**Attractiveness Rating Task**

**Stimuli Development**

Videos were previously coded using Paul Ekman’s Facial Action Coding System (FACS; Ekman & Friesen, 1978), which is the gold standard for measuring visible facial movements thought to be related to emotion. This coding, as well as previously coded speech and beverage sipping behaviors, informed the frames of video extracted for stimuli creation. Stimuli from videos of control-beverage consuming participants were previously extracted for a study with sober participants using the following criteria (Bowdring et al., 2021), and alcohol-consuming participant stimuli were extracted using the same criteria. Each stimulus type was defined by the following:

1. Static images were single frames of video.
   1. Static neutral: absence of AUs (Ekman & Friesen, 1978).
   2. Static smiling: presence of the genuine, “Duchenne,” smile – AUs 6 (cheek raiser) + 12 (lip corner puller) – (Ekman & Friesen, 1982), along with AU 25 (lips part), as open mouth criteria has been applied in previous research and has been shown to increase smile authenticity (compared to closed-mouth Duchenne smiles; Korb, With, Niedenthal, Kaiser, & Grandjean, 2014; Krumhuber, Manstead, Cosker, Marshall, & Rosin, 2009).
2. Dynamic images were five-second periods of video in which the target was talking[[1]](#footnote-1), as has been done in past research in order to capture facial dynamics that are typical of perception experiences in natural social interactions (Parker et al., 2008; Rennels & Kayl, 2015).
   1. Dynamic neutral: absence of AUs.
   2. Dynamic smiling: presence of AUs 6 (cheek raiser) + 12 (lip corner puller) + 25 (lips part), wherein AU 6 was not present at the start of the clip but occurred at some point and remained present through end of the clip (such that the image displayed the onset, but not offset, of the Duchenne smile, as the onset of a smile encompasses a key component of the social signal; Cohn & Schmidt, 2004; Leonard et al., 1991)

Frames from each stimulus type were non-overlapping with one another (e.g., the static smiling stimulus presented a different smile than did the dynamic smiling stimulus for a given target; Rennels & Kayl, 2015; Roberts et al., 2009).  Sipping behavior and presence of the cup were absent from all images. Eye gaze in each frame of stimuli was directed away from the camera, as eye-gaze can alter PPA (Jones, DeBruine, Little, Conway, & Feinberg, 2006) and our video dataset did not have sufficient images available to extract stimuli in which eye gaze was directed toward the camera.

**Task Set Up**

To facilitate completion of the PPA task within the time course of the drinking period (i.e., within 18 minutes), participants rated 64 images per session (128 total, derived from 32 targets). [[2]](#footnote-2) This, to our knowledge, was the largest facial image stimulus set used in a study of alcohol and PPA. Images were evenly split by target gender (male, female), target drink condition (alcohol, control beverage), and stimulus type (static neutral, static smiling, dynamic neutral, dynamic smiling), and distributed evenly across sessions. We randomized the 32 targets into separate session sets, the presentation of which was intended to be counterbalanced across sessions and drink-condition order (i.e., half the session one control drink dyads would view set one during session one, while the other half would view set two during session one). The 64 images within a set (four stimulus types per 16 targets) were presented in random order for each dyad (Okubo et al., 2015).

1. Our previous study using sober participants found no main effect of audio-accompaniment on attractiveness ratings (Bowdring et al., invited resubmission), which may be in part due to considerable variability in the content and quality (e.g., volume, clarity) of vocalizations. Thus, because inclusion of audio would likely be confounded and because the present study focuses on alcohol’s effect on perceptions of *physical* attractiveness (Post et al., 2012), dynamic images were be audio-free. Because acoustics can be altered by alcohol (Fairbairn et al., 2015) and because vocal cues can alter perceptions of attractiveness (Raines et al., 1990), incorporation of audio into PPA stimuli may be a direction of interest for future research. [↑](#footnote-ref-1)
2. Estimated completion time was based on prior work (Bowdring et al., 2021), which took about ten seconds per stimulus, while accounting for additional time that may result from discussion within the dyad (six to eight additional seconds per stimulus). [↑](#footnote-ref-2)