Data Analysis

Sönning, Lukas, 2021,
"Clear vs. dark /l/ in German Learner English:
Dataset for chapter 5 in "Phonological variation
in German Learner English"",
https://doi.org/10.18710/G6PJ5F, DataverseNO, V1,
UNF:6:qGMGOYpGPdJCZcXD2QAyeg== [fileUNF]

Exercises

0

Why does this not work?

```
n_data <- read.csv2('laterals_data_ns.csv')
nrow(n_data)  # returns 383

n_data_BrE <- n_data[l_data$subject %in% l_bio_BrE$subject,]
n_data_AmE <- n_data[l_data$subject %in% l_bio_AmE$subject,]

n_data_BrE_pre <- n_data[n_data$context == 1,]
n_data_BrE_non <- n_data[n_data$context == 0,]

n_data_AmE_pre <- n_data[n_data$context == 1,]
n_data_AmE_non <- n_data[n_data$context == 0,]

#Sanity check
nrow(n_data) - nrow(n_data_BrE_pre) - nrow(n_data_BrE_non) -
nrow(n_data_AmE_pre) - nrow(n_data_AmE_non)
# returns -383
```

1

Load the data from 'file1.csv' into a data frame called dat1.

2

Load the data from 'file2.csv' into a data frame called dat2.

3

Load the data from 'file3.tsv' into a data frame called dat3.

4

Load the data from 'file4.xlsx' into a data frame called dat4.

5

Load the data from 'file5.rda'.

6

Remove outliers from dat3 and check how many did you remove.

7

Work with the data from 'laterals_data_learners.csv' (l_data). Make a new data frame only with subjects younger than 20.

8

Work with the data from 'laterals_data_learners.csv' (l_data). Make two separate data frames for subjects labeled male and for subjects labeled female.

9

Work with the data from 'laterals_data_learners.csv' (l_data). Make a data frame for subjects with an age of onset learning more than or equal to 10.

10

Work with the data from 'laterals_data_learners.csv' (l_data). Make a data frame for subjects with an age of onset learning more than 10 and a foreign accent rating between 4 and 8.

10

Work with the data from 'laterals_data_learners.csv' (l_data). Plot male and female F1 and F2 values differentiated by colour into one plot.

12

Work with the data from 'laterals_data_learners.csv' (l_data). Choose a specific subject and plot their F1 and F2 in two separate plots - vocalic and non-vocalic.

13

Plot a linear and quadratic function in two separate plots next to each other. Try to make them lines and not points.

14

Plot sine and cosine functions into one plot, distinguish them by colour and play around with values to make the curves smooth.

How to continue learning R?

- Methods II: Statistics
- Many, many, many resources online - general and specific for linguistics
- Just use it when you have the chance