Updates and Permutation Practice

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Learning objectives

1. Practice permutation testing

Today's outline

1. Exam stuff
2. Point make-ups for Programming Projects
3. Practice permutation testing in R

Exam things

- Nice work overall!
- A few typos on my end, will be dealt with accordingly (congrats on free points)
- Now that everyone has submitted it I can talk more about the content/answer questions folks may have had, shoot me a message if you want to talk about it

Programming Project make-ups

- Going to offer folks the chance to resubmit code
- Chance to make up to 50% of lost points
- Submission page will be up on Canvas after class

Permutation testing refresher

A permutation test or randomization test determines whether apparent patterns in data could arise by chance. The general algorithm is:

1. Compute a test statistic on the data, e.g., difference in means, correlation, etc.
2. Repeatedly randomize (permute) the labels (treatments) or covariates and recalculate the statistic
3. Use this null distribution to determine (with some level of confidence) whether the observed data can be explained by chance under the null hypothesis

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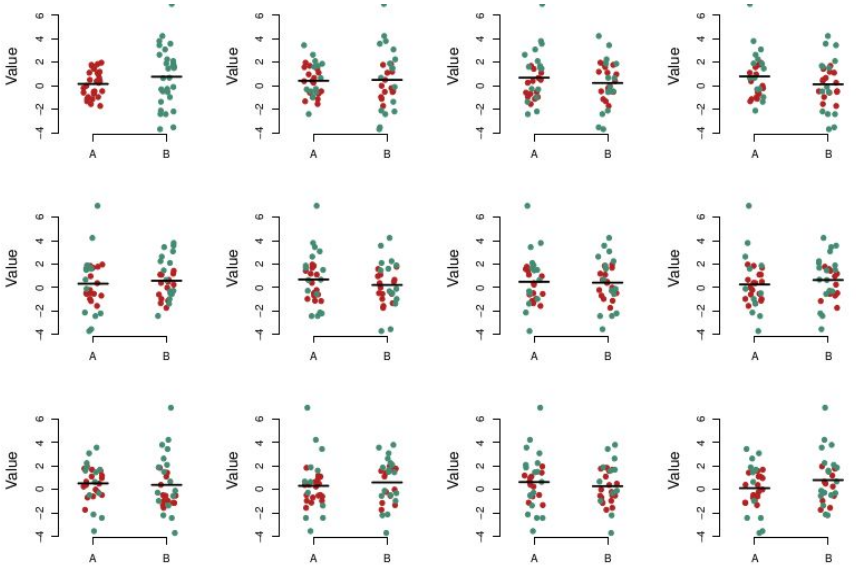

Permutation testing

See the “Permutation testing” worksheet on the schedule, submit your code to the “Permutation testing” Canvas discussion page before the end of class