urgency, sensation seeking, lack of premeditation), binge drinking, depression, and stress predicted greater odds of drunk driving during the year.

Within-person elevations in impulsivity (negative urgency, sensation seeking) and binge drinking predicted greater odds of same-month alcohol-impaired driving.

Unexpectedly, within-person increases in depression predicted decreased odds of same-month drunk driving.

Implications

Programs for drunk driving may wish to coach students on emotion regulation, pre-planning safe rides home (e.g., having a designated driver, adding a cab company into phone), and adopting a buddy system that holds students accountable when making driving decisions.

Programs should also be ramped up during periods of the year when binge drinking tends to be high (e.g., start of the academic year, weekends, after exams).

The opposite findings at the between- and within-person level for depression underscore the importance of disaggregating these effects when assessing risk.

Although students with higher average depression may be at elevated risk of drunk driving, students may be at lower risk of drunk driving on months when they feel more depressed than usual because they are socially withdrawn and are avoiding social situations (e.g., parties) that are related to alcohol-impaired driving.

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