

Lab 8

Amy, Mandi, Marielena

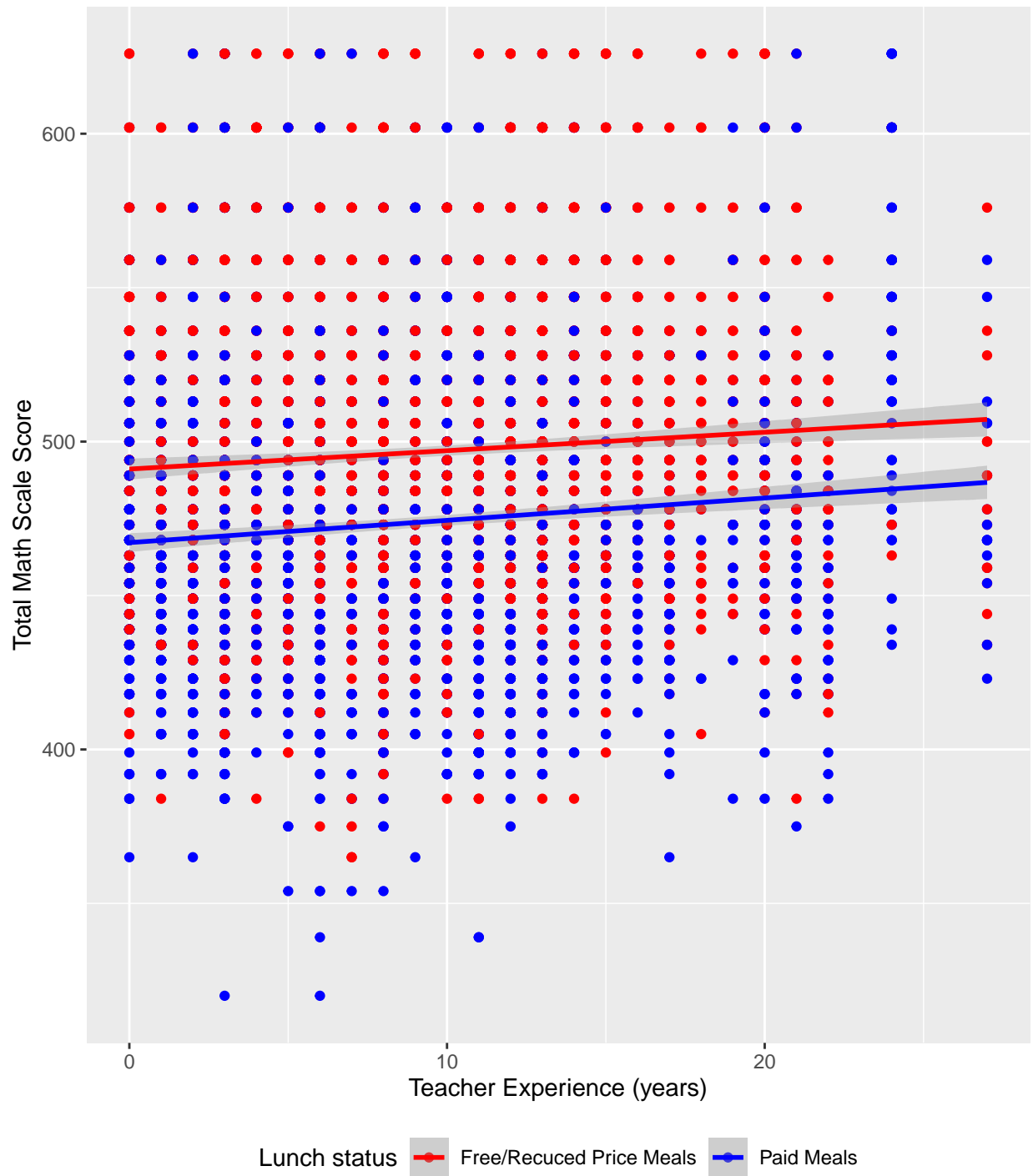
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In this lab, we will use the **tidyverse** (Wickham et al. (2019)) and **here** (Müller (2020)) packages. We will also use **reader** by Wickham and Hester (2021) and **ggplot2** by Wickham (2016), both of which load automatically with the **tidyverse** package.

| 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 |

Below is the graph that shows relationship between teacher experience and math scores with regression lines displaying lunch status as free/reduced vs. paid lunch.

Relationship between teacher experience and math scores
 Separate regression lines displayed by free/reduced price lunch status



References

- Müller, Kirill. 2020. *Here: A Simpler Way to Find Your Files*. <https://CRAN.R-project.org/package=here>.
- Wickham, Hadley. 2016. *Ggplot2: Elegant Graphics for Data Analysis*. Springer-Verlag New York. <https://ggplot2.tidyverse.org>.
- Wickham, Hadley, Mara Averick, Jennifer Bryan, Winston Chang, Lucy D’Agostino McGowan, Romain François, Garrett Golemund, et al. 2019. “Welcome to the tidyverse.” *Journal of Open Source Software* 4 (43): 1686. <https://doi.org/10.21105/joss.01686>.
- Wickham, Hadley, and Jim Hester. 2021. *Readr: Read Rectangular Text Data*. <https://CRAN.R-project.org/package=readr>.