



CLASSROOM SPANISH LEARNING

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Angela Grant (data from her master's thesis)

PROJECT SUMMARY

This study compares structural MRI changes for English monolingual adults learning Spanish via PSU advanced language courses.

Training took place over 1 year, but the MRI sessions were collected mid-training and at the end of training (November and March). This was part of a larger fMRI study conducted by Angela Grant for her Master's thesis.

Behavioral measures taken include both English and Spanish Lexical Decision Tasks along with a Spanish semantic judgement task. Furthermore, participants came in for a cognitive session where they performed a Flanker task, a letter-number sequencing (LNS) task, and TVIP (Spanish fluency) task.

ROIs were a-priori designated by the fMRI regions used in Angela's study (Grant, Fang, & Li, 2015)

Completed

Study design & data collection (Angela)

sMRI data analysis (of Angela's data)

Preprocessing sMRI analyses w/ 2nd control data

Univariate analyses

In Progress

Mass-univariate LME [end July]

Not yet started

Write-up manuscript [mid Sept]

Present at 2017 SNL conference

DATA ANALYSIS: DETAILS

- Preprocessed sMRI data using Freesurfer's longitudinal reconstruction/preprocessing
- Used Freesurfer's linear mixed effects modeling to conduct univariate and mass-univariate analyses
 - Data analysis for Angela's sMRI data complete
- Found 2nd control data set from data sharing database