

The Association Between Parental Involvement and Student Academic Achievement



Jackson Tinari, Applied Data Analysis, Wesleyan University

Introduction

- Since the COVID-19 pandemic teachers have experienced higher levels of absenteeism, poor literacy and math outcomes, drop-outs, and academic disengagement (Whitley et al, 2021).
- Along with this, test scores have shown that students lost approximately a half year of learning in subjects such as math and literature (Spector et al, 2024).
- Students coming from single-parent families have been more likely to drop out, have poorer grades, and participate in activities outside of school (Chavda & Niagara, 2023).

Research Questions

- Is there a relationship between parental involvement and academic achievement?
- Does the relationship between parental involvement and academic achievement exist beyond maternal or paternal interference?

Methods

Sample

Respondents were drawn from Wave 1 of The U.S. Longitudinal Survey of Adolescent Health featuring data regarding demographic, social, familial, socioeconomic, behavioral, psychosocial, cognitive, and health survey data from participants and their parents.

Measures

- Academic achievement was measured by examining the individual grade students' received across the subjects of mathematics, english, science, and history.
- Academic achievement was also measured by examining homework completion with the responses "always" "mostly" "sometimes" and "never".
- Parental involvement was measured using responses to "Relations With Parents" with dichotomous answers "agree" and "disagree".

Results

Bivariate

- Chi-Square analysis showed that homework completion was significantly associated with adolescent academic performance (p = 2.2e-16).
- Students who were more likely not to complete their homework showed to have higher GPAs in each subject. (Fig. 1).

Multivariate

- Logistic regression analyses showed that children who felt loved by their parents are more likely to achieve a C or higher in their respective subject, despite being less likely to complete homework.
- Feeling loved by parents significantly moderates the relationship between GPA in respective subject and likelihood of completing homework (OR 1.964, p = 0.003) (Fig. 2).
- For every 1 unit increase in the predictor "Loved", adolescents were 1.9x more likely to achieve a C or higher in their respective subject.

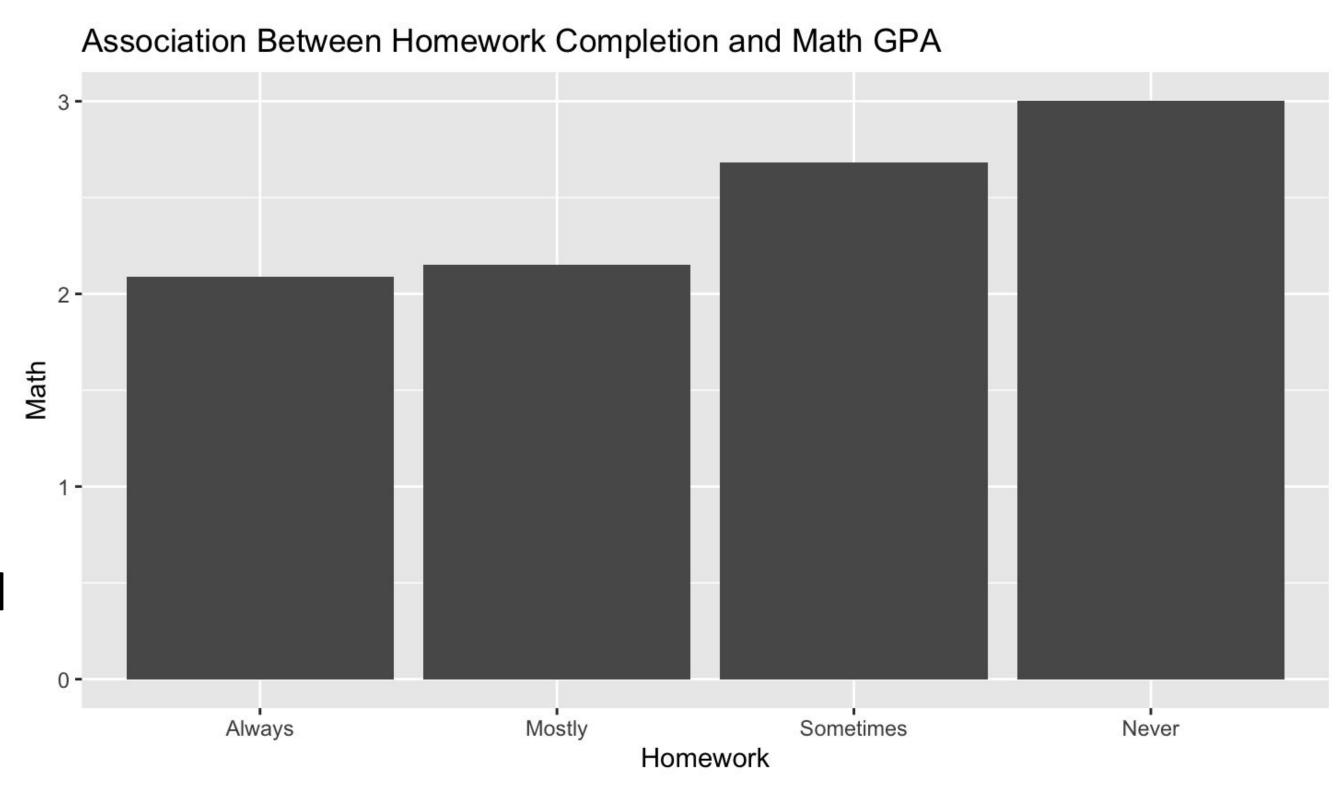


Figure 1: The Association Between Homework Completion and Math GPA

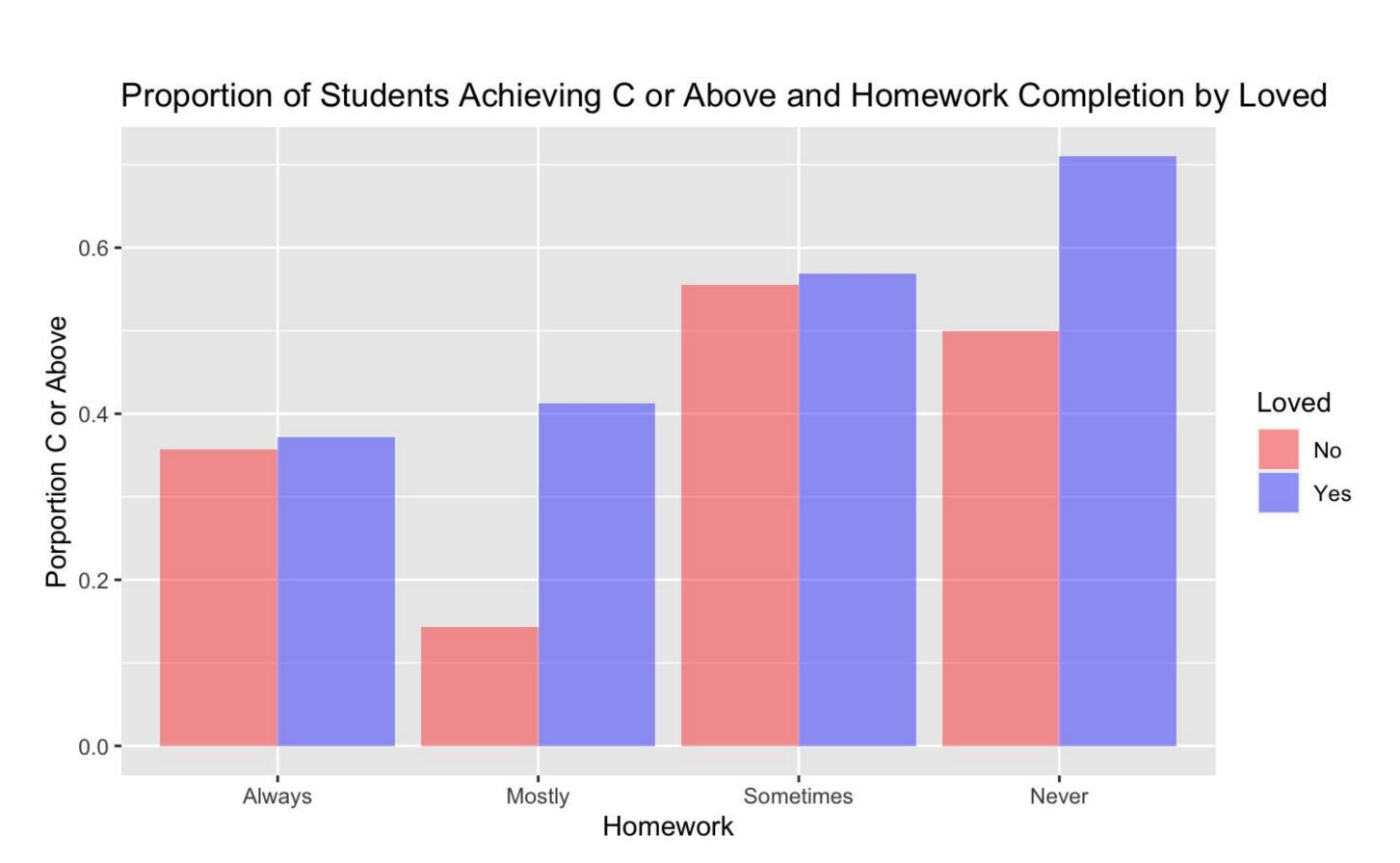


Figure 2: Proportion of Students Achieving a C or Above and Their Homework Completion by How Much They Feel Loved by Parent

Discussion

- The more parents are involved in their adolescents life, the more likely they are to perform well in school.
- These findings may contribute to topics relating to parenting style in early adolescents and the role of schools to foster a healthy environment.
- Future research is needed to determine the role of other covariates (e.g. income, race, ans gender) to determine why some adolescents perform better with less parental involvement.

References

Otani, M. Parental involvement and academic achievement among elementary and middle school students. *Asia Pacific Educ. Rev.* **21**, 1–25 (2020). https://doi.org/10.1007/s12564-019-09614-z

Centers for Disease Control and Prevention. (n.d.). Centers for Disease Control and Prevention. https://covid.cdc.gov/

S. Wilder (2014) Effects of parental involvement on academic achievement: a meta-synthesis, Educational Review, 66:3, 377-397, DOI: 10.1080/00131911.2013.780009

Ferrell, R. T. (2009). The effects of single -parent households versus two -parent households on student academic success, attendance, and suspensions (Order No. 3354734). Available from Publicly Available Content Database. (305082855). Retrieved from https://www.proquest.com/dissertations-theses/effects-single-parent-households-versus-two-on/docview/

Jess Whitley, Miriam H. Beauchamp, and Curtis Brown. 2021. The impact of COVID-19 on the learning and achievement of vulnerable Canadian children and youth. *FACETS*. 6(): 1693-1713.

https://doi.org/10.1139/facets-2021-0096

Chavda K, Nisarga V. Single Parenting: Impact on Child's Development. *Journal of Indian Association for Child and*

Adolescent Mental Health. 2023;19(1):14-20. doi:10.1177/09731342231179017

Spector, C. (2024, January 31). New report shows historic gains in pandemic recovery for many U.S. school districts. Stanford Institute for Economic Policy Research. Retrieved March 1, 2024, from https://siepr.stanford.edu/news/new-report-shows-historic-gains-pandemic-recovery-many-us-school-distri

Camera, L., & Smith, C. (2022, October 24). *Pandemic Prompts Historic Decline in Student Achievement on Nation's Report Card*. USNews.com. Retrieved March 1, 2024, from <a href="https://www.usnews.com/news/education-news/articles/2022-10-24/pandemic-prompts-historic-decline-in-news/articles/2022-10-24/pandem

-student-achievement-on-nations-report-card