

Financial Stability & Its Effects on Children's Academic Performance

RANDOMIZED CONTROL TRIAL
INTERIM REPORT / AUGUST 2017

* For our report on parent outcomes at home, *Randomized Control Trial Interim Report August 2016*, please visit www.GoodFund.us/RCT

Our Hypothesis

Improving the health and financial stability of a low-income family will strengthen educational outcomes for children, empowering them to move up the economic ladder in adulthood.

The Randomized Control Trial

To test our hypothesis, in 2013 we launched a Randomized Control Trial (RCT) in partnership with Brown University and the Providence Public School District (PPSD). A treatment group is receiving our rigorous, specialized Financial + Health Coaching, and a control group is not. Our partnership with PPSD gave us access to a wealth of educational data from 2012–2016, including student attendance, tardiness, disciplinary records, and standardized test scores. The study is ongoing. In summer 2016, we issued a report looking at the financial and health outcomes for parents.* This interim report looks at educational outcomes for the children of participating families.



Treatment Group

Info Collected: Financial & Health
Intervention: Receives Coaching



Control Group

Info Collected: Financial & Health
Intervention: None

Methodology: T-Test

This analysis uses two sample t-tests to compare the data of the treatment and control groups for each year. This test signals whether there is a significant difference between these two groups by inputting population size, standard deviation, and the mean for each year into the t-test formula. If the resulting t-score and p-value lie in the rejection region, we can say with 95% confidence that the treatment group performed better than the control group for that academic year.

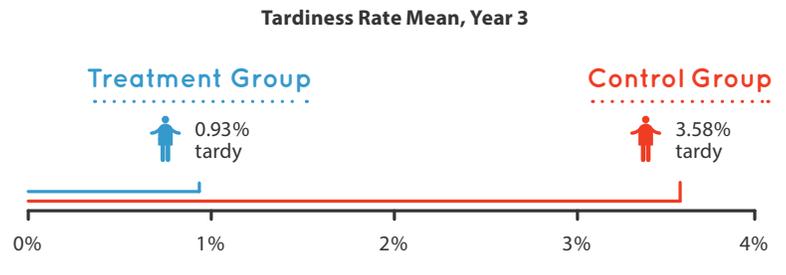
Emerging Trends

We found a statistically significant difference in the rate of tardiness among treatment and control groups when observed over a three-year period. This statistical analysis included 29 students from

¹ Vukovic, R. (2017). *The Effect of Student Tardiness on Learning*. Retrieved from <https://www.teachermagazine.com.au/articles/the-effect-of-student-tardiness-on-learning>

the treatment group and 39 students from the control group and showed that tardiness in the control group was nearly four times higher than that of treatment. As our data set grows we expect this trend to hold steady.

The article “The Effect of Student Tardiness on Learning” reminds us that by “arriving late and missing school hours, students receive fewer hours of instruction than students who are in class when the bell sounds.”[†] Because parents are often a main factor in elementary-aged children arriving to school on time, a reduction in tardiness could be assumed to be a direct result of changes in parents’ behavior and circumstances through Coaching.



We also analyzed rates of attendance among treatment and control groups, when observed over a three-year period. To prevent skewing the data, we implemented a threshold of students being enrolled for at least 80% (144 days) of the 180-day school year. We were unable to demonstrate statistical difference with 95% confidence; however, we saw a trend of attendance rates improving among the treatment group, and declining among the control group. In year three, the p-value decreased to 0.106. As we gather more data, we anticipate that the p-value will fall below 0.05, *making it possible to declare a statistically significant, causal relationship between Coaching and attendance rates.*

In addition to attendance and tardiness, we also examined the interim effects of the RCT on the treatment and control groups with respect to standardized testing. To measure this, we compared results from STAR Math and Reading, as well as NECAP Math and Reading. However, we were unable to find a statistically significant difference on standardized test performance at this time. We will continue collecting and analyzing data, and hope to prove various positive trends in future reports.

Next Steps

We have already demonstrated that our Coaching results in significant improvements in parents’ financial stability and health at home (www.GoodFund.us/RCT), and the early data indicates that this improvement can reduce absenteeism and tardiness. We are excited to complete the study and share this intervention with other school districts throughout the country!

TIMELINE

- Summer 2013**
Coaching and enrollment started
- Summer 2016**
1st interim report of parents’ results
- Summer 2017**
2nd interim report of children’s results
- Fall 2017 (current status)**
Enrollment in research study to be completed
- Fall 2019**
Last parents complete research study
- Summer 2020**
Final data requested from Providence Public School District for 2019–2020 school year
- 2021**
Final analysis for results/conclusions

