Capstone Data Analysis Project – Preliminary Data Analysis
Biostatistics

Name: Karsten Braun Score = 23 /25

Submitted on time? (●) Y ( ) N

GENERAL REQUIREMENTS (10 POINTS):

Element	Points	Score	Feedback
Effective git/GitHub	1	1	
Well-organized	1	1	
Strong commentary outside of code chunks	3	3	
Effective use of comments within code chunks	2	2	
Code provides correct values and reduces "human intervention"	2	2	
Link on Canvas	1	1	

STATISTICAL ANALYSES (15 POINTS):

☐ Took initiative to learn new methods as appropriate

☑ Generally followed the our workflow:

Plot -> Guess -> Create model -> Check assumptions -> Interpret -> Final plot

Statistical analysis 1:

Question: Is there a relationship b/w bmi and map?

Workflow checklist

☑ 1. Plot data

☑ 2. Guess relationships

☑ 3. Create model: linear regression

☑ Correct model?

☑ 4. Check model assumptions, if needed

☑ 5. Interpret model

☑ Interpretation is correct

☑ 6. Replot

☑ 7. Clear results statement

☑ In prose

☐ Outside of code chunk

Statistical analysis 2:

Question: Does mean FPG differ among people depending on body mass category?

Workflow checklist

- [x] 1. Plot data
- [x] 2. Guess relationships
- [x] 3. Create model: 1-way anova with post-hoc tests
  - [x] Correct model?
- [x] 4. Check model assumptions, if needed
- [x] 5. Interpret model
  - [x] Interpretation is correct
- [x] 6. Replot
- [ ] 7. Clear results statement
  - [ ] In prose
  - [ ] Outside of code chunk

Statistical analysis 3:

Question: Is there a difference in BMI between individuals diagnosed with diabetes and those not diagnosed?

Workflow checklist

- [x] 1. Plot data
- [x] 2. Guess relationships
- [ ] 3. Create model: 2 sample t-test
  - [x] Correct model?
- [x] 4. Check model assumptions, if needed
- [x] 5. Interpret model
  - [x] Interpretation is correct
- [x] 6. Replot
- [x] 7. Clear results statement
  - [x] In prose
  - [x] Outside of code chunk

Additional feedback

Think about your final plots for the ANOVA and t-test a bit more carefully.

Also, I think it would be cool to do logistic regression instead of 2-sample t-test on BMA and diabetes. See more notes in prelim-analysis-feedback.qmd.

Overall, really nice job!