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Impact of District-Wide Free Lunch on Third-Grade Students' Reading Comprehension

POSTER PRESENTATION



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Author

Rita A. Williams, PhD

Graduate

School of Human Services

rita.williams@waldenu.edu

Supervisory Committee

Gregory Hickman - Chair

Randy Heinrich - Committee Member

Rebecca Stout - URR Member

Abstract

Children with low economic status often perform poorly in math and reading. The purpose of this study was to examine the impact of universal free and reduced lunch (FRL) policy changes on third grade reading normal curve equivalent (NCE) scores. I collected secondary data from the Tennessee Department of Education website. The findings indicated there are no statistically significant differences in NCE third grade reading scores after the policy change to 100% FRL. The social implications of these findings offer the potential to raise awareness of universal FRL and its impact on reading comprehension among third grade students.

Doctoral Research

Problem

Proper nutrition plays a role in providing sufficient development in the physical, mental, and social development of children.

Policymakers have given increased attention to school meals as a means of improving the nutrition and academic performance of lowincome children.

There is extensive research concerning poverty and reading comprehension among children. Children who do not master reading by third grade may experience academic problems throughout the rest of their school process.

The problem addressed was whether policy change to universal FRL impacted students' third grade NCE reading scores.

Purpose

The purpose of this quantitative, comparative study was to examine the impact of policy change on universal FRL on third grade NCE reading scores.

Specifically, I compared the different extremes of low, middle, and high levels of FRL in relation to NCE reading scores before and after FRL policy changes.

Significance

This study contributes to a gap-in-knowledge about policy changes in the U S Department of Agriculture, Food and Nutrition Services (USDA) program for universal FRL to children. The results of this study will be made available to educational institutions that are eligible to participate in the Community Eligibility Provision (CEP) of the Healthy, Hunger-Free Kids Act 2010, but have not done so.

This information provides educational systems with knowledge to raise awareness of the reading scores of schools that serve FRL to students. As a result, enabling administrators to implement actions to close the gap on the documented problem of low reading comprehension among third grade students.

Theory

Fundamental cause theory (FCT) clarifies the relationship between socioeconomic status (SES) and health (Link & Phelan, 1995)

Relevant Scholarship

The connection between food and proper nutrition and the ability of children to develop and learn influenced the decision of the government to extend, expand, and strengthen programs such as the National School Lunch Program to safeguard the health and well-being of America's children (Huang & Youngmi, 2015).

Since 2001, the No Child left Behind literacy has become the center of attention for educational legislation to provide more resources to enhance reading skills for children by the end of his or her third grade year (U.S. Department of Education , 2015).

Poverty among children has an enormous negative influence on school success, with the main reason being suffering from food deprivation and poor access to adequate health care (Hair, et al., 2015).

Research Question

What are the differences in third grade reading NCE scores before and after the policy change to 100% FRL?

Participants

The sampling frame consisted of 574 schools that met the qualification for the entire student body to receive FRL under the CEP of the Healthy, Hunger-Free Kids Act of 2010.

A purposive and convenience sampling method was used to select schools that met the criteria and implemented the policy change to universal FRL.

Procedures

I obtained the data for this comparative quantitative, ANOVA, Q3Q1 split study from the Tennessee Department of Education website. The secondary data collected were entered into SPSS software for an analysis that created the results.

The Q3Q1 split was conducted as one of the three points that divided a range of the NCE scores.

Analysis

Means score differences were tested with analysis of variance (ANOVA).

Findings

No statistically significant differences were found.

Interpretation

In using an ANOVA Q3Q1 split, I was able to examine which schools with high, medium, and low FRL percentages benefited the most from this policy change.

Conversely, the results suggest that the schools with the lower FRL percentage had the highest gains in NCE reading scores in 2014 based on the indication of SES linked to different and extreme groups. FRL is an indicator of SES.

The middle-to-high FRL schools gained very little. The high FRL schools did not gain as much as the lower FRL schools. The high FRL schools were already near 100% FRL before the policy change due to having the highest need and lowest SES.

Whereas, schools with the lower FRL, or more affluent schools, did gain statistically from this policy change.

Limitations

Potential imitations include:

- Additional variables were omitted which are important covariates to control for in secondary analysis.
- Data were only available at the school level and not the individual student level.
- Data was limited to third grade students only.

Recommendations

Consider the relationship of other demographic variables (e.g., SES, racial and ethnic disparities) to FRL policy change and the impact on third grade reading gain scores.

Future research using qualitative exploratory case study design with structured interviews with students for data collection could have the potential for a better understanding of schools, which benefitted more from policy change to universal FRL.

A mixed-method design study may be helpful in identifying the use of theoretical lenses as it relates to gender, race/ethnicity, and class.

Hopefully, this study will not influence policy makers to decrease resources to improve positive educational outcomes for children with low SES, but to encourage additional resources to address the documented problem of third grade reading comprehension among third grade students.

Social Change Implications

These findings have the potential to influence social change by providing the educational system information to raise awareness of the reading scores of schools that serve FRL to students, thereby bring about policy changes in the USDA for FRL to children regardless of SES.

References

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