RMET15-955 Episodic Thinking (ET) as a Candidate Technique to Reduce Alcohol Consumption

Statistical Analysis Plan

10/26/2017
Statistical Analysis Plan

Descriptive statistics, chi-square, and t-test will be used to compare means and frequencies of sample characteristics among the two groups. Paired t-tests will be carried out to compare alcohol consumption, rates of discounting, alcohol valuation, PANAS measures, and craving scores before and after the intervention within groups. Discounting of delayed money will be assessed using an adjusting-delay task (Koffarnus and Bickel 2014) and an adjusting-amount task (see Du, Green, and Myerson 2002). Discount rate in both tasks will be calculated using the following hyperbolic equation, (Mazur 1987)

\[ V = \frac{A}{1 + kD} \]

In this formula, \( V \) refers to the discounted value of a delayed reward; \( A \) represents the amount of the delayed reward; \( D \) equals the delay of the award; and \( k \) represents the delay-discounting rate (Mazur 1987). A higher \( k \) value means steeper discounting curve and reflects greater impulsivity, while lower \( k \) value means shallower discounting curve with less impulsivity. To provide an estimate of \( k \), we will fit the hyperbolic equation to participants’ indifference points (given in discounted monetary value), and use its natural log transformation in analyses. All the statistical analyses will be conducted using Prism 7 at a significance level of 0.05.