

## **Supplemental Material S6.** Rationale for the statistical analyses.

The traditional ANOVA repeated measures model requires the following assumptions to be satisfied: normality, homogeneity of variance, and sphericity. The GLMM 'robust statistics' option was invoked to accommodate violations of normality and homogeneity of variance. Violations of sphericity were accommodated by changing the covariance matrix from the default of compound symmetry to autoregressive. Compared to the traditional statistical procedures for analyzing behavioral change, GLMM is less sensitive to participant attrition because it does not rely on participants providing data at every assessment point; the GLMM maximum likelihood procedure is a full information estimation procedure that uses all the data present at each assessment point. This reduces sampling bias and the need to replace missing data. GLMM is robust to unequal group sizes and is particularly powerful when group sizes are small. GLMM is able to use the data present at each assessment point because time is interpreted as a Level 1 variable that is nested within participant at Level 2.