Biostatistics
Fall 2024

Final Capstone Project Feedback – 35 Points

Student: Seamus O'Brien Score: 30.25 /35 = 86.4 %

Part 1: Clean up your Repo – 5 pts Score: 4.75

Using Git/GitHub effectively and organizing a project well

Feedback: Looks good. A hanging, untracked file in code folder "Preliminary-analysis-feedback.qmd" that didn't get moved. Otherwise good.

Part 2: Finalize statistical analyses- 20 pts Score: 17.5

Remove unneeded code; Follow correct workflow; Reflects feedback; overall challenge

Feedback: Q1 - trap type and attractant on mosquito diversity. Good interpretation of Chisq warning. Post hoc test you told me what the resulting table is, but not what we should infer from it. I challenge your assumption that you couldn't get smaller groups. YOu could have, for example, grouped everything in genus Culex together, everything in genus Aedes together, etc. When you talk about confounding vars, you should say what they are. Also, you didn't go back to biology with your results statement. Q2 - # total caught by genus_species. Good to reduce to C pipiens vs. other. Better biological intepretation but need citation. What your analysis didn't do was enough post hoc test to tell if, say, # A. albopictus was different than another group though not C pipiens. But I see that is Q3! Q3 needs post hoc test though.

Part 3: Final report – 10 pts Score: 8

Intro, Analysis with biological insight , Challenges; Well-written; Strong use of markdown

Feedback: Markdown looks good, using italics is good. Basic. Introduction "DC Health" is vague - provide link? Hypotheses for Q1 could use more biological basis. WHY do some mosquitoes prefer certain types of traps/attractants? Challenges section reads a bit weird "The employee isn't always step-by-step guide of what to do" etc. just doesn't make grammatical and therefore intellectual sense.

I'm glad you did 3 analyses, but wish one of them had been something different from chi-square in terms of overall challenge.