Final Report on the Evaluation of School Support Specialist (SSS) of Nevada Boys Town's LIFT program 2022-2023

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Introduction

The Boys Town LIFT intervention is a community-based intervention designed to improve student behavioral and academic outcomes using a multi-tiered, multi-component approach. An important component of LIFT is the School Support Specialist (SSS) Program, which provides individualized support to students facing academic and behavioral challenges. During the 2022-2023 academic year, the SSS program was implemented across 48 schools in the Clark County School District (CCSD), Nevada. The purpose of this document is to present the methods, results and conclusions of the evaluation of the SSS component of Boys Town's LIFT program in Nevada for the 2022-2023 school year.

The evaluation aimed to assess the effectiveness of the SSS program in supporting at-risk youth in Clark County School District, particularly in improving behavioral and academic outcomes. This report starts with a summary of the findings, followed by (a) an overview of the SSS; (b) a description of the program evaluation design; (c) an explanation of the analysis; (d) a presentation of the results; and (e) a discussion of the conclusions and recommendations drawn from the program evaluation. All data presented in this report are based on the data from two sources: administrative records from Boys Town and student records from the Clark County School District (CCSD) for the 2022 to 2023 academic year.

Executive Summary of Overall Findings from the Evaluation Study

In this evaluation of the SSS program, the research team assessed the academic and behavioral impacts of SSS programs on the CCSD student population. The evaluation focused on testing three primary hypotheses: 1) Students who received the SSS intervention from Boys Town would demonstrate significantly better academic (e.g., gains in MAP math and ELA scores) and behavioral (e.g., mitigated absences and behavioral events) outcomes compared to

students who did not receive SSS intervention across terms (e.g., fall, winter, spring) or quarters (e.g., Q1-Q4), 2) Students who received the SSS intervention from Boys Town would demonstrate improvement in academic and behavioral outcomes over time (e.g., across terms or quarters), and 3) Students who received SSS intervention throughout the academic year from Boys Town would demonstrate significantly better academic and behavioral outcomes than the students who received only one-time intervention (office referral group).

The findings from the evaluation indicate mixed short-term effectiveness of the SSS program. While modest improvements in students' behavior were observed, academic gains were limited. The results indicated that the SSS program may have a stronger effect on reducing unexcused absences than on improving academic outcomes or other behavioral metrics, when comparing students who received the SSS intervention to those who did not. Among the students who received SSS intervention, there were notable trends toward the academic improvements in ELA and math scores; however, these academic gains cannot be conclusively attributed to the intervention itself. Additionally, when comparing students who participated in SSS with those who received only one-time intervention based on the official referral, academic and behavioral outcomes were largely similar. Thus, the findings were mixed across the three tested hypotheses, with a significant effect found only for unexcused absences when comparing students who received SSS to those who did not. These results suggest that while the SSS program may be effective in reducing absenteeism, its impact on academic performance and broader behavioral measures warrants further study. A longitudinal approach is recommended to assess long-term effects.

This evaluation focuses specifically on the 2022 to 2023 implementation of the SSS intervention, which was delivered as a short-term service based on student needs identified

through Boys Town's Truancy Prevention Outreach Program (TPOP) referral process. As the SSS program is not designed to follow students longitudinally, the duration of services for each individual student cannot be determined. Given this structure, the program emphasizes immediate or proximal outcomes rather than long-term effects. It is possible that some impacts, particularly those related to academic performance and broader behavioral development, may emerge over time and are not fully captured within this short-term evaluation window.

(a) Overview of Boys Town School Support Specialist (SSS) Program

CCSD is the fifth largest school district in the U.S. (Lair & Retzl, 2019) and is recognized as one of the most diverse districts in the nation, with an 80% minority enrollment and a significant 60.8% of economically disadvantaged students (U.S. News, 2025). This demographic diversity underscores CCSD's pivotal role in serving a wide-ranging student population from varied socio-economic backgrounds who present unique healthy development needs. In this dynamic educational setting, it is evident that certain students may require additional support to maintain well-being and realize their full health and academic potential to thrive in their school environment.

Boys Town, an established organization with a demonstrated history of effective interventions in education and youth services, has been collaborating with CCSD since 2015 to offer targeted support to students via LIFT. Boys Town's LIFT intervention (Boys Town, 2023) is a comprehensive, community-based initiative using a multi-tiered and multi-component approach (Ziomek-Daigle, 2016), which includes components such as social skills training (Tyler et al., 2021; Tierney & Green, 2011) alongside other interventions, all working synergistically to prevent issues before they escalate to a point where children feel unsafe, become disengaged from school, experience teacher turnover, and negatively impact the overall

school community. Central to this program is a school-based intervention program designed to enhance student and school safety; promote active involvement of students; parents and teachers; and elevate overall satisfaction levels. Grounded in Social Learning Theory (Bandura, 1977) and Operant Learning Principles (Skinner, 1953), the program emphasizes positive reinforcement to improve a student's social and learning skills and self-management, while mitigating problem behaviors. Recognizing that positive student behavior is a vital component of a productive working environment, LIFT further holds potential to positively influence teacher job satisfaction, well-being, and retention (Ortan et al., 2021).

One important program of LIFT intervention is School Support Specialist (SSS) Program that plays an important role in providing individualized support for students to preempt disruptive behaviors such as defiance and non-compliance, address truancy and attendance problems, and alleviate emotional distress. The key activities of SSS include one-on-one skills instruction in the classroom, social skills coaching during office referrals, facilitating social skills groups, and conducting observations and brief educational sessions. Additionally, this intervention also actively fosters parental involvement to increase engagement and streamline the process of identifying necessary resources for both students and families.

The proposed project aims to conduct a comprehensive evaluation of the impact of Boys Town's SSS program within CCSD by integrating existing clinical/administrative and school records data from both Boys Town and CCSD, which will help inform both Boys Town Nevada and CCSD about the effectiveness of the intervention, including areas where it is working as designed and areas where improvements might be needed to maximize impact for students in need. Therefore, retrospective comparative analyses were conducted. This research endeavor will yield valuable insights that contribute to the continued improvement of educational outcomes

within CCSD. The planned evaluation explicitly addresses the key goals of CCSD's Focus: 2024 strategic plan, notably in the areas of student achievement, equity, and socio-emotional well-being. By merging and analyzing data from Boys Town with CCSD's school data, we aim to gain deeper insights into the factors influencing student success and identify evidence-based strategies to improve outcomes for all students, especially at-risk students.

The study's methodology and data handling procedures are carefully designed to ensure the confidentiality and privacy of student information, while providing valuable insights into the effectiveness of Boys Town's LIFT intervention within CCSD. All proper procedures for research review were followed, which included but was not limited to CCSD Primary Agreement on data sharing. Based on this agreement, we followed the required procedures including "Data and compliance with PERPA" (Item 20) to complete the required document. The evaluation study covered the period from August 2024 to July 2025. Prior to data collection, the study received approval from the University of Nevada, Las Vegas (UNLV) Institutional Review Board (IRB) and was authorized through CCSD's Assessment, Accountability, Research, and School Improvement (AARSI) application process. Agreements with Boys Town were also established between January and May 2024. Data were received and merged from both Boys Town and CCSD during the summer of 2024. From August to October 2024, the research team conducted propensity score matching and initial hypotheses testing. A preliminary report was drafted between November to January 2025 and submitted to Boys Town for review by the end of January 2025. The final evaluation report was developed and completed between February and July 2025.

(b) Design of SSS Evaluation

This program evaluation employed a retrospective, quasi-experimental design using propensity score matching to compare academic and behavioral outcomes among students who received varying levels of support from Boys Town's School Support Specialist (SSS) intervention during the 2022-2023 academic year. Specifically, the evaluation examined: (1) differences in outcomes between students who received the SSS intervention and matched students who did not receive the intervention (control group); (2) changes in outcomes across terms and quarters within the SSS intervention group; and (3) differences between students who received ongoing SSS support and those who received a one-time intervention (i.e., office referral only).

Sample

The data elements for this evaluation were sourced from Schedule A of the previously established Memorandum of Agreement (MOA) between CCSD and Boys Town Nevada, Inc. This dataset included both students who were directly served by Boys Town and those who were not, during the 2022-2023 academic year. The data contained the administrative records provided by Boys Town and student records obtained from the Clark County School District (CCSD).

In total, data was gathered from 50,385 students across 48 CCSD schools in Las Vegas, Nevada, spanning elementary to high school levels during the 2022-2023 academic year. The dataset included 69 variables including demographics (e.g., masked ID, cohort, school ID, grade, age, gender, race/ethnicity), Individualized Education Program (IEP) status, Limited English Proficiency (LEP), attendance records (e.g., excused/unexcused absences, tardies by quarter), office referrals, academic performance metrics (e.g., MAP and SBAC scores), and behavioral events (e.g., major events and minor events). It is important to note that there were only 4 cases

of suspension and 1 case of expulsion in the full dataset, which were insufficient for meaningful statistical analysis; therefore, they were not included in this report.

The Boys Town Las Vegas School Support Specialist (SSS) intervention was delivered to 5,096 students during the 2022-2023 academic year, including all grade levels (Pre-K to 12). Of these, 4,022 students received the LIFT SSS intervention, while 464 students received a one-time office referral intervention. Combined, 4,486 students participated in the intervention, leaving 43,896 students in the same schools who did not receive any SSS intervention.

Procedure

Given the nature of the study, propensity score matching was conducted using demographic variables to construct a comparable control group. To identify students eligible for inclusion in the control group, we excluded those who were not referred to Boys Town and had fewer than 7 unexcused absences in quarter 1 or no major behavioral events based on Boys Town's TPOP referral process documentation. After applying these exclusion criteria, 6,205 students were deemed suitable for inclusion in the control group as they were more comparable to students who received the intervention.

Propensity scores were generated based on a set of demographic variables including age, sex, race/ethnicity, grade level, school ID, IEP status, and LEP status. After matching, 2668 students in the intervention group of students were matched one-to-one with 2,668 students in the control group. Both of the intervention and control groups of students have similar age distributions with 56% of male (n = 2,988) and 44% of female (n = 2,348). Students represented all grade levels from kindergarten to 12th grade. Among the matched sample, 83.86% (n = 4,475) of students were not enrolled in IEP programs, while 16.14% (n = 861) were enrolled in the IEP program. Similarly, 81.71% (n = 4,360) of students have non-LEP, and 18.29% (n =

976) were identified as LEP (See Table 1 for the list of schools, and Table 2 for demographic statistics including breakdowns by age, sex, race/ethnicity, grade, IEP, and LEP). It is important to note that SBAC scores were not included in the propensity score matching due to a high degree of missingness, as the SBAC assessment is administered only to students in grades 3 through 8. Instead, SBAC scores were statistically controlled for in subsequent analyses.

(c) Analyses

Assessment Measures

CCSD data measurements include basic demographic variables and test scores. *Masked ID* refers to the de-identified student ID number for those not served by the Boys Town SSS program. *Boys Town cohort* is a binary indicator denoting students served by the program, with 1 indicating a participant and 0 a non-participant. *Student ID* is a three-digit school identification number assigned by CCSD, while *School State ID* is a four-digit identifier for each school. *Grade level* represents the student's numeric grade as of the 2022-2023 validation day on October 1st. *Age* reflects the student's age on that same validation day. *Gender* includes three response categories: male, female, and did not disclose (labeled as "on-binary" in the tables). *Race/ethnicity* is categorized using the federal seven-category parameters: White, Black/African American, Hispanic/Latino, Asian, American Indian/Alaska Native, Native Hawaiian/Pacific Islander, and two or more races. *IEP (Limited English Proficiency)* reflects the student's English language learner status as of the validation day, coded as a binary variable (yes or no).

Academic performance is measured through multiple indicators. Year-end *weighted and unweighted GPA* is included but not calculated for grades K-5. Additional assessments include *MAP ELA and math RIT scores* for fall, winter, and spring, as well as *MAP achievement quintiles* categorized as low, low average, high average, and high, with "no record" noted for

missing data. *SBAC ELA and math assessments* include one-time scale scores and corresponding proficiency levels ranging from 1 (low) to 4 (high), also including a "no record" category when applicable. Attendance data include *excused absences, unexcused absences, present days,* and *total class tardies*, measured from quarter 1 through quarter 4. Behavioral data cover *major and minor behavior resolutions, suspensions,* and *expulsions,* also recorded quarterly.

Boys Town provided two clinical measures. The first is the *last recorded interaction*, which refers to the most recent recorded engagement with the student by Boys Town staff. The second is *unsuccessful parent consent only*, which indicates that the student qualified for SSS services but did not receive them due to an inability to reach the parent or obtain consent. These students, while eligible, were not served and are considered part of the control group.

Analytic Plan

The students in the control and intervention group were matched using propensity score matching based on age, gender, grade level, school, race/ethnicity, IEP status, and LEP status. Propensity scores were estimated using logistic regression and the nearest neighbor matching method was used to match participants.

Academic performance metrics such as the SBAC and MAP scores were analyzed using generalized linear models. Type 2 fixed effect tests were used to measure the overall intervention effect after controlling for behavioral outcomes and grade level. For assessments that were administered in multiple periods (MAP), an interaction model involving period and intervention was used to test for differences. Post-hoc pairwise comparisons were performed for statistically significant overall effects.

Behavioral outcome metrics were analyzed using Poisson and negative binomial generalized linear models. Interaction models were used to account for the variability between

terms in the academic year. For rarely reported outcomes such as major events and expulsions, negative binomial and zero-inflated Poisson models were used to account for the overdispersion caused by the high number of zeros in the data set.

All analyses were performed using R statistical software (R Core Team, 2021). The following packages were used: *MatchIt* (propensity score matching), *emmeans* (post-hoc analysis and mean estimation), *tidyverse* (data wrangling), pscl (zero-inflated analyses). The significance level used for all analyses was 0.05, and all confidence intervals (CIs) reported are at the 95% level.

(d) Results

The retrospective comparative analyses were conducted by testing three hypotheses as follows. To guide interpretation, hypothesis 1 was divided into two parts: hypothesis 1.1 examined overall differences in academic and behavioral outcomes between the intervention and control groups, while hypothesis 1.2 focused on differences in how these outcomes changed across quarters or terms between the two groups.

Hypothesis 1.1

S*tudents who received the SSS intervention from Boys Town will demonstrate significantly better academic (e.g., gains in MAP math and ELA scores) and behavioral (e.g., mitigated absences and behavioral events) outcomes throughout the academic year compared to those who did not receive SSS intervention.*

Academic Outcomes

MAP ELA Achievement. After controlling for fall ELA score and behavioral outcomes, the difference in ELA scores between the spring and fall terms was lower for the intervention group with an estimated value of -1.21 (CI [-2.08, -0.33], p = .007) compared to the control

group. Although the estimated difference in MAP ELA scores was statistically significant, the magnitude of this difference was minimal within the context of the MAP standardized testing scale with one unit equivalent to one RIT (Rasch Unit) points. On this scale, differences in points can range from negligible to meaningful depending on grade level and students' growth expectations. A 1.21-point difference might be small if the typical growth or variation is much larger (e.g., 5-10 points per year). However, it could be significant if it aligns with typical growth expectations for the intervention group of students over a given time frame (e.g., annual progress for students with behavioral issues).

MAP Math Achievement. After controlling for fall math scores and behavioral outcomes, the estimated improvement in MAP math scores for the intervention group was 0.46 (CI [-1.23, 0.32], p = .25) points lower than the control group. However, there was no evidence of a statistical difference in scores between the spring and fall terms for the intervention group and the control group. For more details of the mean MAP ELA and MAP math score and percentile changes please see Table 3.

SBAC Math (3-8). There was a statistically significant difference between the SBAC math scores of the intervention and control groups. This difference was estimated to be -10.6 (CI [-18.2, -3.1], p = .006), meaning the intervention group is 10.6 points lower than the control group. The difference was pretty small compared to the scale of the SBAC.

SBAC ELA (3-8). The estimated statistically significant difference between intervention and control groups was -10.8 (CI [-18.1, -3.6], p = .003), meaning the intervention group was 10.8 points lower than the control group.

GPA (6-12). Students in the intervention group were estimated to have weighted GPAs that were 0.12 (CI [-0.17, -0.06]) lower than the control group. This difference was found to be

statistically significant (p = .0001). Table 4 presents a concise summary of group differences and observed improvements in MAP, SBAC, and weighted GPA scores.

Behavioral Outcomes

Major Events. Both groups had negligible estimates for the estimated number of major events. The estimated number of major events for both intervention and control groups were 0 with 0.0001 for intervention group and 0.00008 for control group. The ratios were statistically significant, but they might not be practically significant.

Minor Events. Both groups had negligible estimates for the estimated number of minor events. The estimated number of minor events for both groups were 0 with 0.00006 for intervention group and 0.00004 for control group. The ratios were statistically significant, but they might not be practically significant.

Tardiness. There was a statistically significant difference between the total tardiness rates in the intervention and control group of students. The students in the control group were estimated to have 20.9 (CI [20.7, 21.1]) tardy days, while the students in the intervention group were estimated to have 23.7 (CI [23.5, 23.9]) tardy days. Students in the control group were recorded to have 12% (p < .0001) less tardy days compared to the students in the intervention group throughout the academic year.

Unexcused Absences. A statistically significant difference was observed between the total estimated unexcused absences in the intervention and control groups. Students in the control group were estimated to have 37.8 (CI [36.7, 39.0]) unexcused absences, while students in the intervention group were estimated to have 24.9 (CI [24.2, 25.6]) unexcused absences. The odds ratio for the comparison between the two groups was 1.52 (CI [1.46, 1.59], p < .0001). This suggests that students in the control group were 52% more likely to have unexcused absences

compared to those in the intervention group, indicating that the intervention group had fewer unexcused absences. Please see Figure 1 for a comparison of tardiness and unexcused absences between groups.

Hypothesis 1.2

Students who received the SSS intervention from Boys Town will demonstrate improvement in academic (e.g., gains in MAP math and ELA scores) and behavioral (e.g., mitigated absences and behavioral events) outcomes across terms (e.g., fall, winter, spring) or quarters (e.g., Q1-Q4) compared to the control group.

Academic Outcomes

MAP ELA. There was an estimated increase of 3.7 points (CI [2.5, 4.84], $p < .0001$) in the winter ELA scores from the fall ELA scores after controlling for unexcused absences, reported tardiness, major events, and grade level for the intervention group. The improvement increased to 5.2 points (CI [4.01, 6.37], $p < .001$) in the spring ELA scores. In comparison, the control group was estimated to increase their winter ELA scores by 3.15 points (CI [1.91, 4.39], $p < .0001$) and spring ELA scores by 5.41 points (CI [4.16, 6.66], $p < .0001$). The interaction between group (intervention vs. control) and term (fall, winter, spring) was not statistically significant ($F(2,9927) = 0.48$, $p = .62$), indicating that the pattern of improvement in ELA scores across terms did not differ significantly between the intervention and control groups. In other words, although both groups showed improvements across terms, the rate of change was comparable between them.

MAP Math. Math scores showed an improvement of 7.5 points (CI [6.4, 8.5], $p < .0001$) for the intervention group and 7.1 (CI [5.9, 8.2], $p < .0001$) points for the control group in the spring compared to the fall semester scores. Similar to the MAP ELA scores, the interaction

between intervention group and the term were not significant ($F(2,10340) = 0.21$, $p = .81$), meaning the effect of the intervention on MAP scores does not vary significantly across different terms. There was no difference between the winter math scores and the fall math scores for any student in the intervention group. Please also note that there is potentially a data source problem from CCSD since we have the same values for both fall and winter for MAP math, so we only compared fall and spring for MAP math. Please see Figure 2 for MAP ELA and MAP math for the intervention and control groups across terms.

SBAC ELA, SBAC math and GPA were only reported at one time point so there is no comparison within the group across quarters or terms.

Behavioral Outcomes

Major Events. All estimated averages of major events were at close to 0 for each quarter.

Minor Events. All estimated averages of minor events were at close to 0 for each quarter.

Unexcused Absences. The average number of unexcused absences increased monotonically with statistical significance in the intervention group, from 5.70 (CI [5.60, 5.80]) days in Q1 to 8.63 (CI [8.51, 8.75]) days in Q4. The control group recorded a higher estimated number of absences in all quarters, from 9.56 (CI [9.44, 9.68]) days in Q1 to 10.75 (CI [10.62, 10.89]) days in Q4. The control group was observed to record lower changes in absences across terms compared to the intervention group as supported by the significant interaction term between group and quarter ($\chi^2(3) = 503$, $p < .0001$), indicating that the change in unexcused absences across terms was greater in the intervention group compared to the control group.

Tardiness. The average number of tardies in Q4 was significantly different from Q1 for the intervention group. The intervention group showed an increase from 6.46 (CI [6.35, 6.57]) tardies in Q1 to 7.86 (CI [7.74, 7.99]) in Q4. On the other hand, the control group reported a similar increase in tardies from 5.65 (CI [5.55, 5.75]) in Q1 to 7.13 (CI [7.00, 7.25]) in Q4. The interaction between group and term was found to be statistically significant ($\chi^2(3) = 22.5$, $p < .0001$), indicating different term effects for each group. While these differences across terms were statistically significant for both intervention (Relative Ratio = 1.22, CI [1.18, 1.25], $p < .0001$) and control (Relative Ratio = 1.26, CI [1.23, 1.30], $p < .0001$) groups, the mean difference of around 1.5 tardy days across quarters may not be practically significant to discern. Please see Table 5 and Figure 3 for a comparison of tardiness and unexcused absences between groups across quarters.

While the findings of hypothesis 1 suggest that the intervention was effective in reducing overall unexcused absences, as the intervention group consistently recorded fewer absences than the control group across all quarters, the intervention group also showed a steeper increase in unexcused absences over time.

Hypothesis 2

Students who received the SSS intervention from Boys Town will demonstrate improvement in academic (e.g., gains in MAP math and ELA scores) and behavioral (e.g., mitigated absences and behavioral events) outcomes across terms (e.g., fall, winter, spring) or quarters (e.g., Q1-Q4).

Demographics

4,022 students received the SSS intervention. The intervention group have mean age of 11.8. The race/ethnicity were predominantly Hispanic (46.4%, n = 1865) and Black (35.5%, n = 1426). 55.7% were male (n = 2239) and 44.3% were female (n = 1781).

Special Education and Language

84.7% of students were not enrolled in IEP programs (n = 3406), while 15.3% were enrolled in IEP program (n = 616). 81.4% of students had no Limited English Proficiency (n = 3272), and 18.6% were classified as LEP (n = 750). Please see Table 6 for demographic statistics including breakdowns by age, sex, race/ethnicity, grade, IEP, and LEP.

Academic Outcomes

MAP ELA. There was 4.1 points (CI [3.14, 5.05], $p < .0001$) increase in the winter ELA scores from the fall ELA scores after controlling for unexcused absences, reported tardiness, major events, and grade level for the intervention group. The improvement increased to 5.92 points (CI [4.96, 6.88], $p < .0001$) in the spring ELA scores.

MAP Math. There was no difference between the winter math scores and the fall math scores for any student in the intervention group. By spring, math scores showed an improvement, increasing by 7.8 points (CI [6.9, 8.7], $p < .0001$) compared to fall. Please note that there is potentially a data source problem from CCSD since we have the same values for both fall and winter for MAP math, so we only compared fall and spring for MAP math. Please see Table 7 for the details of MAP scores and percentile changes across terms for the intervention group, and Figure 4 for MAP ELA and math scores for the intervention group across terms.

SBAC ELA, SBAC math and GPA were only reported at one time point so there is no comparison within the group across quarters or terms.

Behavioral Outcomes

Major Events. All estimated averages of major events were at close to 0 for each quarter.

Minor Events. All estimated averages of minor events were close to 0 for each quarter.

Unexcused Absences. The average number of unexcused absences increased monotonically with statistical significance in the intervention group, from 5.22 (CI [5.14, 5.30]) days in 7.80 (CI [7.70, 7.89]) days in Q4. These differences were statistically significant (Relative Ratio = 1.49, CI [1.46, 1.53], $p < .0001$).

Tardiness. The average number of tardies in Q4 was significantly different from Q1 for the intervention group. The intervention group showed an increase from 5.71 (CI [5.61, 5.80]) tardies in Q1 to 7.04 (CI [6.93, 7.15]) in Q4. While these differences were statistically significant (Relative Ratio = 1.23, CI [1.18, 1.25], $p < .0001$), the mean difference of around 1 day per quarter may not be practically significant. Please see Figure 5 for a comparison of tardiness and unexcused absences between groups across quarters.

While students in the intervention group demonstrated statistically significant improvements in MAP ELA and math scores across terms throughout the academic year, these improvements alone do not provide sufficient evidence that the intervention caused the change. Observing improvement over time within a single group reflects a pre-post effect, which can result from various factors such as natural academic development, external influences, or other confounding variables. Without a significant interaction effect or comparison showing greater improvement than a non-intervention group (refer results in hypothesis 1.2), causal conclusions about the impact of the intervention cannot be drawn based solely on within-group changes.

In addition, behavioral outcomes were mixed: while major and minor disciplinary events remained minimal, both unexcused absences and tardiness increased over time. The increase in behavioral incidents may reflect growing disengagement or external factors not addressed by the intervention. This pattern indicates that additional support may be needed to sustain or improve behavioral engagement across the school year.

Hypothesis 3

S*tudents who received SSS intervention throughout the academic year from Boys Town will demonstrate significantly better academic (e.g., gains in MAP math and ELA scores) and behavioral (e.g., mitigated absences and behavioral events) outcomes compared to those who received one-time intervention (Office Referral group).*

Propensity Score Matching

We selected demographics, including age, gender, race/ethnicity, and grade as well as IEP and LEP to match the intervention group of students (n = 4022) and the one-time intervention group of students (n = 464). After propensity score matching, we have 464 students for each of the intervention groups.

Demographics

The intervention and one time intervention groups have similar age distributions. The race/ethnicity were predominantly Hispanic (41.2%, n = 382) and Black (38.4%, n = 356). 53.98% were male (n = 501) and 45.80% were female (n = 425).

Special Education and Language

86.20% of students were not enrolled in IEP programs, while 13.80% were enrolled in IEP program. 85.56% of students had no Limited English Proficiency, and 14.43% were

classified as LEP. Please see Table 8 for demographic statistics including breakdowns by age, sex, race/ethnicity, grade, IEP, and LEP.

Academic Outcomes

MAP ELA Achievement. After controlling for fall ELA scores, unexcused absences, tarries, and major event, the difference in ELA scores between spring and fall terms was lower for the one-time intervention group with an estimated value of 1.55 (CI [-3.16, 0.07], $p = .06$). However, the difference was not statistically significant. The interaction between intervention group and term were not significant, meaning both intervention types showed similar trends in how ELA scores change across fall, winter and spring, regardless of the intervention structure.

MAP Math Achievement. After controlling fall math scores, unexcused absences, tarries, and major event, the difference in math score between spring and fall terms was higher for the one-time intervention group with an estimated value of 0.27 (CI [-1.03, 1.57], $p = .68$). However, the difference was not statistically significant. The interaction between intervention group and term were not significant, meaning both intervention types showed similar trends in how math scores change across fall, winter and spring, regardless of the intervention structure. Please see Table 9 for details on MAP scores and percentile changes between the intervention and one-time intervention groups across terms, and Figure 6 for MAP ELA and math scores comparing the two groups across terms.

SBAC ELA (3-8). Students in the intervention group were estimated to score 4.16 points (CI [-17.9, 9.55], $p = .55$) higher than the one-time intervention group. However, this difference was not statistically significant.

SBAC Math (3-8). Students in the one-time intervention group were estimated to score 1.43 points higher than the intervention group (CI [-12.2, 15.1], $p = .84$), which is small

compared to the scale of the SBAC. There was no evidence of a statistically significant difference between the SBAC math scores of the intervention and one-time intervention groups.

GPA (6-12). Students in the intervention group were estimated to have weighted GPAs that were 0.03 (CI [-0.17, 0.10], $p = .69$) higher than the one-time intervention group. However, the difference was not statistically significant. Please see Table 10 for a concise overview of group differences in score improvements across MAP, SBAC, and weighted GPA.

Behavioral Outcomes

Major Events. Both groups had negligible estimates for the estimated quarterly number of major events. The estimated number of major events for both groups were 0 with 0.00003 intervention group and 0.00002 for one-time intervention group. Although the ratios were statistically significant, they were not practically significant. All estimated averages of major events were close to 0 for each quarter.

Minor Events. Both groups had negligible estimates for the estimated quarterly number of minor events. The estimated number of minor events for both groups were 0 with 0.00007 for the intervention group and 0.00005 for one-time intervention group. Although the ratios were statistically significant, they were not practically significant. All estimated averages of minor events were close to 0 for each quarter.

Tardiness. There was statistically significant difference between the tardiness rates in the intervention and one-time intervention group of students. The students in the intervention group were estimated to have 21.1 (CI [20.5, 21.6]) tardy days, while the students in the one-time intervention group were estimated to have 18.4 (CI [17.9, 18.9]) tardy days. Students in the intervention group were recorded to have 14% (CI [11%,18%], $p < .0001$) more tardy days compared to the students in the one-time intervention group throughout the academic year. The

average number of tardies in Q4 was statistically significantly different from Q1 for both the one-time intervention and intervention groups. Based on the estimates, the one-time group had an average of 4.50 tardies in Q1 and 7.22 in Q4, with a 60.5% increase in tardies (CI [48.7%, 73.0%], $p < .0001$). The intervention group had an average of 5.92 tardies in Q1 and 6.77 tardies in Q4, with a relatively low increase of 14.3% (CI [6.3%, 23%], $p < .0001$).

Unexcused Absences. There was no statistically significant difference between the unexcused absences in the intervention and one-time intervention groups. Students in the intervention group were estimated to have 21.8 (CI [19.9, 23.9]) unexcused absences, while the one-time intervention group were estimated to have 20.6 (CI [18.8, 22.5]) unexcused absences. Students in the intervention group recorded 6% (CI [-5.3%, 19.0%]) more unexcused absences compared to the one-time intervention group. The average number of unexcused absences in Q4 was significantly different from Q1 for both the one-time and intervention groups. Based on the estimates, the one-time group had an average of 5.02 (CI [4.77, 5.29]) absences in Q1 and 7.28 (CI [7.00, 7.58]) in Q4, with a 45.1% increase in unexcused absences (CI [33.4%, 58.0%], $p < .0001$). The intervention group had an average of 5.31 (CI [5.06, 5.57]) unexcused absences in Q1 and 7.57 (CI [7.28, 7.86]) in Q4, with a 42.5% increase in unexcused absences (CI [31.6%, 54.0%], $p < .0001$). Please see Figure 7 and Table 11 for a comparison of tardiness and unexcused absences between the intervention and one-time intervention groups across quarters.

The intervention did not result in fewer total unexcused absences, nor did it reduce the growth rate over time compared to the one-time group. Both groups showed similar patterns: starting around 5 absences in Q1 and rising to about 7 by Q4. Therefore, the intervention had no observable impact on unexcused absences, either overall or in slowing increases over time. There

was no significant difference in unexcused absences between the intervention and one-time intervention groups, either in total number or in the rate of increase from Q1 to Q4.

(e) Discussion and Recommendations

One of the significant findings from this evaluation is the substantial reduction in unexcused absences among students who received the SSS intervention. Compared to their peers, these students recorded 52% fewer absences, a difference that is both statistically and practically significant. This suggests that the SSS program may play an important role in addressing chronic absenteeism, a critical barrier to academic success and engagement (Klein & Sosu, 2023; May, Bailees, & Riser, 2024). While other academic and behavioral outcomes showed minimal or inconsistent effects, this pronounced improvement in attendance offers a promising starting point for understanding the potential impact of short-term behavioral interventions in school settings.

The results of hypothesis 1 suggest mixed outcomes for the SSS intervention's impact on academic and behavioral metrics. Academically, the intervention group showed lower improvement in MAP ELA scores compared to the control group. While this difference is statistically significant, it is minimal in practical terms given the scale of MAP standardized testing. Improvement in MAP math scores showed no significant differences between groups. On standardized tests, the intervention group scored lower than the control group on SBAC math and ELA assessments, with statistically significant but small differences in scale. Weighted GPAs were slightly lower for the intervention group, with the difference being statistically significant but likely lacking practical significance. This pattern aligns with prior research indicating that academic improvements from behavioral and support interventions often take time to materialize and may not be evident within a single academic year (e.g., Zhang et al., 2025; Karlberg, 2025).

Behaviorally, the intervention group showed a substantial reduction in unexcused absences when compared to non-Boys Town students who showed a high tendency of chronic absenteeism. The intervention group recorded 52% fewer absences compared to the control group, reflecting a meaningful practical impact. This finding is particularly important, as chronic absenteeism is closely associated with academic underperformance, school disengagement, and long-term dropout risk (Gottfried, 2015; Rahman et al., 2024). However, the intervention group exhibited slightly higher tardiness rates (12% more than the control group), and the differences in major and minor behavioral events, while statistically significant, were negligible in practical terms. This increase in tardiness, particularly in the later part of the school year, is consistent with broader patterns observed in secondary education, where students often display decreased motivation, increased fatigue and stress, or disengagement as the academic year progresses (Chen et al., 2025; Cohen et al., 2022). Overall, the findings indicate that the SSS intervention may have a stronger impact on reducing unexcused absences than on improving academic outcomes or other behavioral metrics.

According to the results of hypothesis 2, there are clear indications of academic improvements, particularly in ELA and math scores; however, the lack of significant interaction effects suggests that these gains cannot be conclusively attributed to the SSS intervention. This is consistent with prior research indicating that without clear interaction effects or controlled comparisons, observed academic growth may reflect normative development, maturation, or external factors rather than the direct result of an intervention (Zhang et al., 2025). Behavioral outcomes reveal a mixed picture, with unexcused absences and tardiness showing statistically significant increases over time. While these increases may reflect challenges in attendance despite the intervention, the practical significance of these changes remains limited. Such

patterns are consistent with prior research indicating that attendance-related behaviors can fluctuate, and improvements may be delayed as students and schools adjust to intervention efforts (Villares et al., 2024). Overall, the findings highlight areas of academic progress alongside behavioral challenges, indicating the need for further investigation to determine the intervention's specific impact and address potential barriers to behavioral improvement.

The results for hypothesis 3 suggest that while some statistically significant differences exist between the intervention and one-time intervention groups across academic and behavioral outcomes, most differences lack practical significance. Academic outcomes, including MAP ELA and math scores, SBAC scores, and weighted GPAs, show no substantial differences between groups, indicating both interventions yield similar results. This aligns with research suggesting that the intensity or duration of an intervention does not always translate immediately into measurable differences in academic or behavioral outcomes, particularly within a short evaluation period (Karlberg, 2025; Luh et al., 2025). Behavioral outcomes reveal slight differences. Although students in the intervention group had higher overall tardiness than those in the one-time intervention group, the full intervention appeared to mitigate further increases in tardiness over time. When observing over the quarters, the intervention group started higher and stayed higher in total tardy days. However, their tardiness increased more slowly across the year compared to the one-time group. So, the intervention may not have reduced existing tardiness but might have prevented a sharper increase that was seen in the one-time group. This suggests a potential protective effect in slowing deterioration (Troncoso et al., 2024), though the intervention may need further refinement to reduce absolute levels of tardiness.

In addition, unexcused absences are slightly higher for the intervention group, though the overall increase in absences from Q1 to Q4 is comparable between groups. Both major and

minor behavioral events were negligible in occurrence, despite statistical significance in ratios. Such small behavioral fluctuations are consistent with prior studies indicating that attendance and disciplinary incidents often vary within expected ranges and that statistical significance does not always reflect meaningful behavioral change (Lane et al., 2024). Overall, these findings indicate that neither intervention type has a distinct advantage in improving academic or behavioral outcomes.

It is important to note that not all students received the same dosage of the intervention. Many students entered and exited the program at different times, with some participating for only one month and others for as long as nine months. For instance, some students who began the program in August may have left by December, while others did not begin receiving SSS services until January. This turnover could influence observed trends and may help explain why improvements in the intervention group were less pronounced. Varying exposure lengths can reduce the observed effectiveness of an intervention at the group level, as students with limited participation may not have received the full benefit. This highlights the importance of accounting for intervention dosage and participant retention in both program implementation and evaluation (Durlak & DuPre, 2008).

Overall, the SSS intervention shows mixed short-term effectiveness, with modest behavioral improvements and limited academic gains. While the intervention group demonstrated a significant reduction in unexcused absences, academic outcomes such as MAP and SBAC scores, as well as behavioral metrics like tardiness and events, revealed differences that were statistically significant but might lack practical significance. While the cross-sectional data does not clearly establish academic and behavioral improvement outcome for the intervention group, the program's potential impact on behavioral adjustment highlights the need

for further investigation. In addition, educational interventions often have delayed effects, and a single year of data may not be sufficient to capture the full impact (Karlberg, 2025; Michael et al., 2023). A longitudinal analysis incorporating data from the 2024-2025 academic year and beyond is crucial for more accurately assessing the program's efficacy and capturing potential long-term trends and benefits.

Limitations

The findings in this report should be interpreted with caution. The control group was not composed of regular non-intervention students but was instead selected to match the intervention group's absenteeism patterns and major events based on the TPOP referral process. Specifically, students with fewer than 7 unexcused absences in quarter 1 or those without a major event were excluded from the control group. This means that the control group consisted of students who met specific criteria aligned with TPOP standards, rather than a general group of non-intervention students. Since the control group was carefully matched to the intervention group, it may not fully represent a broader population of students. Therefore, caution should be exercised when applying these findings to other student populations, as the intervention's effectiveness for students with lower absenteeism rates or different characteristics remains uncertain.

Recommendations

Enhance Academic Components

While the SSS program showed promise in reducing unexcused absences, short-term academic gains were not practically significant. Integrating more structured instructional supports, such as academic coaching, tutoring, or curriculum alignment, may help improve students' performance on standardized assessments and overall GPA.

Target Attendance Interventions

The significant reduction in unexcused absences is a key strength of the program. Continued emphasis on attendance-focused strategies, such as personalized follow-up, parental engagement, or school-based incentives, could sustain and expand this success.

Investigate Causes of Tardiness

The increase in tardiness, particularly among students receiving SSS services, raises concerns. Conducting qualitative research or targeted assessments could help identify contributing factors, such as transportation challenges, school disengagement, or scheduling issues, to guide more tailored interventions.

Conduct Longitudinal Follow-Up

A single academic year may not fully capture the impact of the SSS program, especially for academic and behavioral outcomes that unfold over time. As noted in the Executive Summary, extending the evaluation through the 2024-2025 academic year and beyond is recommended to assess long-term trends and the sustained effects of the intervention.

Improve Evaluation Design

While the current quasi experimental design provides useful insights, and propensity score matching was employed to improve group comparability, Boys Town Nevada could consider adopting a Randomized Controlled Trial (RCT) in future evaluations if feasible. An RCT would support stronger conclusions about whether the intervention directly caused the observed changes. If randomization is not feasible, the evaluation can still be strengthened by 1) tracking and clearly defining levels of intervention exposure or dosage; 2) analyzing outcomes based on length and intensity of participation. These enhancements would improve the quality of evidence and support more precise recommendations.

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Appendix A

Tables

Table 1

Control and Intervention Students by School After Propensity Score Matching

School code & name	Control group		Intervention group		Total
	n	%	*n*	%	*N*
446 Sunrise Mountain HS	176	49.44	180	50.56	356
469 Johnston STEM Academy	150	51.19	143	48.81	293
554 Chaparral HS	271	54.53	226	45.47	497
535 Woodbury MS	38	45.24	46	54.76	84
545 Sedway MS	126	59.15	87	40.85	213
331 Smith MS	36	50.70	35	49.30	71
536 Silvestri JHS	88	46.32	102	53.68	190
245 Mojave HS	191	50.80	185	49.20	376
451 Western HS	178	48.63	188	51.37	366
547 Bailey MS	167	51.38	158	48.62	325
562 Desert Pines HS	174	49.29	179	50.71	353
333 Von Tobel MS	114	50.00	114	50.00	228
563 Centennial HS	58	48.33	62	51.67	120
432 Gibson MS	58	52.73	52	47.27	110
792 South Academic Center	6	46.15	7	53.85	13
242 West Prep	6	50.0	6	50.0	12
300 Webb MS	43	50.59	42	49.41	85
276 Monaco MS	5	55.56	4	44.44	9
259 Hal Smith ES	62	48.44	66	51.56	128
406 Hickey ES	52	50.98	50	49.02	102
550 Desert Rose HS	2	66.67	1	33.33	3
316 Lincoln ES	39	48.75	41	51.25	80
320 Edward ES	10	27.78	26	72.22	36
359 Bailey ES	24	48.98	25	51.02	49
314 Manch ES	80	55.56	64	44.44	144
317 Craig ES	28	43.75	36	56.25	64
430 Lowman ES	51	49.51	52	50.49	103
521 Kelley ES	31	51.67	29	48.33	60
234 Robert ES	12	29.27	29	70.73	41
212 Martin Luther King ES	26	50.0	26	50.0	52
208 Martinez ES	22	47.83	24	52.17	46
350 Hayden ES	32	47.76	35	52.24	67
515 Bell ES	26	47.27	29	52.73	55

375 Dickens ES	22	47.83	24	52.17	46
215 Dearing ES	42	51.22	40	48.78	82
358 Roundy ES	33	46.48	38	53.52	71
328 Tate ES	30	52.63	27	47.37	57
361 Deskin ES	20	43.48	26	56.52	46
254 Cortez ES	32	53.33	28	46.67	60
305 Cozine ES	8	34.78	15	65.22	23
236 Wolfe ES	14	46.67	16	53.33	30
539 Bruner ES	20	46.51	23	53.49	43
462 Wynn ES	46	48.42	49	51.58	95
429 Gray ES	10	47.62	11	52.38	21
523 Rowe ES	7	26.92	19	73.08	26
407 Jeffers ES	1	50.00	1	50.00	2
223 Long ES	1	100.00	0	0.00	1
576 Shadow Ridge HS	1	50.00	1	50.00	2

Table 2

Demographic Characteristics of the Matched Control and Intervention Groups

Demographic	Control group	Intervention group	Total
	n/M(SD)	*n/M(SD)*	*n*
Age	12.6 (3.51)	12.5 (3.52)	
Race/ethnicity			
White	193	206	399
American Indian/Alaskan Native	5	7	12
Asian	21	29	50
Black/African American	974	937	1911
Hispanic/Latino	1284	1274	2558
Native Hawaiian/Pacific Islander	26	34	60
Two or more races	165	181	346
Gender			
Male	1473	1515	2988
Female	1195	1153	2348
Grade level			
KG			270
1			324
2			270
3			254
4			256
5			256
6			473
7			605
8			550
9			662
10			623
11			491
12			302
Special education/language			
Enrolled in IEP program	421	440	861
Not enrolled in IEP program	2247	2228	4475
Limited English proficiency	477	499	976
No limited English proficiency	2191	2169	4360

Table 3

Mean MAP Scores and Percentile Changes Across Terms Between the Control and Intervention Groups for Hypothesis 1.1

Subjects	Groups	Fall	Winter	Spring
		M	*M*	*M*
MAP ELA score	Intervention group	183.52	186.17	187.62
	Control group	185.57	188.25	189.90
MAP math score	Intervention group	187.73	187.73	193.55
	Control group	189.67	189.67	195.55
MAP ELA percentile	Intervention group	25.04	25.52	23.86
	Control group	26.74	26.48	26.11
MAP math percentile	Intervention group	20.39	20.72	20.24
	Control group	21.06	21.31	20.86

Note. The identical means in the MAP math scores for the fall and winter tests were attributed to the data set provided by CCSD.

Table 4

Differences in Score Improvements Across Terms Between the Control and Intervention Groups for Hypothesis 1.1

Metrics	Estimate
	M [95% CI]
MAP ELA score improvement	-1.21 [-2.08, -0.33]
MAP math score improvement	0.46 [-1.23, 0.32]
SBAC math score difference	-10.6 [-18.2, -3.1]
SBAC ELA score difference	-10.8 [-18.1, -3.6]
Weighted GPA	-0.12 [-0.17, -0.06]

Note. Negative values indicate lower improvement in scores for the intervention group compared to the control group.

Table 5

Tardiness and Unexcused Absences Reported for the Matched Intervention and Control Groups Across Quarters for Hypothesis 1.2

Outcome	Control group *(Estimate, [95%CI])*	Intervention group *(Estimate, [95%CI])*
Tardies		
Q1	5.65 [5.55, 5.75]	6.46 [6.35,6.57]
Q2	6.45 [6.35,6.56]	7.82 [7.70, 7.95]
Q3	7.03 [6.92, 7.15]	7.99 [7.87, 8.11]
Q4	7.13 [7.00,7.25]	7.86 [7.74, 7.99]
Unexcused absences		
Q1	9.56 [9.44, 9.68]	5.70 [5.60, 5.80]
Q2	9.93 [9.81, 10.06]	7.59 [7.49, 7.70]
Q3	9.95 [9.83, 10.08]	7.92[7.81, 8.04]
Q4	10.75 [10.62, 10.89]	8.63 [8.51, 8.75]

Note. Estimated tardiness and unexcused absences across the quarters for the intervention and control groups after averaging over grade level and controlling for other behavioral outcomes.

Table 6

Demographic Characteristics of the Intervention Group for Hypothesis 2

Demographic	*N*	*M(SD)*
Age		11.8 (3.41)
Race/ethnicity		
White	351	
American Indian/Alaskan Native	8	
Asian	45	
Black/African American	1426	
Hispanic/Latino	1865	
Native Hawaiian/Pacific Islander	42	
Two or more races	285	
Gender		
Male	2239	
Female	1781	
Non-binary	2	
Grade level		
KG	201	
1	290	
2	255	
3	278	
4	301	
5	345	
6	401	
7	458	
8	437	
9	344	
10	324	
11	244	
12	144	
Special education/language		
Enrolled in IEP program	616	
Not enrolled in IEP program	3406	
Limited English proficiency	750	
No limited English proficiency	3272	

Table 7

MAP Scores and Percentile Changes Across Terms for the Intervention Group for Hypothesis 2

Subjects	Fall	Winter	Spring
	M	*M*	*M*
MAP ELA score	182.83	186.11	187.82
MAP math score	186.44	186.44	193.23
MAP ELA percentile	26.50	26.92	25.44
MAP math percentile	22.18	22.49	21.63

Table 8

Demographic Characteristics of the Matched Intervention and One-Time Intervention Groups for Hypothesis 3

Demographic	Intervention	One-time intervention	Total		
	n	*n*	*n*	*M*	*SD*
Age					
Intervention				11.4	2.86
One time intervention				11.3	2.91
Race/ethnicity					
White	40	48	88		
American Indian/Alaskan Native	1	1	2		
Asian	10	10	20		
Black/African American	185	171	356		
Hispanic/Latino	192	190	382		
Native Hawaiian/Pacific Islander	5	5	10		
Two or more races	31	39	70		
Gender					
Male	255	245	500		
Female	208	218	426		
Non-binary	1	1	2		
Grade level					
KG			37		
1			48		
2			72		
3			52		
4			65		
5			88		
6			193		
7			133		
8			119		
9			40		
10			32		
11			31		
12			18		
Special education/language					
Enrolled in IEP program	52	76	128		
Not enrolled in IEP program	412	388	800		
Limited English proficiency	68	66	134		
No limited English proficiency	396	398	794		

Table 9

MAP Scores and Percentile Changes Across Terms Between the Intervention and One-Time Intervention Groups for Hypothesis 3

Subjects	Groups	Fall	Winter	Spring
		M	*M*	*M*
MAP ELA score	Intervention group	187.89	191.05	192.80
	One time intervention	187.82	190.06	191.54
MAP math score	Intervention group	191.34	191.34	197.20
	One time intervention	190.60	190.60	197.81
MAP ELA percentile	Intervention group	31.20	30.52	29.44
	One time intervention	30.84	27.85	27.06
MAP math percentile	Intervention group	25.73	25.92	24.09
	One time intervention	26.51	26.53	25.01

Table 10

Differences in Score Improvements Across Terms Between the Intervention and One-Time Intervention Groups for Hypothesis 3

Metrics	Estimate
	M [95% CI]
MAP ELA score improvement	-1.55 [-3.16, 0.07]
MAP math score improvement	0.27 [-1.03, 1.57]
SBAC ELA score difference	4.16 [-17.9, 9.55]
SBAC math score difference	1.43 [-12.2, 15.1]
Weighted GPA	0.03 [-0.17, 0.11]

Note. Differences in score improvements between the Intervention and One-time Intervention groups. Negative values indicate lower improvement in scores for the one-time intervention group compared to the intervention group.

Table 11

Tardiness and Unexcused Absences Reported for the Intervention and One-Time Intervention Groups Across Quarters for Hypothesis 3

Outcome	One-time group *(Estimate, [95% CI])*	Intervention group *(Estimate, [95% CI])*
Tardies		
Q1	4.50 [4.28, 4.73]	5.92 [5.66, 6.20]
Q2	5.96 [5.69,6.24]	7.16 [6.87, 7.47]
Q3	6.23 [5.96, 6.51]	7.19 [6.90, 7.49]
Q4	7.22 [6.92, 7.54]	6.77 [6.48, 7.07]
Unexcused absences		
Q1	5.02 [4.77, 5.29]	5.31 [5.06, 5.57]
Q2	6.48 [6.21, 6.76]	6.52 [6.26, 6.80]
Q3	6.03 [5.77, 6.30]	7.00 [6.72, 7.29]
Q4	7.28 [7.00, 7.58]	7.57 [7.28, 7.86]

Note. Estimated tardiness and unexcused absences across the quarters for the intervention and one-time intervention groups after averaging over grade level and controlling for other behavioral outcomes.

Appendix B

Figures

Figure 1
Total Unexcused Absences and Tardiness Reported for the Control and Intervention Groups for Hypothesis 1.1

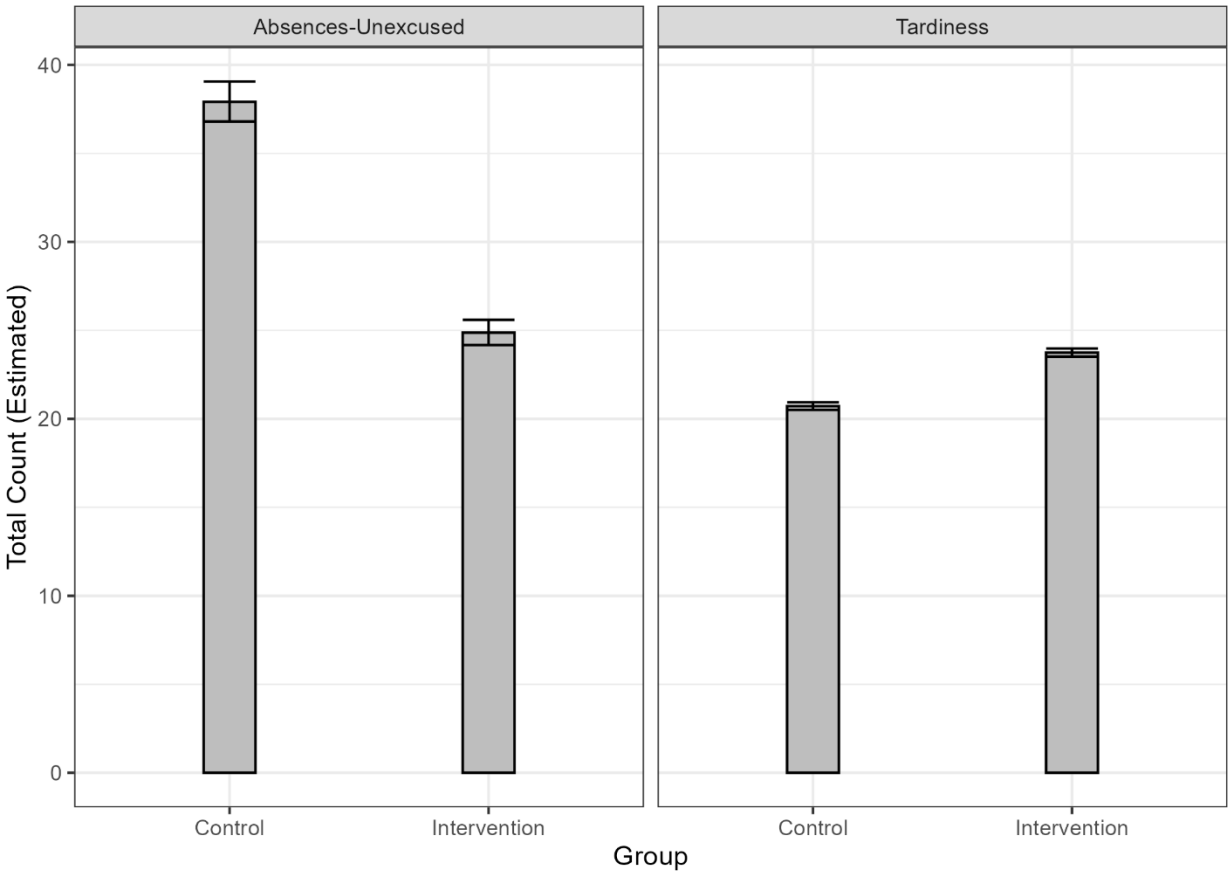
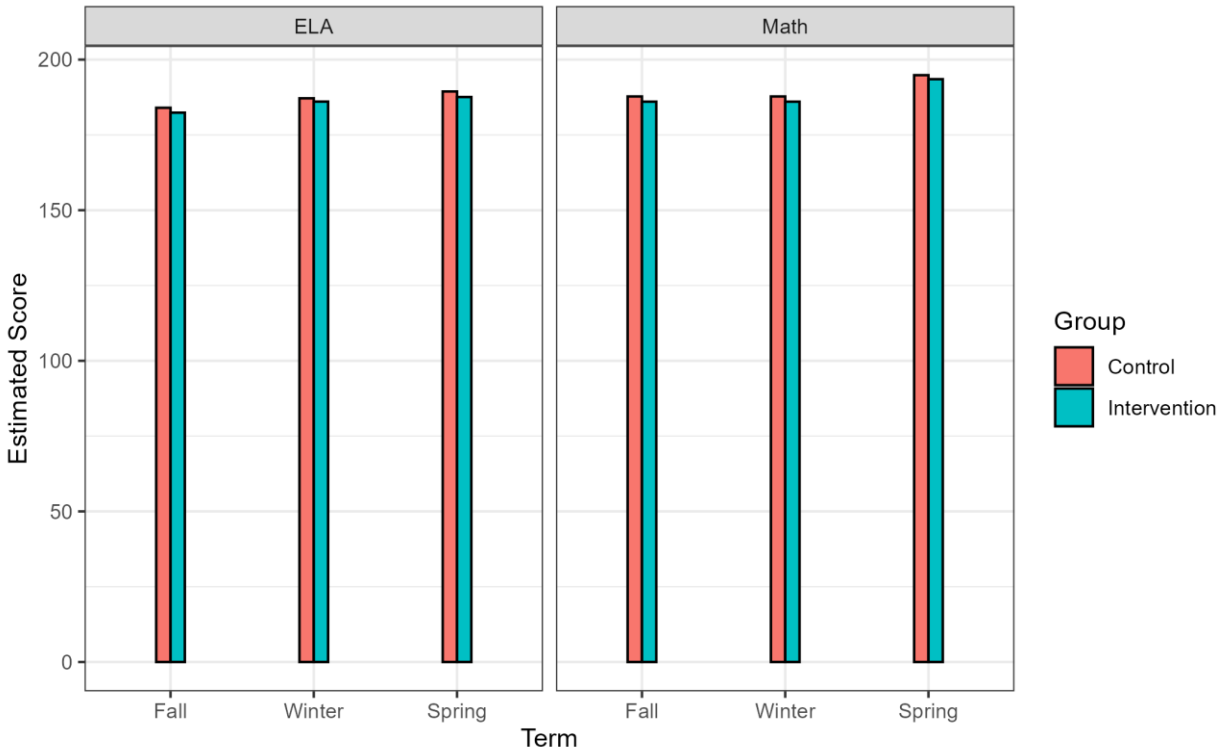


Figure 2

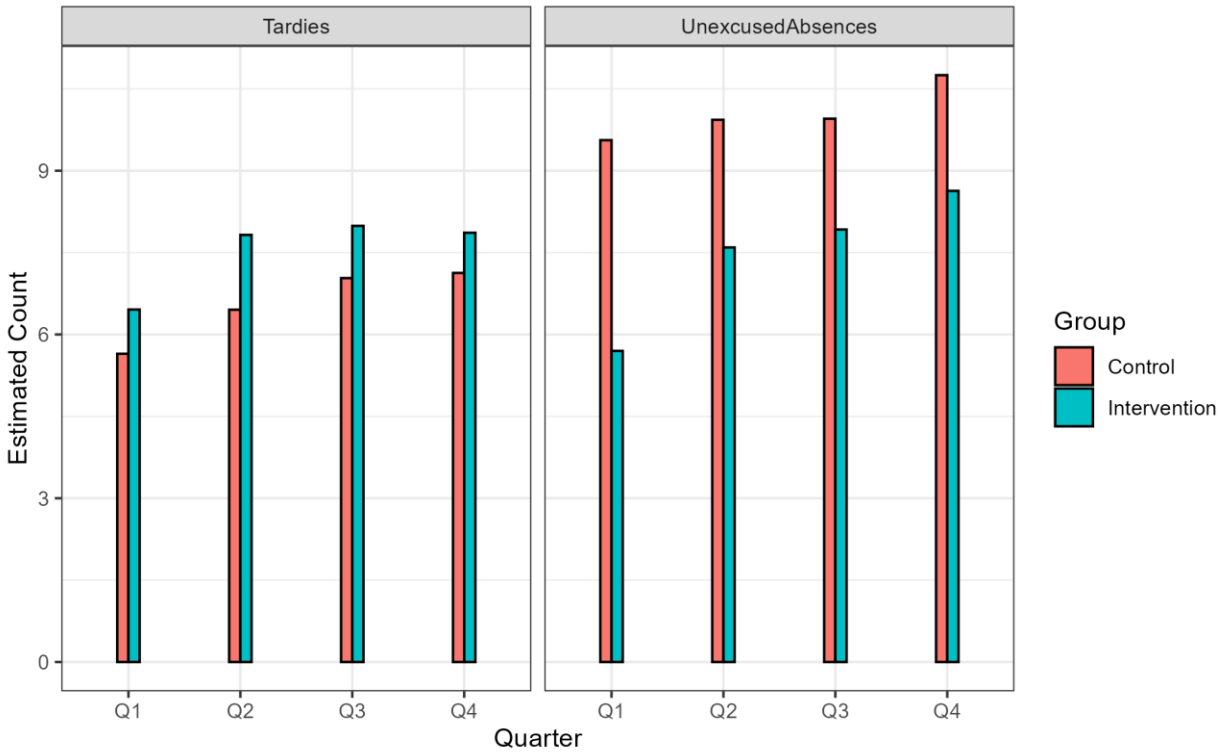
MAP ELA and Math Scores Reported for the Control and Intervention Groups Across Terms for Hypothesis 1.2



Note. Estimated MAP ELA and math Scores across different terms based on the interaction model for both intervention and control groups after averaging over grade level and controlling for other behavioral outcomes. There is potentially a data source problem from CCSD since we have the same values for both fall and winter for MAP math, so we only compared fall and spring for MAP math.

Figure 3

Tardiness and Unexcused Absences Reported for the Control and Intervention Groups Across Quarters for Hypothesis 1.2



Note. Estimated tardiness and unexcused absences across the quarters for the intervention and control groups after averaging over grade level and controlling for other behavioral outcomes.

Figure 4

MAP ELA and Math Scores Reported for the Intervention Group Across Terms for Hypothesis 2

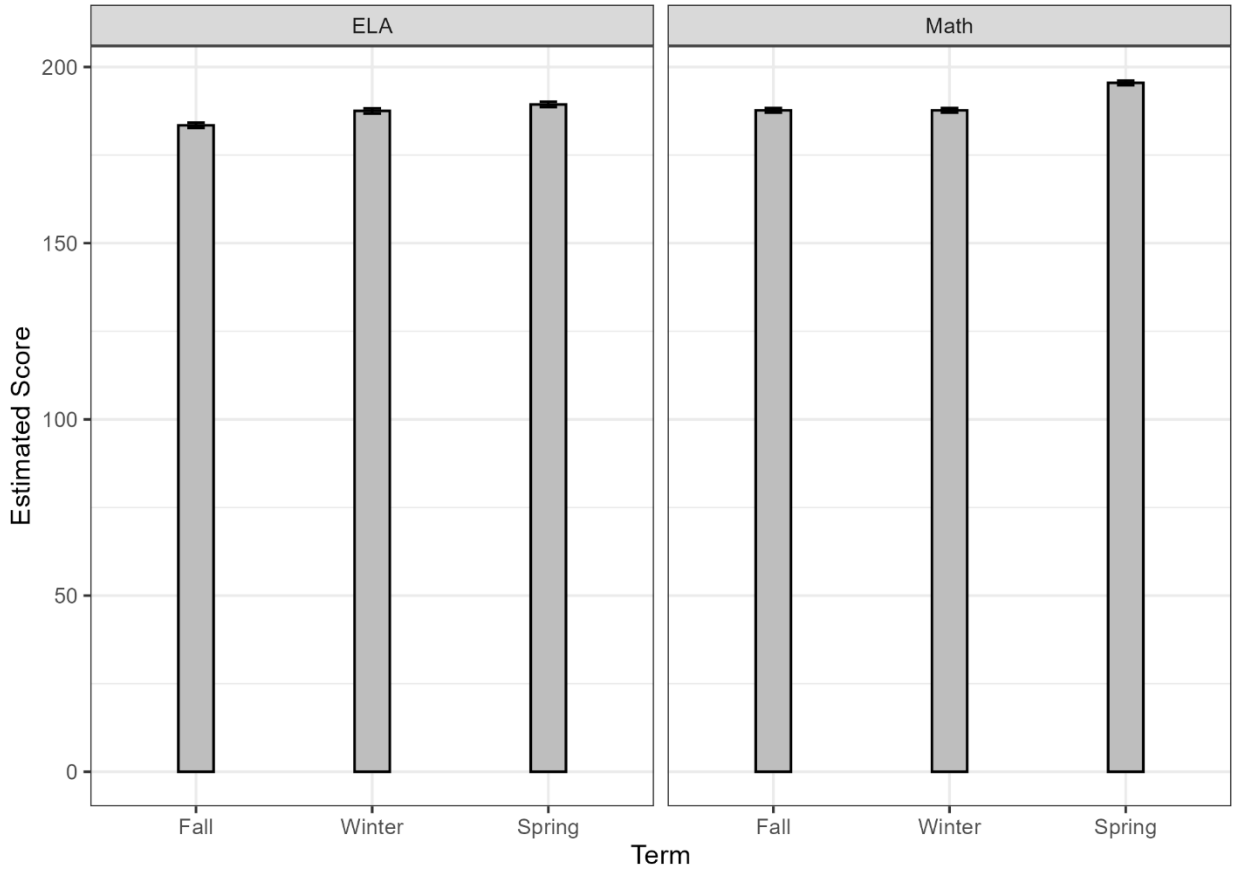


Figure 5

Tardiness and Unexcused Absences Reported for the Intervention Group Across Quarters for Hypothesis 2

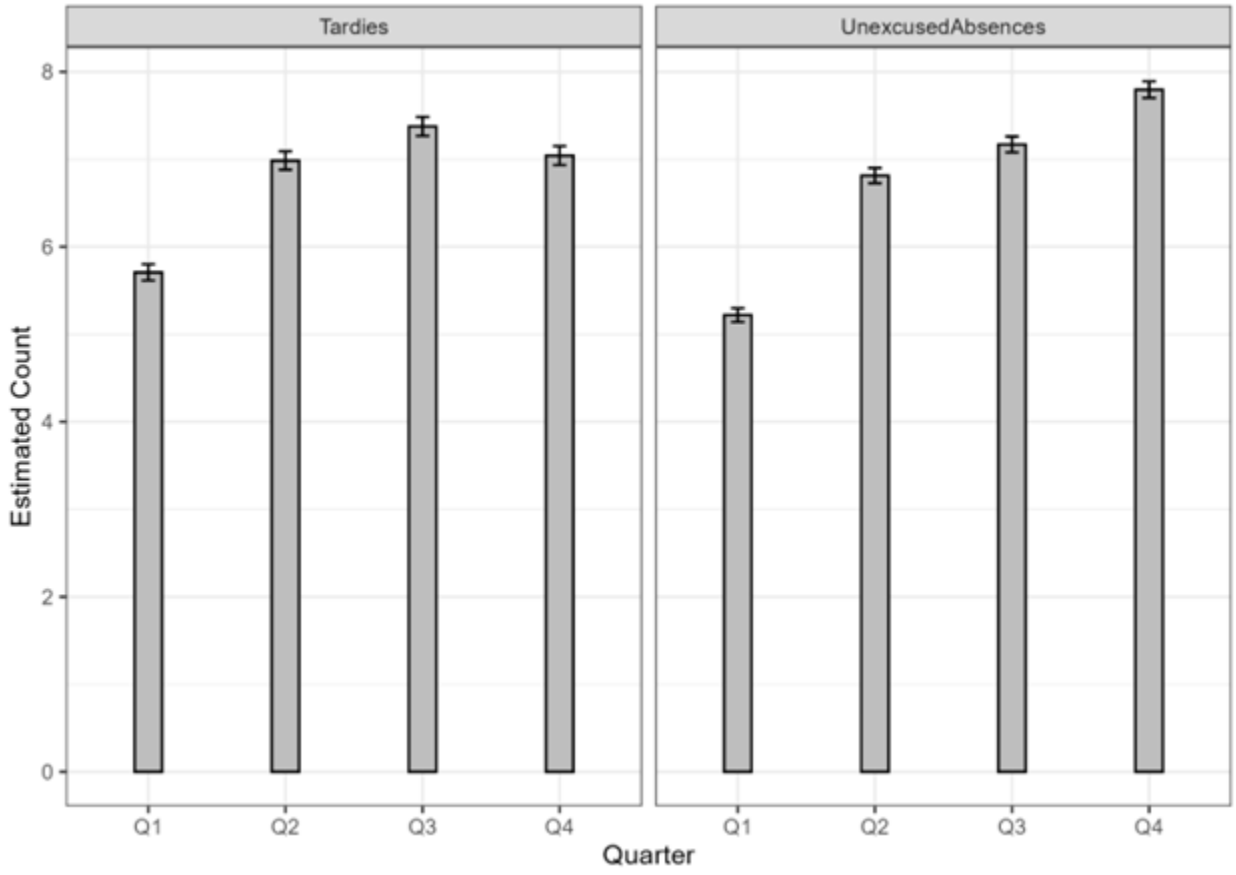
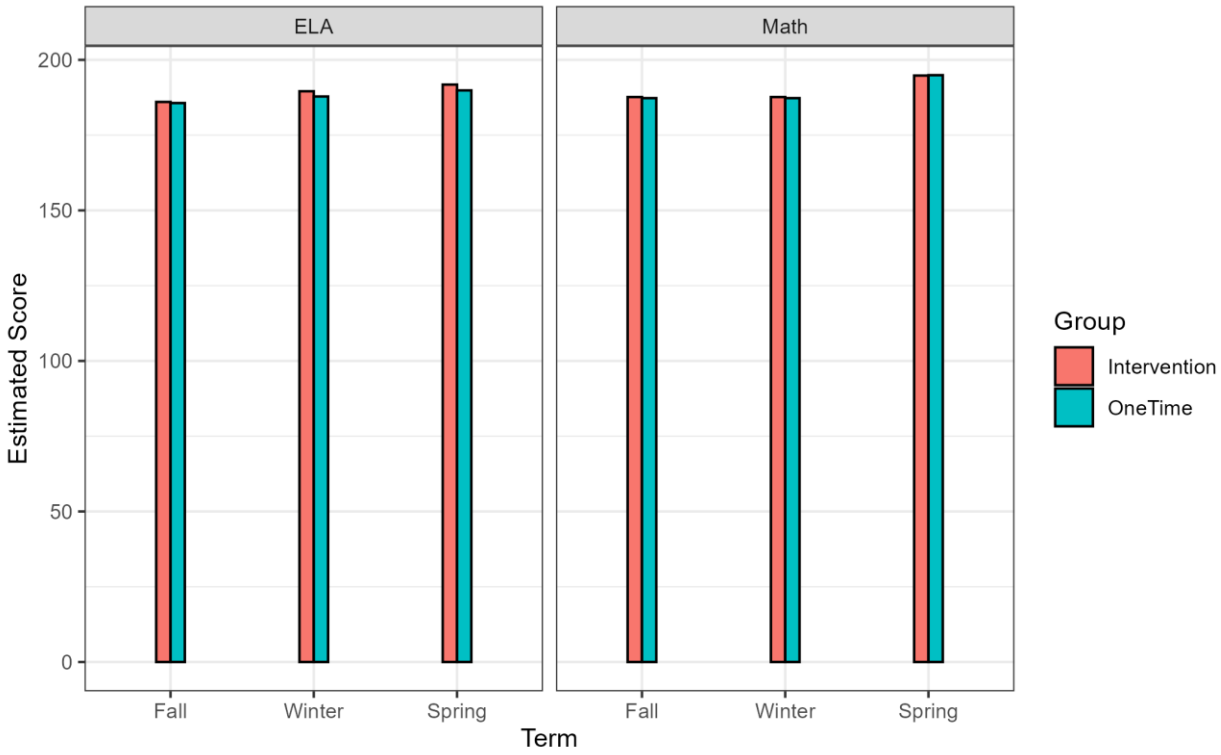


Figure 6

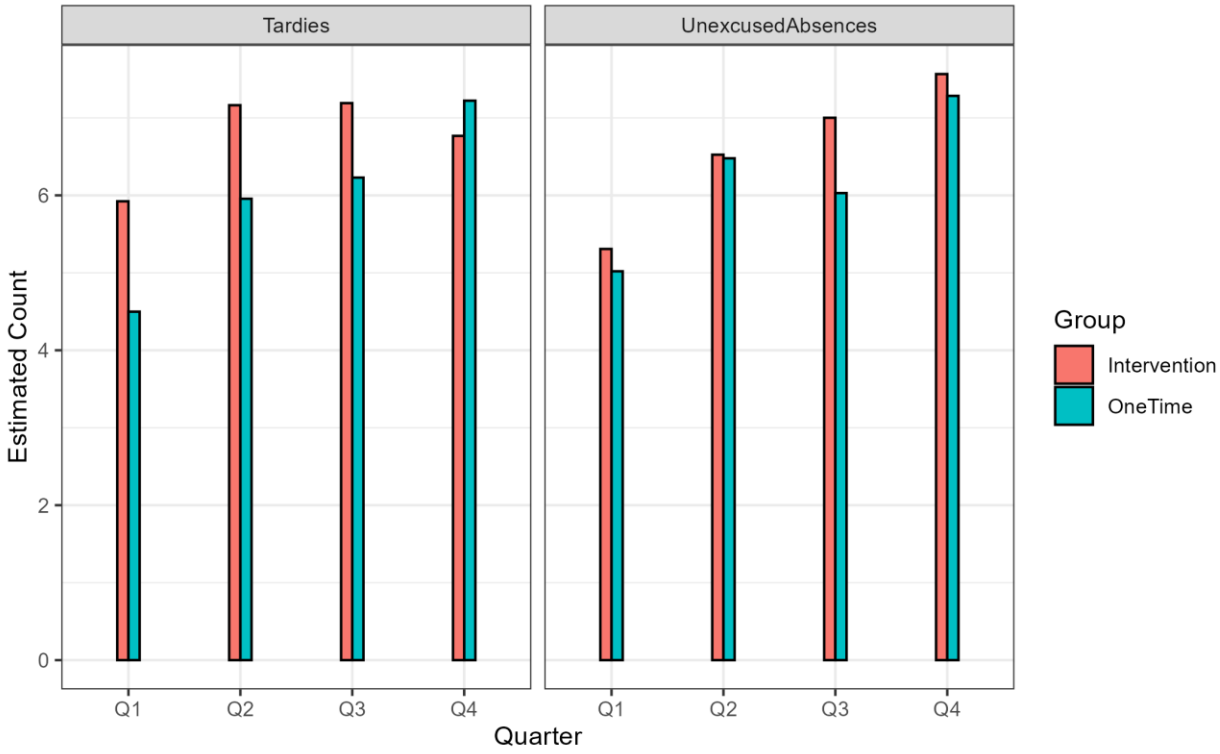
MAP ELA and Math Scores Reported for the Intervention and One-Time Intervention Groups Across Terms for Hypothesis 3



Note. Estimated MAP ELA and math Scores across different terms based on the interaction model for both intervention and one-time intervention groups after averaging over grade level and controlling for other behavioral outcomes. There is potentially a data source problem from CCSD since we have the same values for both fall and winter for MAP math, so we only compared fall and spring for MAP math.

Figure 7

Tardiness and Unexcused Absences Reported for the Intervention and One-Time Intervention Across Quarters for Hypothesis 3



Note. Estimated tardiness and unexcused absences across the quarters for the intervention and one-time intervention groups after averaging over grade level and controlling for other behavioral outcomes.