

Analytic Plan

All analyses will be conducted using R and the lme4 extension (Bates, Mächler, Bolker, & Walker, 2014; Team, 2013). Significance cutoffs will be set at $p < .05$ for all tests. If study design assumptions (namely, that drink condition predicted subjective intoxication and estimated amount of alcohol consumed, such that participants reported greater subjective intoxication and estimated a greater amount of alcohol consumed after having consumed alcohol than after having consumed a non-alcohol control beverage) are met during analysis for our main study aims (see pre-registration, "An Analysis of the Effects of Alcohol on Perceptions of Physical Attractiveness"), we will then assess present model assumptions (e.g., linearity, homoscedasticity) and data will then be analyzed using a set of mixed effects models¹:

Aim 1. To examine whether stimulus type moderates the effect of alcohol on PPA. To enhance power to detect this effect, this analysis will be limited to orientation-matched ratings if analysis of our main study aims (see pre-registration, "An Analysis of the Effects of Alcohol on Perceptions of Physical Attractiveness") reveals that the effect of rater drink condition on PPA is greatest for orientation-matched ratings. It will include all ratings (regardless of orientation-match) if there is not a significant effect of orientation-match in the main study analyses.

Aim 1a. To examine whether target facial expression (i.e., smiling vs. neutral expression) moderates the effect of rater drink condition on PPA, the model will be entered as follows: $\text{Aim1a.model} = \text{lmer}(\text{PPA} \sim \text{RaterDrink} * \text{TargetExpression} + (1|\text{Rater:Dyad}) + (1|\text{Target}), \text{data}=\text{aim1a})$, wherein “RaterDrink*TargetExpression” represents the interaction between rater drink condition and target facial expression (smiling vs. neutral expression) of the

¹ For both analyses, order of drink condition and stimulus set will be entered as covariates, but will be removed if they do not significantly increase model fit.

rating, entered as a fixed effect. Using a likelihood ratio test, this model will be compared to a model in which the interaction term is replaced with “RaterDrink + TargetExpression”.

Aim 1b. To examine whether motion of target presentation (i.e., static vs. dynamic image) moderates the effect of rater drink condition on PPA, the model will be entered as follows: `Aim1b.model = lmer(PPA ~ RaterDrink*TargetMotion + (1|Rater:Dyad) +(1|Target), data=aim1b)`, wherein “RaterDrink*TargetMotion” represents the interaction between rater drink condition and motion of target presentation (static vs. dynamic) of the rating, entered as a fixed effect. Using a likelihood ratio test, this model will be compared to a model in which the interaction term is replaced with “RaterDrink + TargetMotion”.