

THE RELATIONSHIP BETWEEN POVERTY AND SCHOOL PERFORMANCE IN SOUTH CAROLINA

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COLLABORATOR ORGANIZATIONS

Research, Evaluation, and Measurement Center



South Carolina Teacher Education Advancement Consortium Through Higher Education Research



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BACKGROUND

- Poverty shapes educational opportunity and outcomes in the United States
- High poverty schools have difficulty recruiting and retaining teachers
- The opportunity gap also points to the disparity in children's access to learning in a safe environment
- This study examined the relationship between poverty and a variety of school performance variables in South Carolina for three school levels (elementary, middle, and high)



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RESEARCH QUESTIONS

- How do high poverty and low poverty ***elementary schools*** compare on multiple school performance indicators?
- How do high poverty and low poverty ***middle schools*** compare on multiple school performance indicators?
- How do high poverty and low poverty ***high schools*** compare on multiple school performance indicators?



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PARTICIPATING SCHOOLS

- 2019 SC School Report Card data from the SC Department of Education
- Excluded the schools that served special populations
- 1163 public schools in 88 school districts or state-operated programs
 - 683 (58.7%) elementary schools
 - 341 (29.3%) middle schools
 - 241 (20.7%) high schools



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SCHOOL LEVEL VARIABLES

- Schools divided by quartiles of the poverty index
 - Low poverty schools from the lowest 25%
 - High poverty schools from the highest 25%
- Examined school performance variables from SC School Report Cards that may be compared with national trends
- Broad categories for variables include:
 - Academic achievement/outcomes
 - Student engagement
 - Classroom environment
 - Student safety



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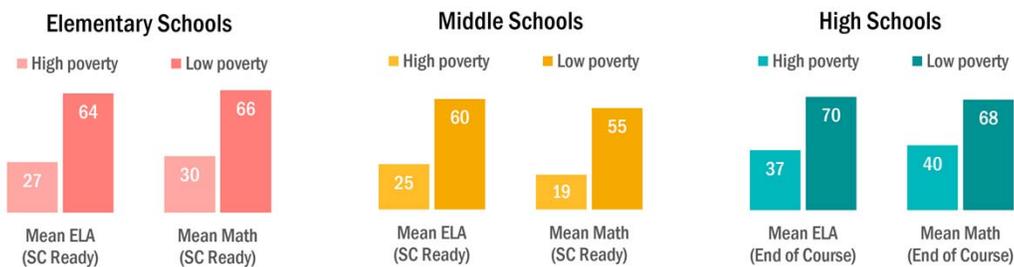
DATA ANALYSIS

- Examined variables within each of the broad categories
- Conducted independent sample t-tests of means between low and high poverty schools
- Calculated standardized mean difference effect sizes
- Conducted separate analysis by school level (elementary, middle, and high schools)



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RESULTS – ACADEMIC ACHIEVEMENT



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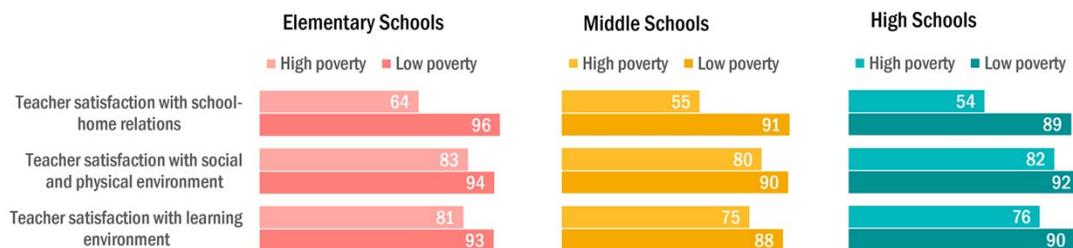
SUMMARY OF RESULTS FOR STUDENT ACHIEVEMENT

- High poverty schools had lower achievement results than low poverty schools in both ELA and Math
- Effects were very large (1.9 to 3.4, larger for ELA than Math)
- Results were consistent for all three school levels (elementary, middle, and high school)



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RESULTS – SCHOOL CLIMATE SURVEY ITEMS



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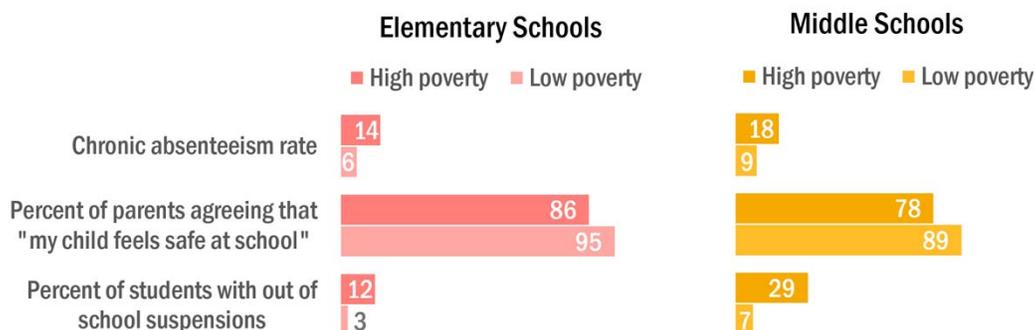
SUMMARY OF RESULTS FOR SCHOOL CLIMATE SURVEY ITEMS

- Teachers from high poverty schools reported lower satisfaction with school climate items
- Largest difference for satisfaction with school-home relations (effect sizes 2.0 to 2.5)
- Results were consistent for all three school levels



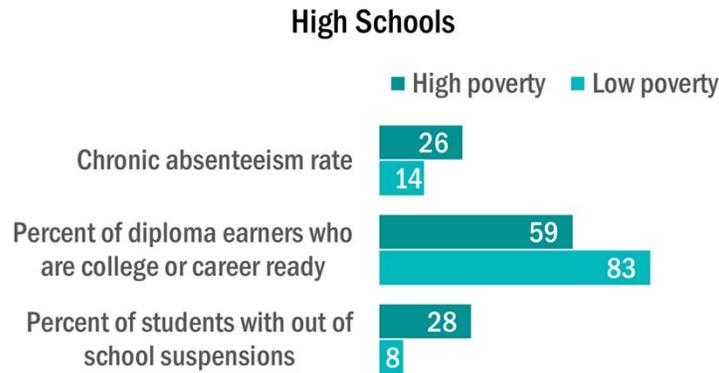
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RESULTS – OTHER VARIABLES WITH VERY LARGE EFFECTS



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SUMMARY OF RESULTS FOR OTHER VARIABLES WITH VERY LARGE EFFECTS

- High poverty schools had higher student absenteeism rates with large effects (1.2 to 1.4) for all school levels
- High poverty schools had higher student suspension rates with large effects (1.6 to 1.9) for all school levels
- Parents from high poverty elementary and middle schools reported lower agreement rates of their child feeling safe at school with large effects (1.2)
- High poverty high schools had a lower percent of college or career ready graduates with a large effect (1.8)



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ENCOURAGING FINDINGS FOR HIGH POVERTY SCHOOLS

- Teacher attendance rates were strikingly similar (~94%) between high and low poverty schools across school levels
- At the elementary level, both low and high poverty schools had similar percentages of teacher vacancies unfilled for more than nine weeks
- At the middle school level, a similar percentage of teachers have an advanced degree in low and high poverty schools (58.5% vs. 57.9%)
- High poverty schools had smaller percentages of inexperienced/out-of-field teachers in core classes than low poverty schools at the middle and high school levels



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CONCERNING FINDINGS REVEALING INEQUITIES

- SC academic achievement falls into similar patterns with national trends regarding significantly lower scores for high poverty schools (Olszewski & Corwith, 2018)
- Student engagement variables align with established national patterns (Yazzie-Mintz, 2007) and point to a more stable environment in low poverty schools
- Sharp differences in student safety aspects indicates concerning trends across all levels about the lack of a healthy learning environment in high poverty schools



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RECOMMENDATIONS

Future research using alternative analysis approaches to examine longitudinal and multivariate trends

Policy Recommendations

- Advised changes align along the 4-As (Tomaševski, 2006)
 - **Availability:** Expand the availability and number of school counsellors, psychologists, and nurses (i.e., the specially targeted caring staff of the school).
 - **Accessibility:** Open access to higher-level (e.g., AP, IB) courses should be prioritized to provide opportunities to learn with the most experienced teachers and to be academically challenged.
 - **Adaptability:** Adapt and transform the school climate into one where students feel safe, accepted, and supported as an intervention to improve academic outcomes and home-school relationships.
 - **Acceptability:** Invite the community to dialogue about possible changes can generate a grassroots' investment and insight into ways to make schools acceptable and prioritized in communities.



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THANKS!

Paper forthcoming at sc-teacher.org/resources/

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