**Outlier Detection and Management**

Unless noted below variables can be assumed to have no outliers and for those involved in analyses based on assumptions of normality, they can also be assumed to have acceptable skewness (values between +/- 2) and kurtosis (values between +/- 7) (Kim, 2013; West et al., 1995). Skew and kurtosis were assessed using the psych extension (Revelle, 2014). Boxplots were used to facilitate visual inspection of outliers. Quantitative inspection of outliers was based on standard deviation analysis, wherein z-scores were calculated for each variable and data points +/- 2.24 standard deviations away from the mean of the relevant variable were considered to be outliers (Aguinis et al., 2013). In cases where visual and quantitative inspection of outliers diverged, data points detected by either approach were considered outliers (Aguinis et al., 2013).

Skewness and kurtosis are not reported for variables that were only assessed with descriptive statistics. Variables of this type that did have outliers included: pre-drink subjective intoxication (four outliers: one, two, five, 100); end estimate of alcohol consumed (two outliers: 60 and 150); frequency of drinking with friend per month (two outliers: two tens); years of friendship (four outliers: two tens, 12, 13); closeness of friendship (one outlier: three). Any reported descriptive statistics of these variables are based on outliers being excluded. Outlier, skew, and kurtosis management for the remaining variables were based on the approaches described below.

**Permanent removal of outliers required**

Outlier removal was required for error outliers, specifically, those lying outside the possible range of values for a variable. Error outliers were only detected for the PPA variable. Seven PPA entries of zero (across three participants and five targets) were treated as missing in all relevant analyses, as these values were outside of the PPA scale range.

**Neither transformation nor permanent removal of outliers required**

For variables that had acceptable skew and kurtosis but had outliers, analyses were run with and without outliers included to assess their level of influence. Results reported in text are based on analyses including outliers which, unless otherwise noted, can be assumed to not meaningfully differ from analyses excluding outliers. Variables for which this was the case included: pre-drink positive mood (PANAS, positive subscale; two outliers: 11 and 45), PPA after error outliers were removed (34 non-error outliers: 27 nines and eight tens), post-drink positive mood (eight-item mood measure – positive subscale; two outliers: zero and four), and post-drink negative mood (eight-item mood measure, negative subscale; six outliers: five, four sixes, and seven).

**Transformation required**

Only one variable involved in analyses based on assumptions of normality, pre-drink negative mood (PANAS – negative subscale), had unacceptable skew (3.29) and kurtosis (13.85). Pre-drink negative mood also had three outliers (17, 26, and 21). Because the variable was right-skewed, the following transformations were applied, such that transformations of increasing magnitude were applied when prior transformations failed to yield acceptable skew and kurtosis: square root, cube root, logarithmic, and negative reciprocal root.[[1]](#footnote-1) Skew remained unacceptable for the square root through logarithmic transformations, and kurtosis was not acceptable until the final transformation. Thus, the negative reciprocal root transformation was maintained for analyses involving pre-drink negative mood (three outliers, skew = 1.75, and kurtosis = 4.05). Analyses were run with and without outliers included to assess their level of influence. Results reported in text are based on analyses wherein outliers were included. Any descriptive statistics of these variables are based on the untransformed versions of the variables.

1. The negative reciprocal root transformation was made negative to maintain the relative ranking of data (Pereira-Maxwell, 2018). [↑](#footnote-ref-1)