

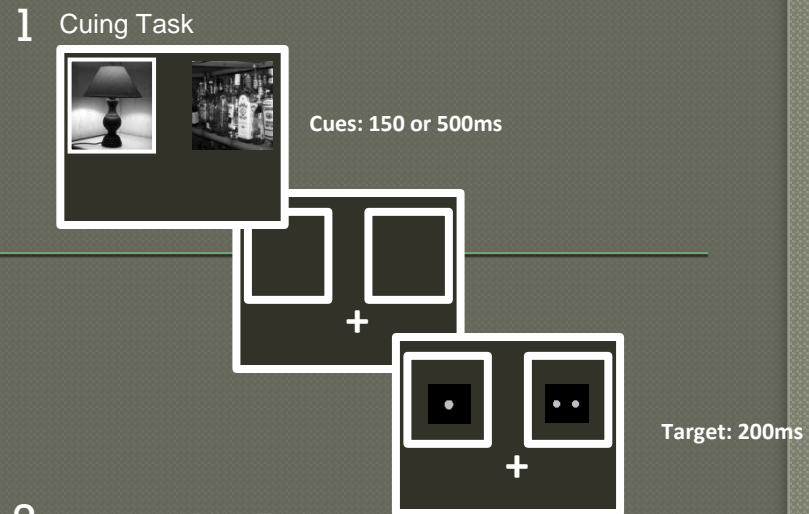
Alcohol Use and Attention

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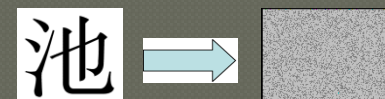
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- **Background:** Studies show that attentional biases exist for substance abuse disorders, (Field et al. 2004) are linked to relapse rates, (Marrisen et al. 2006) and correlate with level of craving intensity (Mogg et al. 2003).
- **Procedure:** Participants will first be assessed with the AUDIT (Alcohol Use Disorders Identification Test) to determine group placement (low/high social drinkers) and the DSM-IV for sober alcoholic qualification. At the experimental session subjects will fill out 5 questionnaires designed to measure impulsivity (BIS), anxiety (STAI), thought-action fusion (TAF), drug use (DUSI), and family history of alcohol abuse (FTQ). They will then complete two behavioral tasks: a cuing paradigm and an attentional blink paradigm, designed to measure capture of and attentional hold towards alcohol cues, followed by a misattribution task in order to measure their autonomic emotional arousal to alcohol-related stimuli, which may have an effect on attentional biases towards these cues.
- **Hypothesis:** Participants who are either identified as sober alcoholics or high social drinkers will show greater speed and accuracy in identifying alcohol-related stimuli compared to low social drinkers on the cuing task. On the Attentional Blink task, high social drinkers and abstinent alcoholics are expected to miss T2 more often and for longer periods of time if T1 is an alcohol image, indicating that their attention was captured by the preceding alcohol stimulus.



3 Misattribution Task



Results and Conclusion

- Significant differences were found between groups for reaction time on the cuing task. High Social drinkers surprisingly showed a bias away from alcohol-related cues relative to high social drinkers, suggesting what might be an anti-bias effect.
- Median Split analysis reveals a significant difference of attentional bias between groups on Lag 2 of the Blink task; high social drinkers showed a slightly greater bias towards alcohol cues, which may reflect attentional hold.
- Questionnaire Data shows significant differences on thought-action fusion scores, Audit scores, drug use, and state anxiety between groups.
- Correlational data shows significant positive relationships between Reaction Time (500ms)/STAI (overall), Lag 2 Bias/TAF, (moral) & BIS (motor), Lag 4 Bias/TAF (others), and Audit scores/drug use. Significant negative relationships also exist between thought-action fusion scores/Audit scores and all subscales.
- Further research is needed to determine if the behavioral paradigm will be effective for collaborative studies involving drug treatment.
- DNA genotyping and recruitment of sober alcoholics are still underway; they may provide more interesting data.