Title: Exploring the Relation between Cigarette Smoking and Alcohol Hangover Frequency

Drinkers differ meaningfully in their susceptibility to hangover, and prior studies suggest individual differences in hangover proneness may be related to risk for alcohol use disorders (AUD). This project examined whether smoking behavior, a frequent concomitant of drinking, accounts for some of the variation in self-reported hangover. Data from a longitudinal familial high-risk study (N=489; 51% with a family history of AUD) were used to assess the association of smoking with hangover. Cross-sectional and multilevel regression results revealed a main effect for smoking such that smokers reported higher mean hangover, and smoking interacted with alcohol consumption such that the relation between drinking and hangover was weaker among smokers than among nonsmokers. Exploration of hangover at early and late time-points among naturally occurring groups who changed smoking status reinforced these results. Logistic regression analyses showed that hangover was associated with risk for AUD, and that this effect remained even after controlling for smoking status, suggesting the relation between early hangover and later AUD is not simply an artifact of failing to account for smoking behavior. These findings raise the intriguing possibility that smoking contributes to individual variation in hangover, and that smoking might be a permissive factor in the escalation of drinking.