Collection of to-dos, potential tests, and questions for data analysis

*Blue: consult Dan*

*Green: done*

1. Memory test
   1. Controlling for

* control for memory itself as a predictor of decision quality: number of items remembered per group 🡪 decision
* leader vs. others: do I need to proof that leaders were neither better nor worse in remembering?
* control for difference in memory between hierarchical and self-organized groups: h\_TMS + h\_noTMS vs. so\_TMS + so\_noTMS 🡪 number of items remembered
* check for differences in the amount of remembered items based on the pilot (A, B, or C)?
* maybe proof TMS-specific incorporation of information: do participants systematically remember more information about the pilot their expert on in the TMS conditions?
* check for differences in the amount of remembered items based on positive and negative information
  1. Learning
* information gain = the amount of unshared information per group that the members have learned from each other, as evident from the 2nd recall questionnaire
* calculate number of items learned per group: (post\_correct\_pos - corret\_same\_pos) + (post\_correct\_neg - corret\_same\_neg) 🡪 compile per member first, then add up for each group
* compare information gain between all 4 conditions!
* leader vs. others: does the leader learn more?
* potentially calculate loss of information? Compare pre\_correct with correct\_same 🡪 negative result indicates information loss
* Are there differences between pilots? Did they learn more about the pilot they chose?
  1. Further exploration
* compare groups in terms of the total amount of items recalled at the end

1. Individual data
   1. Manipulation checks

* Hierarchy: a) leader 🡪 yes, b) decision 🡪 leader, c) power disparity higher than in self-o. groups; power disparity: calculate power score and responsibility score (self- and other-ratings or just other-ratings?) based on average rating, compare groups with regard to the coefficient of variation (CV), √[Ʃ(Di - Dmean)2/*n*]/Dmean or, more simply, SD(D)/Dmean,
* Do leaders have more influence than other members?
* TMS: a) correct understanding of information distribution/expertise, b) more expertise-related items remembered initially
  1. Demographic data
* Age: calculate average age
* control for age difference between leaders and members
* Age: control for age difference between conditions
* Gender: look at number of female and male participants; check whether percentage of male leaders reflects percentage of male participants
* Gender: control for balanced gender distribution between conditions
* Field of study: read which disciplines the sample is composed of, indicate the proportion of each discipline
* Study experience: average study time; control for difference in experience of leaders and members
* Study experience: control for differences in experience between conditions

1. Random for now

* Is the average rating of influence and responsibility higher/lower in self-organized groups than in the hierarchical ones?