

## **The Influence of Drinking with Companions on Alcohol-Impaired Driving**

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Alcohol-impaired driving (AID) is a significant public health problem, with over 10,000 fatalities annually in the U.S. Contextual factors influence AID decisions, but studies of contextual influences have been limited to retrospective self-report data. The current study used event level data to test whether young adults were more likely to engage in AID when drinking alone vs. when drinking with one or more companions.

Fifty-nine heavy to moderate drinkers (57% female, Mean age = 24.9, 83% White) completed six weeks of ecological momentary assessment (EMA). Participants used the TigerAware app on their smartphones to provide data on current drinking status, social context (e.g., drinking companions), AID, and breath alcohol concentration via a portable breathalyzer. Analyses were multilevel models testing whether social context predicted AID.

Participants reported 772 drinking days. Drinking with companions (vs. alone) was associated with a 2.06 fold increase in the odds of AID ( $p=.035$ ). We then explored whether this effect was due to differences in drinking location across social contexts. When participants drank alone, they were more likely to be at home (16%) than not (1.4%). In contrast, when drinking with companions, they were equally likely to be at home (43%) than not (40%). Analyses were then run using only drinking events outside of the home (353 drinking observations) and these analyses did not support a significant effect of social context on AID ( $p=.488$ ).

This study identified a potential significant association between social drinking context and AID, but follow up analyses suggested this effect may not be generalizable. Individuals in our study were much more likely to drink at home than in previous studies, and this reduced overall rates of AID and potentially obscured any contextual influences. Further research is required to explore the process by which social context and social influences affect the likelihood of AID.