First 3 subs are G1, Second 3 subs are G2

1 -1

1 -1

1 -1

1 1

1 1

1 1

Mean (G1): [1 -1]

Mean (G2): [1 1]

To get G1>G2 (make inequality point at 0):

G1-G2 > 0

[1 -1] – [1 1] = [0 -2]

Factor Effects model approach makes setting up contrasts easier:

The number of regressors needed to model a factor is one fewer than the number of levels

Set a baseline level – that always gets a -1

If modeling level 1

A 2x2x2 model should have 8 regressors (2x2x2)

Can read the design matrix into matlab or R to check that it’s not rank deficient

The rank has to equal the number of columns in your design matrix

Copy and paste into matlab and ask it for the rank

Rank(design)

In repeated measures, need to remove any factor that doesn’t change within subject

NOTES FROM CHRIS’S LECTURE 12/15/17

Neurovault: is for sharing unthresholded statistical maps

OpenNeuro: for sharing raw data

Neurovault:

Can use the map you uploaded to search for other studies that have similar activation

Can also compare with gene expression (spatial correlation with different genes across brain are highly correlated)

Can do cognitive decoding – use cognitive terms and see how much correlate with your map

Can do preliminary power analysis using a statistical map – can try to find a stats map from a different study using similar tasks and do a preliminary power analysis and see how many subjects you’ll need for your study for a grant

Can generate shareable link for each results file

If not public, cannot use gene expression decoding and image similarity search

Include neurovault link in manuscript