4 Introduction to regression: Assignment

Instructions

Submit your answers to the **n** first exercises through Aula Global (quiz section). Upload the remaining exercise concerning peer review through Aula Global as well (upload task).

Regression

Consider the model `pitch ~ 1 + gender`, fit on the data from Franke & Roettger (2019).

1. Is this model equivalent to `pitch ~ gender`?
2. Is this model equivalent to `pitch ~ gender + context`?
3. Is this model equivalent to `pitch ~ 1 + gender + context`?
4. Is `pitch` the outcome, a predictor, or neither?
5. Is `gender` the outcome, a predictor, or neither?

Consider the model `pitch ~ 1 + gender + context`, fit on the data from Franke & Roettger (2019).

5. What is the estimated effect on `pitch` in a polite context?
6. Does this model explain more variance than the `pitch ~ 1 + gender` model?
7. What is the predicted pitch (in Hz) of a female speaker in a polite context?
8. What is the actual mean pitch (in Hz) of a female speaker in a polite context according to this data?

Peer review (part I)

Submit answers to these four questions concerning your analysis report as a single page PDF-file through Aula Global. This submission makes up 10% of your peer-review grade. Remember that **your submission must be anonymous**. That is: do not put any information that can identify you in the PDF (like your name).

1.1 Your general research question 1.2 Why do you think this question is interesting? / What does this tell us? 1.3 Your specific research question 1.4 What kind of data would you use to address (1.2) if you had unlimited resources? 1.5 What kind of data are you planning to use to address (1.2) within the scope of this class?

Elaborate with as much detail as you (currently) have but it is perfectly acceptable if you answer in bullet points and single sentences. Y A randomly selected peer will give you feedback on them

References

Franke, Michael, and Timo Benjamin Roettger. 2019. "Bayesian Regression Modeling (for Factorial Designs): A Tutorial," July. https://doi.org/10.31234/osf.io/cdxv3.