

The Association Between Student-Teacher Relationship and Academic Performance

Research Question

- How is student-teacher relationship quality related to the student's academic performance?
- Does this association vary by socioeconomic status (SES)?

Background

- Schools are a primary source for a child's development. The relationship between students and teachers may influence this development.
- Relationship quality between teachers and students has been found to be a predictor of how well students perform academically (Hamre & Pianta, 2001).
- Attachment theory suggests that a teacher who is supportive and involved with a student may supply the student with the means to succeed in the classroom (Hughes, 2011).
- Mother's level of education is a common indicator of SES. Students who live in areas of high poverty may not have access to good-quality schools who hire committed teachers (Murray & Malmgren, 2005).

Hypotheses

- As student-teacher relationship quality increases, the student will perform better academically.
- This association will be greater for children who have mothers with a higher SES.

Data & Sample

- The NICHD Study of Early Child Care and Youth Development (SECCYD) (1991-2008).
- The sample for this study focused on the wave when the children were in the fifth grade (N=924).

Measurements

Student-teacher relationship:

- Measured by the Student-Teacher Relationship Scale (STRS: Pianta, 1992).
 - Conflict: mean of 7 items, ranging 1 to 5; high = ≥ 1.5 (38.9%), low = < 1.5 (61.1%).
 - Closeness: mean of 8 items, ranging 1 to 5; high = ≥ 4 (59%), low = < 4 (41%).

Academic performance:

- Measured by teacher's report.
 - Mathematics: mean of 13 items, ranging 1 to 5; high = ≥ 3.5 (56.3%), low = < 3.5 (43.7%).
 - Reading: mean of 10 items, ranging 1 to 5; high = ≥ 3.7 (57.4%), low = < 3.7 (42.6%).

SES:

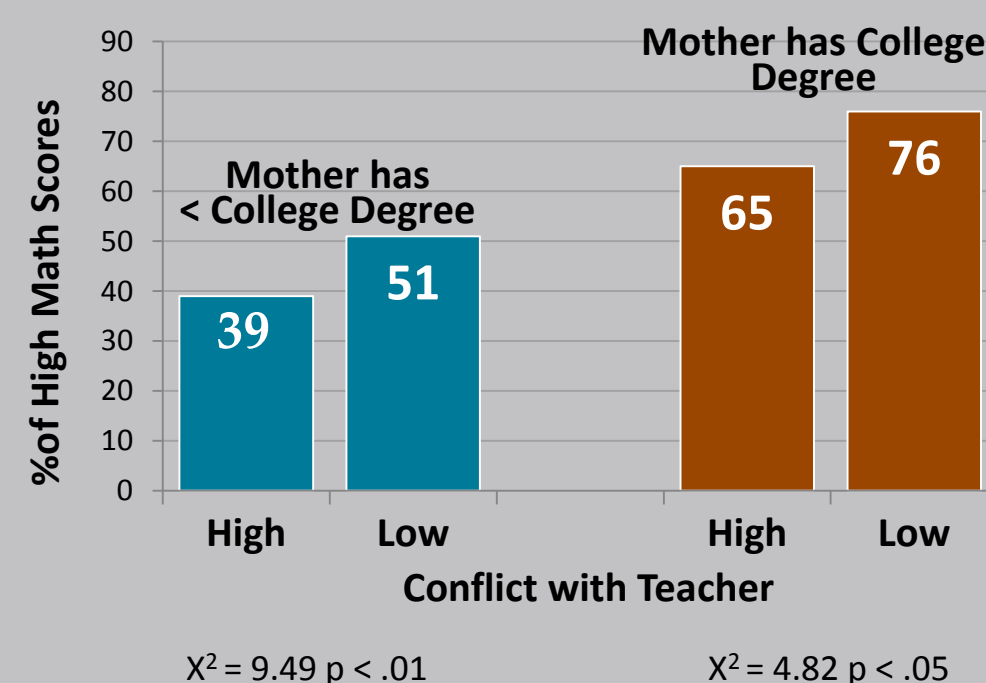
- Measured by the student's mother's level of education.
 - Has college degree + (38.8%).
 - No college degree (61.2%).

Analyses

- Cross tabulation and Chi-square test using SAS.

Results

Figure 1. Math Scores and Student-Teacher Conflict by Mother's Education



Results

Figure 2. Reading Scores and Student-Teacher Conflict by Mother's Education

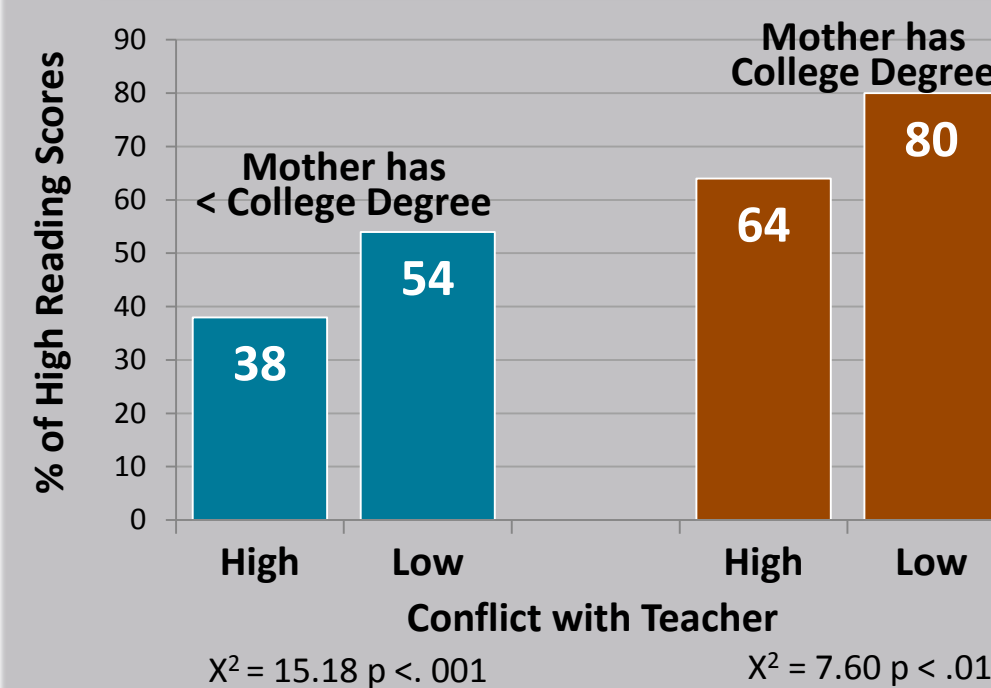


Figure 3. Math Scores and Student-Teacher Closeness by Mother's Education

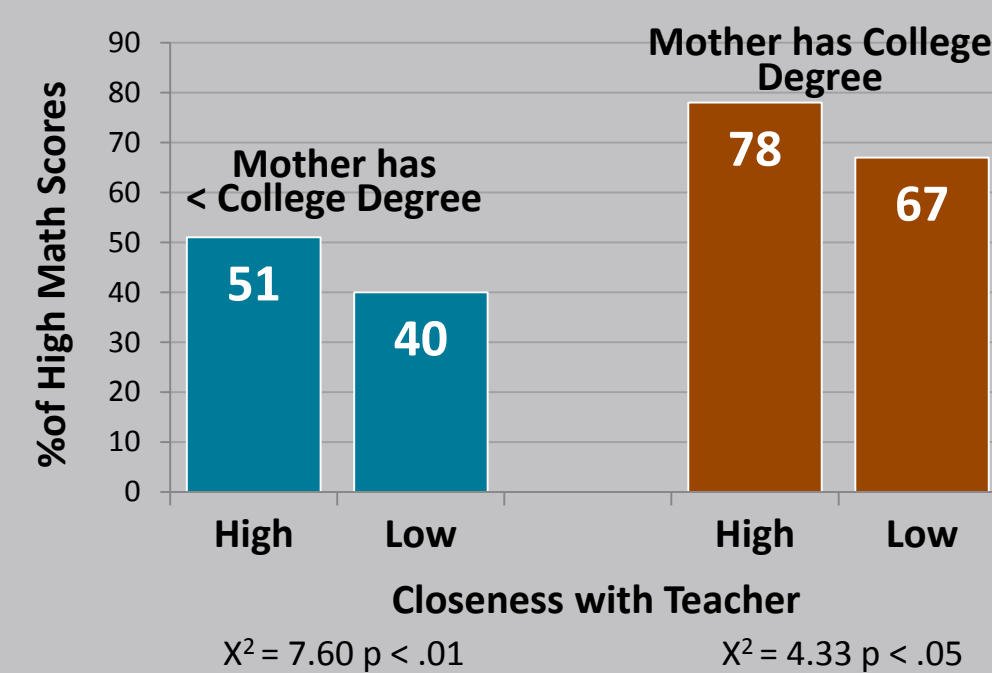
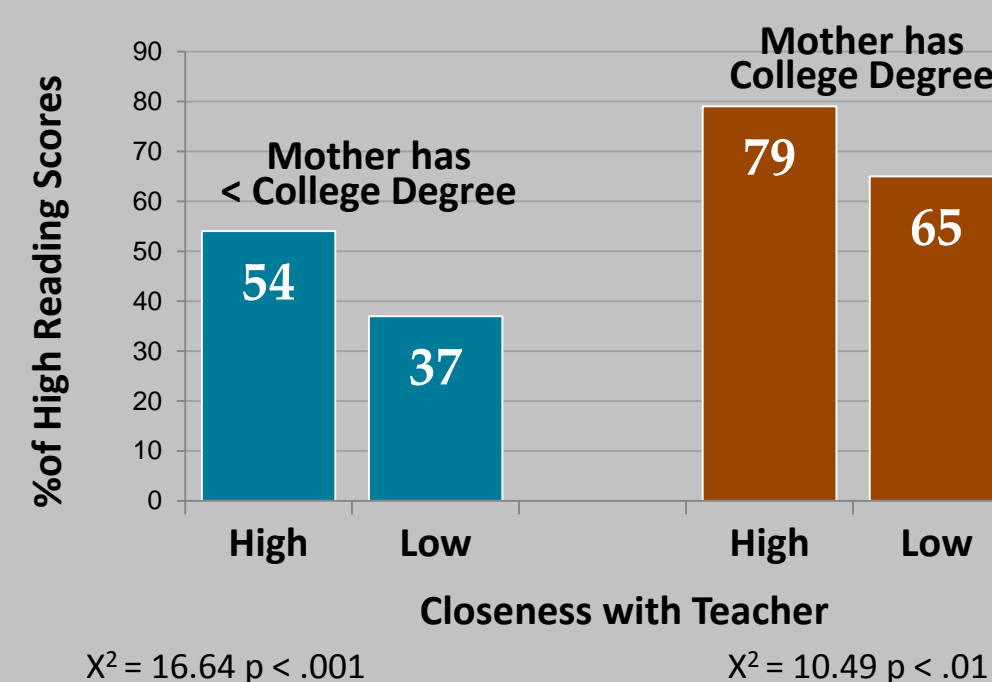


Figure 4. Reading Scores and Student-Teacher Closeness by Mother's Education



Summary of Findings

- Students who had low conflict with their teacher were more likely to score higher in mathematical thinking and reading than those students who had high conflict with their teachers (Fig. 1 & Fig. 2).
- Students who had high closeness with their teacher were more likely to score higher in mathematical thinking and reading than those students who had low closeness with their teachers (Fig. 3 & Fig. 4).

Conclusion

- As hypothesized, student-teacher relationship quality is positively related to the student's academic performance in math and reading among fifth graders.
- There was no difference by SES in this relationship.

Implication

- The results of this study demonstrate the importance on the quality of the relationship between a teacher and a student, regardless of SES.
- This association can be studied further, but future researchers could use different measures to increase the validity.

References

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