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Background

- AID accounts for over a quarter of traffic-related deaths in the U.S. annually (e.g., 10,497 deaths, 28% of total; CDC, 2020).
- >AID is affected by subjective response to alcohol as well as social drinking context (e.g., Motschman et al., 2020)
- Peer pressure and alcohol availability increase the likelihood of consuming multiple alcoholic beverages and subsequent AID (Keatley et al., 2016).
- Appraisal of subjective intoxication differs by social context (Fairbairn & Sayette, 2014).
- Contextual factors, such as hypothetical miles driven, have been shown to influence AID decisions.
- There is a gap in research regarding the impact of drinking with companions on AID.
- No studies have used Ecological Momentary Assessment (EMA) as a function to study whether social context -(e.g., presence of companions, group size)-predicts AID.

Study aims:

- ♦ To assess whether drinking with companions predicts likelihood AID.
- ♦ To test whether the likelihood of AID differs as a function of number of drinking companions and quantity consumed by companions.

Method

Participants

> 59 moderate to heavy drinker participants (M age= 24.9, 57%) female, 83% White) completed EMA for six weeks.

- Participants completed 4 evening prompts assessing drinking status, setting (e.g., drinking companions), and BrAC.
- >Morning reports assessed AID.
- Participants were compensated up to \$500 for completion of the study.

Measures

Quantity

Evening report: "How many drinks have you had at this point?"

Morning report: "How many drinks did you have last night?" BrAC (BACTrackMobile Pro)

>Drinking companions:

Alone vs. with others

♦AID:

Method of transportation (e.g., AID vs. other)

Analytic Method

- Two-level multilevel models with repeated measures nested within participants tested whether likelihood of AID differed by context (drinking alone vs. with others).
- All analyses were conducted in SAS version 9.4.

Alcohol Impaired Driving: Assessing the Impact of Drinking in Groups on the Decision to Drink and Drive

Procedure



Acknowledgements

Home

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- associated with a 2.06 fold increase in the odds of AID compared to drinking alone (p=.035).
- such as the shift to drinking at home vs. elsewhere, we excluded events where drinking occurred at home.
- Results indicated a statistically non-significant effect of drinking context on odds of AID (p=.488).

- home than in previous similar studies, and this reduced influences.
- The pandemic created unique circumstances surrounding people's drinking patterns and social context.



- COVID-19 pandemic.
- Future research should include participants from diverse backgrounds to study whether race affects AID.
- the likelihood of AID. While this analyses looked at the likelihood of AID when drinking in groups compared to
- Lastly, future research should determine whether quantity the likelihood of AID.

References

- analysis approach, Psychology, Crime & Law, 23:2, 135-146, (2017).
- Motschman, C.A., Warner, O.M., Wycoff, A.M. *et al.* Context, acute tolerance, and subjective
- Fairbairn CE, Sayette MA. A social-attributional analysis of alcohol response. Psychol Bull. (2014).
- Centers for Disease Control and Prevention.





Results

Initial analyses indicated that drinking with companions was

 \diamond To test whether this effect was due to factors of the pandemic,

Discussion

Individuals in our study were much more likely to drink at overall rates of AID and potentially obscured any contextual

Our findings may not generalize to post-pandemic AID risk.

Limitations and Future Directions

Interpretations are limited by sample size, demographic population (e.g., racially/ethnically homogenous), and the

Future research should investigate whether group size affects drinking alone, group size was not taken into consideration.

consumed by individuals as well as their companions affects

Keatley D.A, Barsky A. D & Clarke D.D. Driving under the influence of alcohol: a sequence

response affect alcohol-impaired driving decisions. Psychopharmacology 237, 3603–3614 (2020).

Centers for Disease Control and Prevention. (2020, August 24). *Impaired Driving: Get the Facts*.