Mean Centered: data will be mean centered before being decomposed with singular value decomposition to singular values, singular vectors, etc. Treats the brain as singular values: finds modes in data or values that vary together. Non rotated, Non rotated behavior, non-rotated multiblock: user must have contrasts Mean centered type: choose the kind of mean centering of the data matrix before running Mean Centering task; multiblock pls & non rotated multiblock pls Types 0 – Within each group. Removes group means from condition means - Tells us how conditions are modulated by group membership - Boasts condition differences, removes overall group membership - Best suited for condition and condition by group effects 1 – Removes grand condition means from each group condition mean - Tells us how conditions are modulated by group membership - Boosts group differences, removes overall condition differences - Best suited for group and group-by-condition effects 2 – Remove grand mean over all subjects and conditions - Tells us full spectrum of condition and group effects - Best suited for Group, condition, and group-by-conditions 3 – Removes all main effects, subtract condition and group means (group by conditions) - Deals with pure group by condition interaction

Correlation mode: applies to regular behave PLS, Non-rotated, Behave PLS, multiblock PLS, non-rotated multiblock PLS - You can choose between measures of association between brain data and behavioral data 0 – Pearson correlation 2 – Covariance 4 – Cosine angle 6 – Dot product Permutation test: Significance testing Permutation loop must be > 0 - Split halves: examines reliability of association between brain design patterns - Two-point estimation: Reliability of brain pattern p_ucorr - Reliability of design pattern p_vcorr Must set number of permutations and split fields - Rule of thumb both: set both equal to 100 - Make sure you set matlabpool to open. (this speeds up the process supposedly) - This process is supposed to be slow Bootstrap resampling: tests the reliability of the individual voxels - Set number of bootstraps > 0 - Include upper and lower bounds of correlation set by the confidence level - Make sure you have enough subjects Conventional bootstrap resampling: includes the Procrustes rotation Split halve resampling: does not include the Procrustes rotation -Procrustes rotation: has a significant effect on p-value and little effect on bootstrap results