Efficacy of EveryDay Labs Nudges in DC Public and Public Charter Schools

Executive Summary

Results from our SY 24-25 randomized controlled trial suggest that the EveryDay Labs nudges decrease chronic absenteeism rates by 1.7 percentage points, or 6.3%,[1] among the focus population. Results also indicate that the nudges prevented 20,385 student absences, above and beyond any other attendance efforts conducted in the district. This program is 21 times more cost effective at reducing absenteeism compared to mentoring, and 52 times more cost effective than tutoring.

Reduction in chronic absenteeism	**6.3%**
Total days recovered over year-long implementation	**20,385**

Cost per absence prevented	
EveryDay Labs[2]	$19
Mentoring[3]	$400
Tutoring[4]	$1000

1 The magnitude of the impact on chronic absenteeism is consistent with previous studies of this intervention, but the overall percentage decrease appears lower due to the high rates of chronic absenteeism post-pandemic.

2 This is calculated by taking the total program cost, $395,000, and dividing it by the number of days recovered. We expect this to be a high estimate, as the total program cost includes services and functionality beyond the nudges.

3 Based on studies of the Check & Connect program, which reduced absences among middle school students by up to 4.2 days, with no statistically significant effects on elementary school students. The estimated cost of the program is $1,700 per student, meaning each absence prevented costs about $400.

4 High impact tutoring, recently studied in DCPS, reduces absenteeism by 1.2 percentage points on days with tutoring sessions, or 7%. This translates to students attending 1.3 more days of school during the school year, on average. Referencing the DCPS High Impact Tutoring cost calculator, the baseline costs for this type of program is about $1,400 per student, meaning each absence prevented costs about $1,000.

Program Description

The EveryDay Labs attendance solution was implemented in both DC Public and DC Public Charter schools. This solution includes chronic absenteeism nudges, sent via mail and text message to guardians of students with at least a 5% absence rate. These nudges were the focus of this study. However, in addition to nudges, staff also had access to attendance resources and professional learning provided by EveryDay Labs experts. And, charter school staff had access to an online platform that provides up-to-date information on student attendance, patterns and trends, and attendance barriers. The platform is designed to help staff identify and support students struggling with attendance. Because access to these resources was not assigned randomly, the results reported here do not reflect the impact of these additional supports, and therefore should be considered a lower bound of the impact of the entire attendance solution.

Study Population

This study included students in DC Public Charter and DC Public Schools. There were 21,070 households and 27,499 students in the study. Students in the universe:

- Were in grades K-12
- Were actively enrolled and missed more than 1 day of school as of September 30, 2024
- Were not in an excluded school (as determined by the district)
- Were not in households with more than 4 students
- Did not disenroll from the district during the study period

The enrolled students were householded together to account for households where some students attended DC Public Charter while others attended DC Public Schools. Students were identified as living in the same household if they shared an address. Households with more than 4 students have been excluded, as this can be an indicator that the address is inaccurate or incomplete (e.g. apartment number missing).

[4] We have not analyzed results using smaller subgroups, such as whether students are enrolled in a charter school or not, because these smaller subgroups are less statistically reliable.

Households were then stratified into one of two categories. We created the first category called “Priority,” which reflects the students prioritized in a typical program implementation. These students had an absence range of 5-30%. The second category is called “Non-Priority” and they had an absence range of 30-95%. Within the Priority and Non-Priority categories, households were randomly assigned to treatment or control groups, with each student taking on the assignment of the household.

[5]

Program Implementation

Once assigned to treatment, one eligible student per household received a mail nudge and all eligible students received a text nudge. The focal student for each mail nudge could change from communication to communication, but preference was given to students in the priority range. If households had students in both DC Public Charter and DC Public, two letters were sent, one from each district.

This study ran during the Fall Semester, from October 15 through December 20. During this time 3 mail nudges and 3 text nudges were delivered. On average, treated students received 4.2 communications during the study period (average of 2.2 mail nudges).

[5] There were 5 households that had a mix of students assigned to treatment and control (16 total students). These households were removed from the analysis. Additionally, 31 students assigned to treatment received no direct communications, nor did anyone else in their household receive treatment. These students have been retained in the analysis.

Results

The outcome analyzed in this study was the total absences[6] during the study period of October 15 to December 20. This is 43 school days, or about 24% of school days.

Results focus on students in the priority range at the time of random assignment. This is for two reasons: (1) previous research suggests that this is the population for which the intervention has an impact; and (2) when implemented as contracted, the program primarily delivers mail nudges to students in this group, so focusing on this group is most reflective of what the district can expect with a typical implementation of the program.

Students in the treatment group, and with a 5-30% absence rate, had 0.19 fewer days[7] absent than students in the control group during the RCT period. The mean absences for the control group within this range was 6.4 days, making the effect a 3% reduction. **Treatment reduced the likelihood of a student in this group being chronically absent by 6.3%.** These results isolate the impact of the nudges, above and beyond any other attendance work being done by the district.

Over the course of the school year this effect would account for 0.79 school days,[8] assuming consistent effects across the school year. We believe this to be a conservative estimate as absences are known to increase as the year progresses.

Had all eligible students in the priority range been treated, an estimated 20,385 additional school days[9] would have been attended over the course of the school year. This translates to a cost of about **$19 per net day[10] recovered.**

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6 The total absences were calculated by taking the total year-to-date absences on December 20 and subtracting the total absences that had been accumulated by October 15.

7 Results are statistically significant at $p < 0.01$. The regression model controls for: pre-randomization absences (count); grade level (K-12); race (White, Black, Asian, other); free and reduced priced lunch status (binary); special education status (binary); gender (binary); ethnicity (binary); students in the household (count); home language (binary); school wide absences (school average).

8 This is calculated by multiplying the effect of -0.19 for 24% of the year by 4.16 to get the effect for a full year.

9 This is calculated by multiplying the annual effect of -0.79 by the number of students in the priority population (25,805) to get the total days recovered had all students been treated.

10 This is calculated by taking the total program cost, $395,000, and dividing it by the number of days recovered. We expect this to be a high estimate, as the total program cost includes services and functionality beyond the nudges.

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