Supplementary materials

Pre-registered analyses

To investigate processing accuracy of angry and sad faces following and acute dose of alcohol, emotion specific hit rates and false alarms were analysed using 2 drink (alcohol, placebo) × 2 aggression (high, low) mixed ANOVAs; two for anger and two for sadness. In addition, 6AFC hit rates were also analysed using an exploratory 2 drink (alcohol, placebo) × 2 trait aggression (high, low) x 5 emotion (angry, sad, happy, disgust, fear) mixed model ANOVA.

Emotion specific hits. There was no evidence of a main effect of drink for anger ($F [1, 83] = .44$, $p = .510$, $\eta_p^2 = .005$) or sadness ($F [1, 83] = 1.78$, $p = .185$, $\eta_p^2 = .021$). There was also no evidence of a main effect of trait aggression for anger ($F [1, 83] = 2.11$, $p = .150$, $\eta_p^2 = .025$), but there was weak evidence of main effect for sadness ($F [1, 83] = 3.25$, $p = .075$, $\eta_p^2 = .038$) indicating more hits in the low trait aggressive group. There was also no evidence of drink by trait aggression interactions for anger ($F [1, 83] = .44$, $p = .510$, $\eta_p^2 = .005$) or sadness ($F [1, 83] = .00$, $p = .956$, $\eta_p^2 = .000$).

Emotion specific false alarms. There was no evidence of a main effect of drink for anger ($F [1, 83] = .01$, $p = .919$, $\eta_p^2 = .000$) or sadness ($F [1, 83] = 1.23$, $p = .270$, $\eta_p^2 = .015$). There was also no evidence of a main effect of trait aggression for anger ($F [1, 83] = 1.10$, $p = .297$, $\eta_p^2 = .013$) or sadness ($F [1, 83] = .00$, $p = .999$, $\eta_p^2 = .000$). There was also no evidence for a drink by trait aggression interaction for anger ($F [1, 83] = .57$, $p = .452$, $\eta_p^2 = .007$) or sadness ($F [1, 83] = .04$, $p = .849$, $\eta_p^2 = .000$).

Exploratory hits by emotion. There was evidence of main effect of drink ($F [1, 83] = 10.57$, $p = .002$, $\eta_p^2 = .113$), and emotion ($F [2.92, 242.47] = 225.40$, $p < .001$, $\eta_p^2 = .731$). There was no evidence of a main effect of trait aggression ($F [1,83] = .50$, $p = .482$, $\eta_p^2 = .006$), drink by trait aggression interaction ($F [1,83] = 1.30$, $p = .258$, $\eta_p^2 = .015$), emotion by trait aggression interaction ($F [2.92, 242.47] = 1.07$, $p = .361$, $\eta_p^2 = .013$), or drink by emotion interaction ($F [3.19, 264.77] = 1.89$, $p = .127$ $\eta_p^2 = .022$). There was also no evidence of a three-way interaction between drink, emotion and trait aggression ($F [3.19, 264.77] = 1.53$, $p = .204$, $\eta_p^2 = .018$).

Commented [AE1]: The study protocol was pre-registered on the Open Science Framework (doi: 10.17605/OSF.IO/YV392).

15) In response to reviewers' comments, analyses have been conducted in accordance with the pre-registered protocol.