

RESEARCH QUESTION

Does increased access to books in the home impact the amount that at-risk elementary school students read at home?

INTRODUCTION

Low-income students have historically been at a disadvantage for developing literacy skills in elementary school, which has a negative impact on their future academic and career success. The more students read, the more developed their literacy skills become. This study examines whether sending books home with students in a structured way impacts the behavior that leads to literacy. A pilot program called Book Buddies has been implemented into an after-school program for at-risk students over a one month period, and its success was evaluated based on data from students.

BACKGROUND AND SIGNIFICANCE

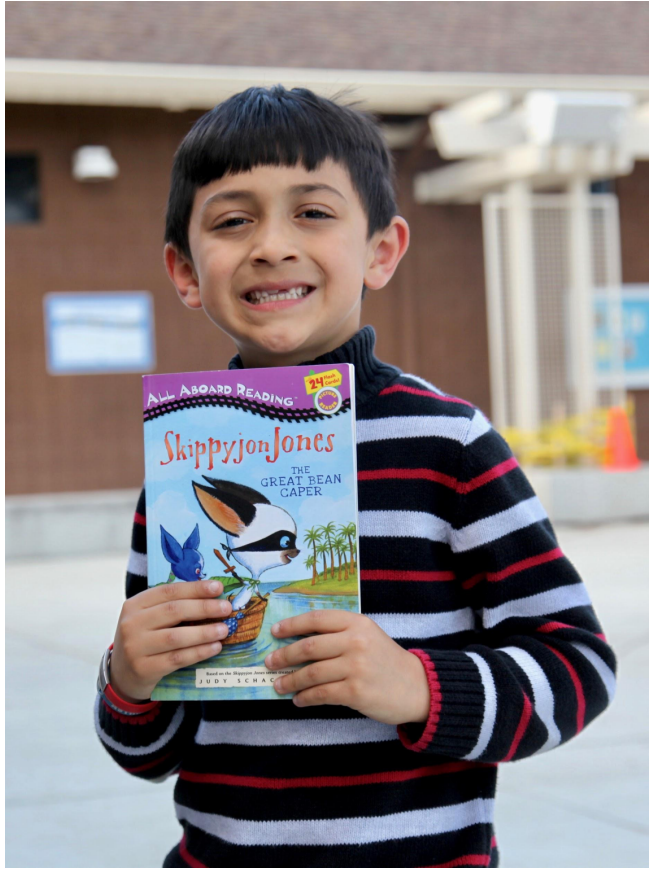
Literacy skills are inequitably distributed between students of different income levels. The 2013 National Assessment of Educational Progress reported that only 18% of fourth grade students eligible for free meals through the National School Lunch Program could read proficiently, in comparison to 51% of fourth grade students that were not eligible ("What Proportions", 2013). **Students who read more at home have better reading skills.** The National Literacy Trust found that "Young people who enjoy reading very much are nearly five times as likely to read above the expected level for their age compared with young people who do not enjoy reading at all"(Clark, 2012).

Many programs have contributed to the solution for this issue. For example, one organization called 10 Books a Home implements a weekly tutoring program into students' homes, in addition to supplying books and other educational materials to low-income students. This program brought every at-risk student in their sample group up to reading level (10 Books a Home, 2016). **A pilot program called Book Buddies was started to try a new method of encouraging students to read for fun.** Each week, students will bring home a stuffed animal and a collection of books themed around the animal, and they are encouraged to read as many books as possible during the week. The Book Buddies program is unique because it uses stuffed animals to give students a positive association with books, which is a new way to improve students' reading motivation and increase their access to books.

LITERACY DEVELOPMENT IN AT-RISK STUDENTS

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RESEARCH METHODOLOGIES

This study consists of applied research that assessed the effectiveness of the Book Buddies program, which intends to help solve the social justice issue of literacy in the community. An experiment was conducted to test whether or not the program increased the amount of time that students spent reading at home each week. The Book Buddies program was implemented into a sample of students in the Homework Club at Laurel Elementary School. The sample consisted of twenty students from kindergarten to second grade, all of whom were identified as at-risk students.

For the purpose of the study, students in the Book Buddies program were randomly selected each week to receive a bag containing several books, a journal, and a toy. At the end of each week, the students brought back their Book Buddies, and quantitative data was collected from all students in class. An interviewer asked each student how many books they had read that week, and if they had been given a Book Buddy. After four weeks, the data was statistically analyzed to determine whether or not students read more books on weeks when they took home a Book Buddy.



DATA ANALYSIS AND RESULTS

The data was analyzed to find whether the Book Buddies program impacted the amount of books that students read at home in a statistically significant way. The data is broken down into the four random sample groups that were selected over four weeks, and displayed on the histogram below. Outliers were calculated and removed from further calculations.

Figure 1

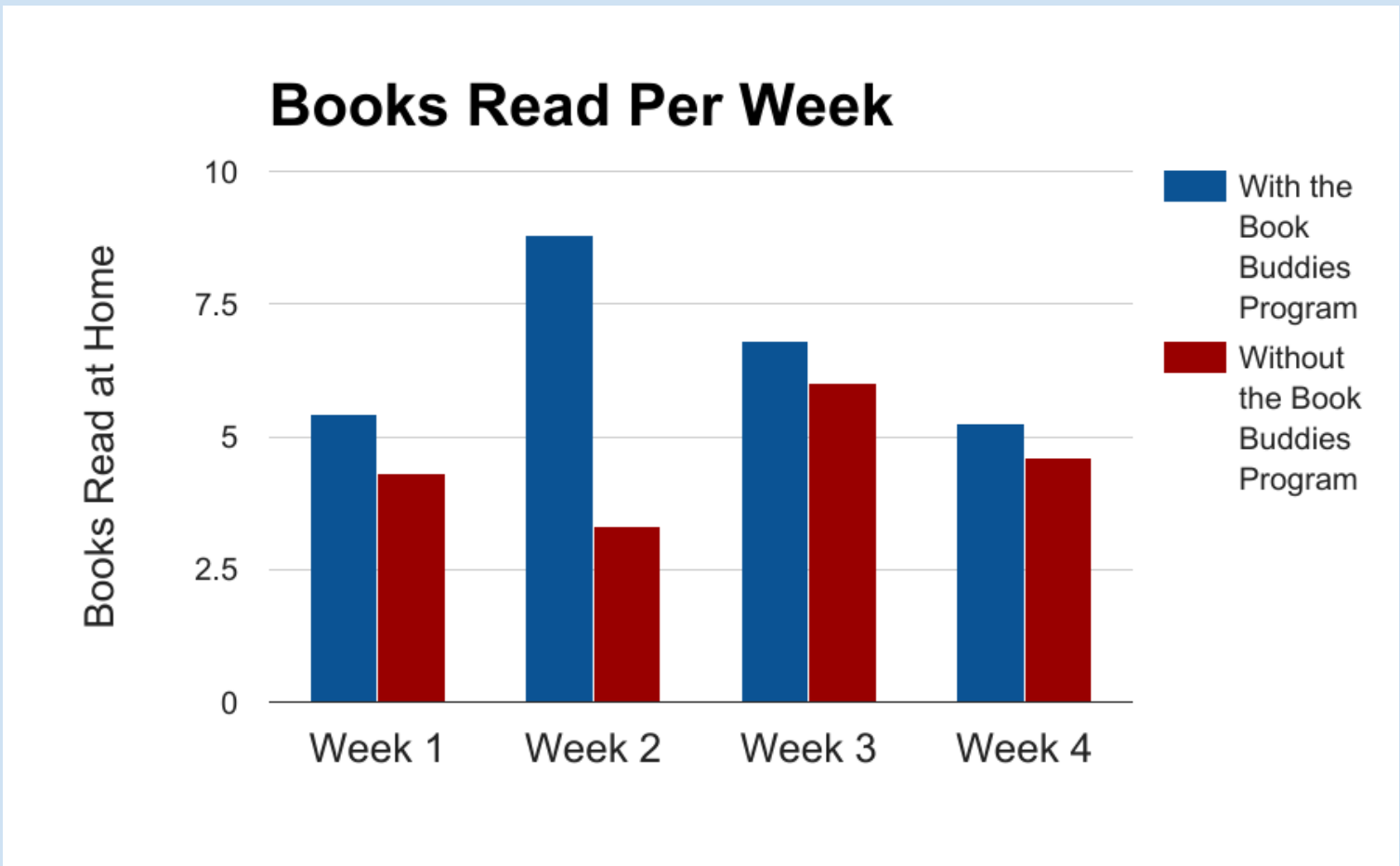


Figure 1: The average number of books read by students with a Book Buddy and without a Book Buddy.

The data shows that in each week, students in the Book Buddies program consistently read more books.

Overall, students in the Book Buddies program read an average of 6.524 books at home, while the control group of students read an average of 4.524 books at home. A 2-Sample T-Test of this data revealed that $p = 0.0545$, which is less than $p = 0.1$, the value necessary to show that the data is statistically significant. Therefore, the data collected supports the conclusion that the Book Buddies program increased the number of books that students read in a statistically significant way.

REFERENCES

10 Books a Home. (May, 2016). *Impact metrics*.
Clark, C. (2012). *Children's and young people's reading today: Findings from the 2011 National Literacy Trust's annual survey*.
What proportions of student groups are reaching proficient? [Fact sheet].(2013). Retrieved October 26, 2016, from The Nation's Report Card website.

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