Homework 6

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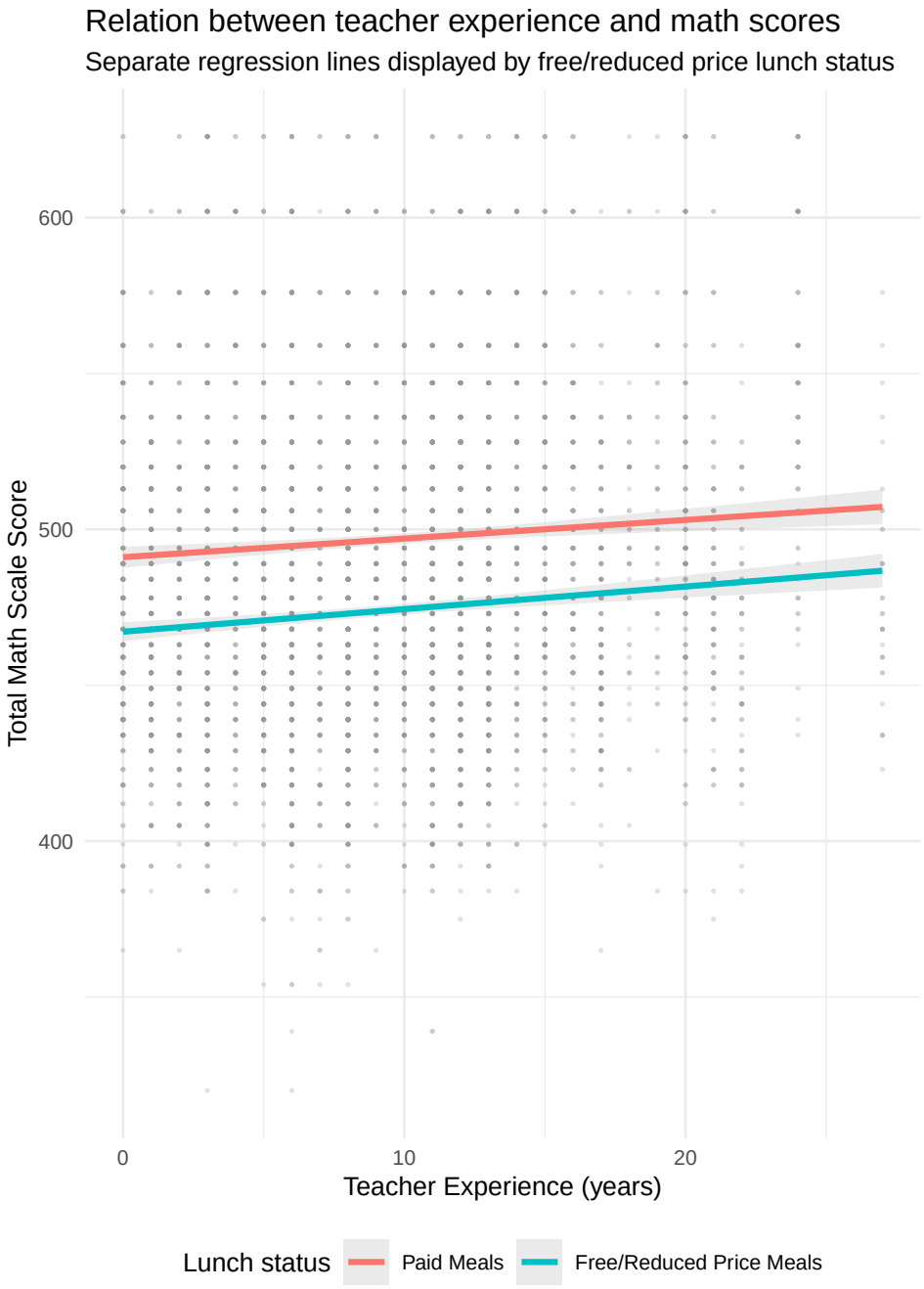
The authors of this homework would like to thank R Core Team (2025), Müller (2025), Wickham et al. (2019), and Chan et al. (2023) for their technological contributions. Though this specific publication did not directly contribute, we would like to thank its authors (Nese, Kamata, and Tindal 2017) for their moral support and guidance.

```
   sex frl math_mean math_sd rdg_mean rdg_sd
1  boy  no    492.85   46.34   441.46  32.32
2  boy yes    469.87   46.09   425.38  26.63
3 girl  no    501.21   45.96   448.54  34.52
4 girl yes    477.51   46.30   430.80  27.42
```


Relation between teacher experience and math scores
Separate regression lines displayed by free/reduced price lunch status
Total Math Scale Score
600
500
400
0
10
20
Teacher Experience (years)
Lunch status
Paid Meals
Free/Reduced Price Meals

Discussion

The scatterplot with fitted regression lines shows a positive relationship between teacher experience and students' math achievement. Students taught by more experienced teachers score higher. Additionally, students who pay for lunch consistently score higher than those receiving free/reduced-price lunch across all levels of teacher experience.

References

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