

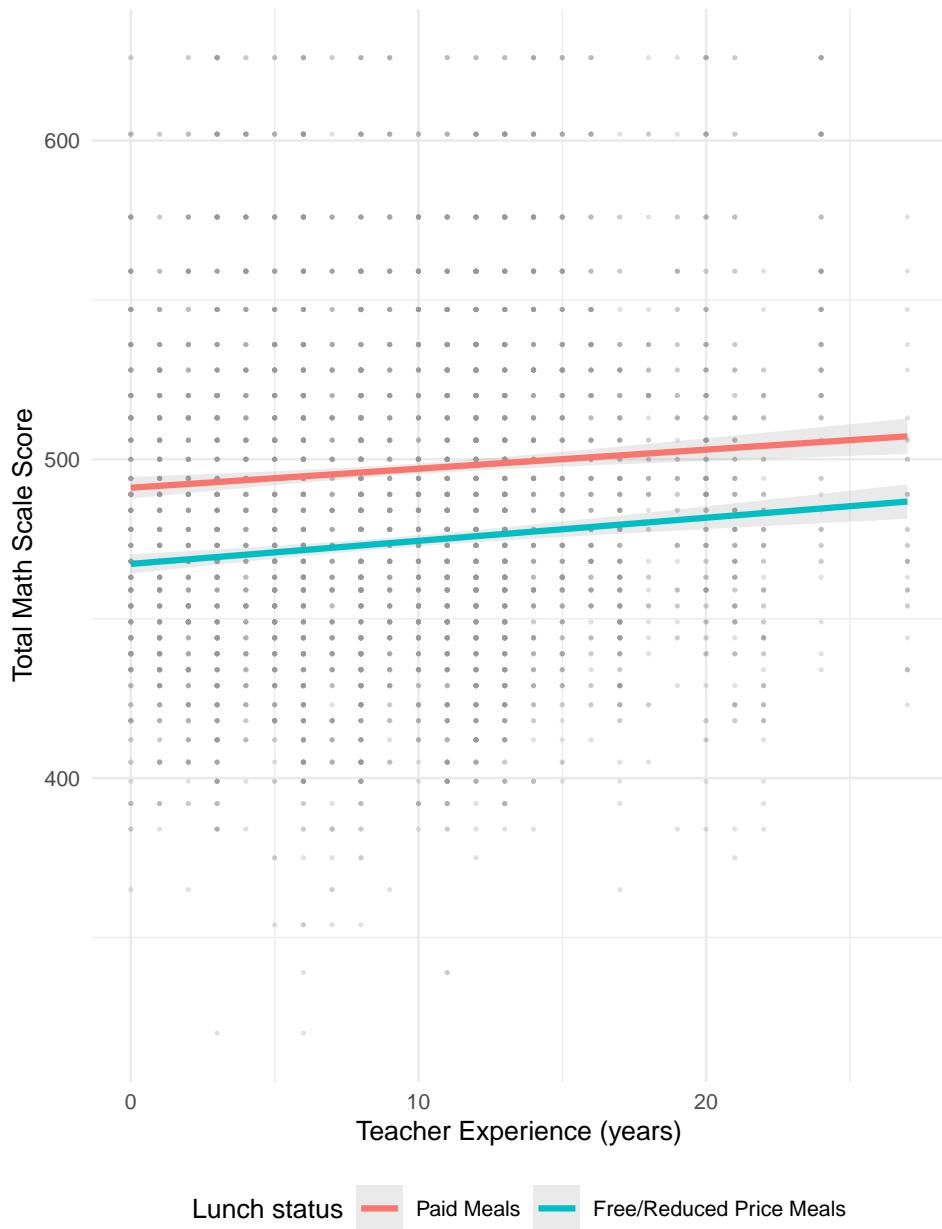
Homework 6

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sex	frl	math_mean	math_sd	rdg_mean	rdg_sd
boy	no	492.85	46.34	441.46	32.32
boy	yes	469.87	46.09	425.38	26.63
girl	no	501.21	45.96	448.54	34.52
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



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

- Chan, Chung-hong, Thomas J. Leeper, Jason Becker, and David Schoch. 2023. *Rio: A Swiss-Army Knife for Data File i/o*. <https://cran.r-project.org/package=rio>.
- Müller, Kirill. 2025. *Here: A Simpler Way to Find Your Files*. <https://doi.org/10.32614/CRAN.package.here>.
- Nese, Joseph FT, Akihito Kamata, and Gerald Tindal. 2017. “A Two-Step Sampling Weight Approach to Growth Mixture Modeling for Emergent and Developing Skills with Distributional Changes over Time.” *Journal of School Psychology* 61: 55–74.
- R Core Team. 2025. *R: A Language and Environment for Statistical Computing*. Vienna, Austria: R Foundation for Statistical Computing. <https://www.R-project.org/>.
- Wickham, Hadley, Mara Averick, Jennifer Bryan, Winston Chang, Lucy D’Agostino McGowan, Romain François, Garrett Grolemund, et al. 2019. “Welcome to the tidyverse.” *Journal of Open Source Software* 4 (43): 1686. <https://doi.org/10.21105/joss.01686>.