

Statistical Analysis Plan

Examination of Psychological and Physiological Pathways Linking Gratitude and Pain

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Data Analysis Plan

Demographic information of the study participants, as well as distribution of participants across intervention arms will be reported to provide context for both the sample and aid in the interpretation of the study outcomes.

Subjective pain ratings throughout the cold-pressor test will be analyzed using a repeated-measure analysis of covariance. Time will be entered as a within-subjects variable and intervention group will be entered as a between-subjects variable. Results of this analysis will examine whether the intervention resulted in different pain ratings over time.

Between-group differences on primary and secondary outcomes will be assessed using univariate analyses of covariance. These analyses will compare means of each group separately for pain outcomes (i.e., pain onset and tolerance), as well as psychological (i.e., rumination and reappraisal) and physiological (i.e. salivary alpha-amylase activity) responses to pain, controlling for covariates.

All statistical analyses will be conducted using appropriate statistical software. Statistical significance for all analyses will be set at $p < .05$.