Evaluation of Catapult Learning Wraparound Supplemental Services in a Large Parochial School District

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EXECUTIVE SUMMARY

In this quasi-experimental design (QED) study, we examined the impacts of Catapult Learning's Wraparound Supplemental Educational Services program on Grades 6-8 student math and reading achievement in selected schools in a large parochial school district. The primary focus of this report was Wraparound Supplemental Educational Services' impact on NWEA MAP Growth math and reading scores, as well as associations between Wraparound Services Schools attendance metrics and achievement outcomes.

- The present study used a student-level QED design, with students from five Wraparound Services Schools identified as the treatment group. The matched comparison group consisted of students from non-Wraparound Services Schools that did not receive supplementary services. Students were matched at the individual level on the basis of prior achievement and demographic variables.
- The present study was situated in a large parochial student district. The analytic sample consisted of 385 Grades 6-8 students receiving Wraparound Services Schools services and 385 matched (non-Wraparound Services Schools) students.
- Data sources included NWEA Measures of Academic Progress (MAP) Growth math and reading scores, as well as Wraparound Services Schools attendance metrics. The main attendance metrics of interest were counts of total program sessions attended for each student, by subject.
- Impact analyses showed a significant positive impact of Wraparound Services Schools on middle school math achievement, with treatment students outperforming matched comparison students by nearly 4 points. Subgroup analyses of this sample showed additional positive impacts for Grade 7, Hispanic, female, and Title I students.
- No significant program impacts were evidenced for reading achievement, with a small directionally positive impact observed.
- Counts of total program sessions were generally not associated with math or reading achievement after controlling for prior achievement and demographic variables.

INTRODUCTION

Overview of Catapult Learning's Wraparound Services Schools

As described by the provider, Catapult Learning's Wraparound Services Schools program consists of a set of Catapult Learning core services including Professional Development Coaching, Catapult Learning Intervention Curriculum (AchieveLiteracy/Math), Counseling, and Special Education services. Wraparound Services Schools are considered to be those that receive all of these services.

Catapult Learning's instructional curricula is systematic, intensive, and explicit and is built on the critical components of effective programs, as reviewed in current research, including the National Reading Panel and the National Council of Teachers of Mathematics. Core program materials include:

- Proprietary and Third-Party Assessments
- Grade-Appropriate, High Interest Texts developed specifically for intervention (AchieveLiteracy)
- Structured Phonics Lessons and Manipulatives
- Systematic and Explicit Literacy Instruction, including Writing
- Explicit and Systematic Math Lessons
- Manipulatives (Math)

The AchieveLiteracy program provides Catapult Learning teachers with proven research-based lessons that include high-quality routines and strategies to increase independence and accelerate literacy learning. Highly-trained intervention teachers create comfortable and supportive learning environments by modeling and encouraging students to use existing knowledge to understand new concepts. Instructional techniques include providing immediate feedback, choosing appropriate independent reading and instructional texts based on students' needs, differentiating and scaffolding instruction, as well as explicitly teaching critical thinking skills to increase students' self-confidence, independence, and motivation to read, write, listen, and speak.

Some additional aspects of AchieveLiteracy include:

- A library of culturally-relevant and developmentally-appropriate texts designed specifically for intervention.
- Student Resource Books and student manipulatives.
- Delivered in a small-group setting (no more than 8:1 student-to-teacher ratio).
- Developed using proven, research-based routines and strategies to accelerate students' literacy achievement.

AchieveMath provides systematic and explicit instruction to improve students' math skills, math literacy, and confidence. The program assists students in transferring and applying newly learned skills in the classroom. Teachers introduce concepts with

concrete manipulatives followed by pictorial representations and algorithms. Math skills are presented sequentially within and across grade levels.

Additional aspects of AchieveMath include:

- Designed to increase struggling students' math skills, number sense, and math fluency.
- Delivered in a small group setting, with no more than an 8:1 student-to-teacher ratio, using proven, research-based math instruction.
- Includes a significant amount of grade-level appropriate manipulatives.
- Correlated to NCTM Standards, and draws upon findings of the National Research Council and the National Math Panel.

Catapult Learning's Counseling services work with school staff, parents, and the community to create a caring environment where students become healthy, competent, and confident learners. Catapult's credentialed, master's level counselors supplement counseling staff and can provide turnkey counseling for students or groups of students who need extra support for behavioral, academic, social, and emotional challenges. Counseling services will include parents and teachers when appropriate. Special Education provides accommodations and/or modifications to meet the unique needs of an individual student with a disability. A student that receives these services will have an Individual Service Plan (ISP) that outlines services needed, and current performance and needs.

Overview of the Evaluation

In 2024, Catapult Learning contracted with CRRE to conduct a quasi-experimental design (QED) to study the impact of the Wraparound Supplemental Educational Services program on math and reading achievement within a large parochial school district. The specific research interest was to determine the impacts of the Wraparound Supplemental Educational Services program on Grades 6-8 students' math and reading achievement growth. Math and reading achievement gains of students who attended Wraparound Services Schools were compared to those of demographically matched students attending schools that did not provide this suite of services.

The present study used a quasi-experimental design (QED) to examine these research questions:

1. What is the impact of the Wraparound Supplemental Educational Services program (WS) on student achievement in reading and math as measured by the NWEA MAP assessment?
    a. How do the impacts of WS on each subject vary by student characteristics (e.g., gender, ethnicity, baseline achievement, and grade level)?
2. To what extent is higher program usage (e.g., student program attendance and/or other data on scope of services and teacher/student engagement) associated with stronger student outcomes in each subject?

METHOD

Research Design

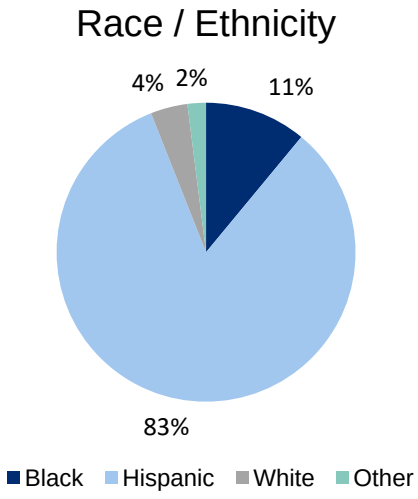
This study examined the efficacy of the Wraparound Supplemental Educational Services program by conducting a prospective quasi-experimental design on Grades 6-8 district students during the 2023-24 school year. Outcome measures for this study included NWEA MAP Growth math and reading scores. The main impact analyses examined differences in math and reading score growth patterns for students in Wraparound Services Schools and matched-comparison students in schools that did not use all of the WS Schools' services. Supplemental analyses were also conducted to examine the associations between program dosage variables (i.e., days of attendance) and achievement gains.

Participants

Details about study participants are presented below.

Math	5 WS Schools	388 Grades 6-8 students
Reading	5 WS Schols	316 Grades 6-8 students

Demographic snapshot of student participants:



The study took place in middle schools within a large parochial school district. Separate analytic samples were considered for math and reading analyses. Demographics of the

analytic samples are presented in Table 1 and 2 below. In both samples, 1:1 propensity-score matching on the basis of prior achievement and demographic variables (described in more detail below) was used to select a sample of equivalent comparison students from the overall pool of nearly 17,000 potential comparison students.

Table 1
Demographics of Analytic Sample - Math Analyses

	Treatment %	Matched Comparison%
Female	50.00	51.03
Black	11.34	10.82
White	3.61	3.61
Hispanic	82.47	81.96
Other Race/Ethnicity	2.58	3.61
Title I	77.32	79.38
n	194	194

Table 2
Demographics of Analytic Sample - Reading Analyses

	Treatment %	Matched Comparison%
Female	49.37	50.00
Black	13.29	11.39
White	4.43	4.43
Hispanic	80.38	82.91
Other Race/Ethnicity	1.90	1.27
Title I	79.75	77.85
n	158	158

Across both samples, sample composition was similar across conditions. A strong majority of students (>75%) were Hispanic, followed by small percentages of Black, White, and Other Race students. More than 75% of each sample were economically disadvantaged. No significant differences were observed across conditions on any of the provided demographic variables. It is important to note that the district did not provide variables related to special education or English-Learning status; thus, we cannot report on differences on those variables between conditions or across samples.

Measures

In order to address the research questions, the study team analyzed NWEA MAP Growth math and reading scores from fall 2023 and spring 2024, as well as student-level PS program usage metrics (see Table 3).

Table 3
Research Questions with Data Sources and Measures

Research Questions	NWEA MAP Scores	Program Usage Metrics
1. What is the impact of the Wraparound Supplemental Educational Services program on student achievement in reading and math as measured by the NWEA MAP assessment?	✓	
2. To what extent is higher program usage (e.g., student program attendance and/or other data on scope of services and teacher/student engagement) associated with stronger student outcomes in each subject?	✓	✓

Data sources and measures for the current study included student achievement and demographics, as well as WS program usage metrics, as described below.

NWEA MAP Growth. The school district (through Catapult Learning) provided CRRE with 2023-24 BOY and EOY NWEA MAP mathematics and reading assessment scores for all Grades 6-8 students. MAP Growth scores are vertically scaled so that scores can be directly compared across grade levels. Demographic data including gender, race/ethnicity, and Title I status (which served as an economically disadvantaged proxy variable) were also included with MAP data files.

Premier School Metrics. Catapult Learning provided CRRE with various student-level WS usage metrics, including counts of instructional attendance days (for the AchieveMath/Literacy component), as well as dates of the first and last session attendances. Attendance data were used to examine associations of different dosages of Premier School usage with math and reading achievement gains.

Analytical Approach

Data for students in Grades 6-8 were analyzed descriptively by examining patterns in NWEA MAP Growth scores and attendance. Multiple Linear Regression (MLR) was used to determine impacts of Wraparound Services Schools on MAP Growth score gains, as well as to determine relationships between Wraparound Services Schools attendance and MAP Growth score gains. Demographic variables such as gender and race/ethnicity were included in all models, as well as dummy variables for student grade levels.

The treatment sample consisted of less than 200 students for each subject, while data from more than 17,000 comparison students were available for analysis. Thus, propensity score matching (PSM) was used to create comparison groups of students that were as similar as possible to treatment students (see Tables 1 and 2). Matching was conducted on the basis of Fall 2023 enrollment and demographic data and was conducted prior to Spring 2024 MAP scores being available. Propensity scores were

computed using the psmatch2 command in Stata (v 18.0); one-to-one matching without replacement was used for all samples. The result of these PSM procedures was that treatment students were matched with comparison students who were as similar as possible in terms of prior MAP achievement and demographic variables, allowing for a more rigorous contrast of treatment and comparison students. The matched samples demonstrated baseline equivalence overall and across all grade levels. Overall baseline equivalence for all samples can be found in Table 4. After PSM was applied to both samples, standardized mean differences were below 0.05 SDs across all samples, well below the WWC's 0.25 SD cutoff. Attrition was minimal across both samples; full attrition tables can be found in Appendix A.

Table 4

Baseline Equivalence, MAP Growth Scores, by Subject

Analytic Sample	All students	Treatment			Comparison			Standardized Mean Difference
	n	*n*	*M*	*SD*	*n*	*M*	*SD*	*M*
Math	388	194	217.44	16.18	194	218.06	15.72	-.04
Reading	316	158	209.42	15.42	158	208.82	15.08	-.03

RESULTS

This section of the report begins with findings related to Wraparound Services Schools' impact on MAP math and reading scores. We then present results relating to associations between WS session attendance variables and math and reading achievement gains. Note that unadjusted descriptive analyses of MAP Growth scores and Premier School session attendance variables can be found in Appendix A.

Wraparound Services Schools Achievement Impacts

RQ. 1 What is the impact of the Wraparound Supplemental Educational Services program on student achievement in reading and math as measured by the NWEA MAP assessment?

Key Findings

- Middle-school students in Wraparound Services Schools significantly outscored matched comparison students on the MAP math assessment, with WS students outscoring matched comparison students by nearly 4 points.

- No significant impact was evidenced in middle school reading analyses, though the impact was directionally positive for WS students.
- Subgroup analyses showed significant positive WS impacts on math achievement for Grade 7, Hispanic, female, and Title I students.

Math Impact Analyses

This set of analyses focuses on the impact of Wraparound Services Schools on spring 2024 NWEA MAP Growth math scores. This analysis was grand-mean centered to enable interpretation of the intercept. The results of this analysis can be found in Table 5.

Table 5
Impact Analysis of Wraparound Services Schools on Spring 2024 NWEA MAP Growth Math Scores

Variable	Estimate	Standard error	*p* value	Effect Size
WS Schools	3.755***	0.867	<.001	0.21
Constant	225.383***	0.613	<.001	
Student *n*	385			

Note. *** $p < .001$.

The Wraparound Supplemental Educational Services program was shown to have a statistically significant positive impact on NWEA MAP math scores for middle school students. The regression estimate can be interpreted as the average difference in spring 2024 MAP Growth scores between treatment and matched comparison students. Thus, middle school PS students outscored matched middle school comparison students by more than 3.7 points on the spring MAP math assessment, controlling for prior achievement and demographic variables. The effect size of .21 SDs is indicative of a medium-to-large practical impact of Wraparound Services Schools on MAP math scores (Kraft, 2020).

Subgroup analyses. We also conducted subgroup analyses examining WS impacts of NWEA MAP math scores. We report the additive impacts of treatment main effects plus interaction terms for each subgroup of interest, with Wald tests performed on each simple effect. Complete regression tables related to subgroup analyses can be found in Appendix B. Table 6 shows the results of subgroup analyses for middle school students.

Table 6
Subgroup Analysis Results, Wraparound Services Schools Impacts on NWEA MAP Growth Math Scores

Subgroup	Estimate	*p* value	*n*

Grade 6	2.410	.103	133
Grade 7	4.796**	.001	147
Grade 8	3.998*	.016	105
Hispanic	3.802***	<.001	317
Black	1.398	.590	43
Female	4.503***	<.001	196
Title I	3.749***	<.001	301

Note. * $p < .05$; ** $p < .01$; *** $p < .001$.

Subgroup analytic models including interaction terms of treatment by student subgroup indicator variables revealed no significant interactions. Follow-up regression analyses of each subgroup, however, individually revealed statistically significant WS impacts for Grades 7 and 8 students, as well as Hispanic, female, and Title I eligible students. WS impacts for these subgroups averaged between 4-5 points, building on the results of the main impact analyses.

Reading Impact Analyses

This set of analyses focuses on the impact of Wraparound Services Schools on spring 2024 NWEA MAP Growth reading scores. As with the math analysis, this impact analysis was grand-mean centered to enable interpretation of the intercept. The results of this analysis can be found in Table 7.

Table 7
Impact Analysis of Wraparound Services Schools on Spring 2024 NWEA MAP Growth Reading Scores

Variable	Estimate	Standard error	*p* value	Effect Size
WS Schools	0.893	0.978	.362	.07
Constant	214.843***	0.690	<.001	
Student *n*	313			

Note. *** $p < .001$.

No statistically significant impact of the Wraparound Supplemental Educational Services program was found in the MAP reading analysis. Results were generally equivocal, with treatment students slightly outperforming comparison students in middle school grades.

Subgroup analyses. As with the math analyses, we also conducted subgroup analyses examining WS impacts across a variety of student subgroups. No significant subgroup impacts on reading achievement were observed across either sample. Full subgroup regression tables can be found in Appendix B.

Wraparound Services Attendance and Achievement Associations

RQ 2. To what extent is higher program usage (e.g., student program attendance) associated with stronger student outcomes in each subject?

Key Findings

- Session attendance metrics were generally not significantly associated with math or reading achievement gains.
- Impacts of program usage meeting recommended attendance guidelines were generally slightly more positive than overall program impacts.

In this section we present the results of correlational analyses examining associations between PS attendance variables and math and reading achievement gains. This is followed by supplementary regression analyses examining WS impacts for students who met Catapult Learning's recommended program attendance guidelines.

Associations Between Program Attendance and Achievement

We begin by showing the results of descriptive analyses of student attendance in both AchieveLiteracy and AchieveMath in the 2023-24 school year. It is important to remember that attendance refers to days of student attendance and participation in Catapult's AchieveLiteracy or AchieveMath curriculum. The results of these analyses are shown in Tables 8 and 9.

Table 8
Wraparound Services Schools Math Attendance, by Grade Level

Grade Level	Mean	SD	Minimum	Maximum	*N*
Grade 6	27.24	21.27	0	71	67
Grade 7	21.83	16.73	0	56	72
Grade 8	14.25	16.71	3	74	53

Table 9
Wraparound Services Schools Reading Attendance, by Grade Level

Grade Level	Mean	SD	Minimum	Maximum	*N*
Grade 6	25.96	18.98	0	58	46
Grade 7	14.86	14.97	1	51	59
Grade 8	12.07	15.57	1	52	44

Attendance metrics were highest for Grade 6 students, and generally decreased across

grade levels. This drop was more pronounced with reading attendance, and especially with students in Grades 7 and 8. Program attendance counts were generally normally distributed across grade levels and subjects, although Grades 7 and 8 reading attendance metrics were somewhat positively skewed.

Next, we show the results of Pearson correlations showing the associations between days of program attendance and spring 2024 MAP Growth scores. Table 10 shows unadjusted Pearson correlations between math attendance and achievement, while Table 11 shows unadjusted Pearson correlations between reading attendance and achievement.

Table 10

Associations Between Wraparound Supplemental Educational Services Program Attendance and MAP Math Scores by Grade

Grade Level	*R*	*p* value	*n*
Grade 6	-.14	.25	67
Grade 7	-.48***	<.001	71
Grade 8	-.45***	<.001	53
All Middle	-.41***	<.001	191

Note. *** $p < .001$.

Table 11

Associations Between Wraparound Supplemental Educational Services Program Attendance and MAP Reading Scores by Grade

Grade Level	*R*	*p* value	*n*
Grade 6	-.22	.14	46
Grade 7	-.36**	.006	58
Grade 8	-.43**	.003	44
All Middle	-.39***	<.001	148

Note. ** $p < .01$; *** $p < .001$.

Across both subjects, associations between WS attendance and spring achievement scores were generally significantly negative for middle school students, with magnitudes of associations ranging from .36 to .48, indicating moderate negative associations between attendance and achievement scores.

We also conducted regression analyses examining the associations between counts of program attendance days and achievement. These regression analyses were similar to the main impact analyses, with the treatment variable replaced by the count of program attendance days. These analyses were conducted only on the treatment student samples. The results of these analyses are found in Table 12.

Table 12

Associations Between Program Attendance and Achievement

Subject	Estimate	Standard Error	*p* value
Math	0.038	0.040	.332
Reading	0.093	0.050	.067

Counts of program attendance days were not significantly associated with math or reading achievement after controlling for prior achievement and demographic variables. Magnitudes of these impacts were generally quite small. Interestingly, the results of these analyses show the negative associations found in the previous correlational analyses disappearing. Taken together with the prior correlational analyses, there is little evidence that Wraparound Supplemental Educational Services program attendance data is associated with math or reading achievement gains.

Wraparound Services Schools Students Meeting Recommended Guidelines

We conclude by conducting supplementary analyses examining the impacts of Wraparound Services Schools for students who meet Catapult Learning's recommended guidelines on math and reading achievement. Catapult recommends that students attend at least 30 sessions of the AchieveMath program and 40 sessions of the AchieveLiteracy program. Thus, we defined "meeting recommended guidelines" as students in the math sample who attended at least 30 sessions and students in the reading sample who attended at least 40 sessions. Table 13 shows the percentages of each analytic sample who met Catapult's recommended guidelines.

Table 13
Percentages of Students Meeting Usage Guidelines, by Subject

Grade Band	% Meeting Guidelines	Total *n*
Math	33%	194
Reading	17%	158

A larger percentage of students in the math program reached recommended usage guidelines than in the reading/literacy program. Across the entire middle school sample, a majority of students did not reach recommended usage guidelines, with only one-third of math students and less than one-fifth of reading students meeting usage targets.

Next, we examined Wraparound Supplemental Educational Services program impacts for students who met usage guidelines. These analyses are similar to the main impact analyses, with the only difference being that only treatment students who met usage guidelines are included in these analyses. The results of these analyses are shown in Table 14.

Table 14
Wraparound Services Schools Impacts on MAP Math and Reading Scores (WS Students Meeting Usage Guidelines Only)

Grade Band	Estimate	Standard Error	*p* value
Math	4.911***	1.314	<.001
Reading	1.130	1.988	.570

Note. *** $p < .001$.

Impact estimates from these analyses were generally similar to those observed in the main impact analyses. The WS impact on math achievement for students meeting usage guidelines was still significantly positive, with these students outgaining matched comparison students by nearly 5 points. The impact for reading was not statistically significant, although directionally positive. In all, meeting WS usage guidelines did not appear to considerably change patterns of program impacts.

DISCUSSION

The purpose of the present study was to evaluate the efficacy of Catapult Learning's Wraparound Supplemental Educational Services program in a large parochial school district. The main outcome measures included NWEA MAP Growth math and reading scores. Wraparound Services Schools' attendance data were also analyzed, as associations between program attendance and achievement were examined in this study. Findings from impact analyses and supplemental correlational analyses relating to attendance and achievement were presented in this report.

Main Achievement Impacts

Results of the main impact analyses showed a significant positive impact of Wraparound Services Schools on NWEA MAP math scores for middle school students, with treatment students in this grade band outperforming matched comparison students by nearly 4 points. The effect size of this impact was .21 SDs, indicating a medium-to-large practical impact of Wraparound Services Schools on middle school math achievement. The other impact analyses on middle school reading achievement showed a directionally positive, but not statistically significant impact. Subgroup analyses showed significant positive Wraparound Services Schools impacts on math achievement in middle school for Grade 7, Hispanic, female, and Title I students. No other significant subgroup impacts were observed for reading achievement.

Program Attendance Associations

Correlational analyses showed no significant positive associations between Wraparound Supplemental Educational Services program attendance variables and student achievement. However, negative Pearson correlations were observed in middle school for both math and reading. Interestingly, regression analyses controlling for prior achievement and demographic variables also showed no significant associations between program attendance and math or reading achievement in either a positive or negative direction. Additional supplemental regression analyses examining program impacts for students who met program attendance guidelines showed similar patterns of program impacts in relation to the main impact analyses.

Conclusion

Results of this evaluation showed a statistically significant positive impact of the Wraparound Supplemental Educational Services program on middle school math achievement, with treatment students significantly outperforming matched comparison students on the NWEA MAP math assessment. This finding gives evidence supporting the efficacy of Wraparound Services Schools on math achievement at the middle school level that we believe meets ESSA Tier 2 criteria. Subgroup analyses showed additional positive impacts for Hispanic, female, and Title I students. It is important to consider that this study took place in a small number of schools across a large parochial school district. Thus, results of this study may not generalize to other student populations or school contexts. More research across different school contexts is encouraged to enhance the generalizability of these results.

APPENDIX A: Descriptive Achievement Analyses

Table A1

Summary of Student Attrition

Sample	Comp. N	Treat N	Matched C	Matched T	Attrited C Students	Attrited T Students	Overall Attrition	Diff. Attrition
Math	192	193	194	194	2	1	0.77	0.52
Reading	157	156	158	158	1	2	0.95	0.63

Table A2

Average MAP Growth Math Scores, by Grade Level, Middle Grades

Group	Pretest	Posttest	Change
Grade 6			
Treatment (*n* = 67)	208.55	218.87	10.32
Matched Comparison (*n* = 66)	209.98	216.73	7.75
Grade 7			
Treatment (*n* = 73)	218.92	230.86	11.94
Matched Comparison (*n* = 74)	220.24	227.32	7.08
Grade 8			
Treatment (*n* = 53)	226.53	238.51	11.98
Matched Comparison (*n* = 52)	226.83	234.57	7.74
All			
Treatment (*n* = 193)	217.41	228.80	11.39
Matched Comparison (*n* = 192)	218.16	225.72	7.56

Table A3

Average MAP Growth Reading Scores, by Grade Level, Middle Grades

Group	Pretest	Posttest	Change
Grade 6			
Treatment (*n* = 48)	203.58	210.46	6.88
Matched Comparison (*n* = 48)	203.50	212.15	8.65
Grade 7			
Treatment (*n* = 64)	210.36	217.02	6.66
Matched Comparison (*n* = 65)	211.08	216.46	5.38
Grade 8			
Treatment (*n* = 44)	214.80	219.00	4.20
Matched Comparison (*n* = 44)	215.48	16.03	0.55
All			
Treatment (*n* = 156)	209.53	215.56	6.03
Matched Comparison (*n* = 157)	209.99	215.02	5.03

APPENDIX B: Full Math Subgroup Regression Analyses

Table B1

Grade Level Subgroup Analysis of Wraparound Services School Impacts on Spring 2024 MAP Math Scores, Middle Grades

Variable	Estimate	Standard error	*p* value
WS (Grade 7)	4.796**	1.404	.001
WS*Grade 6	-2.387	2.039	.242
WS*Grade 8	-0.799	2.173	.713
Constant	225.386***	0.614	<.001
N	385		

Note. ** $p < .01$; *** $p < .001$.

Table B2

Hispanic Subgroup Analysis of Wraparound Services School Impacts on Spring 2024 MAP Math Scores, Middle Grades

Variable	Estimate	Standard error	*p* value
WS	3.534	2.070	.089
WS*Hispanic	0.268	2.279	.906
Constant	225.383***	0.614	<.001
N	385		

Note. *** $p < .001$.

Table B3

Black Subgroup Analysis of Wraparound Services School Impacts on Spring 2024 MAP Math Scores, Middle Grades

Variable	Estimate	Standard error	*p* value
WS	4.049***	0.919	<.001
WS*Black	-2.651	2.752	.336
Constant	225.387***	0.613	<.001
N	385		

Note. *** $p < .001$.

Table B4

Gender Subgroup Analysis of Wraparound Services School Impacts on Spring 2024 MAP Math Scores, Middle Grades

Variable	Estimate	Standard error	*p* value
WS	2.975*	1.243	.017
WS*Gender	1.528	1.746	.382
Constant	225.389***	0.613	<.001
N	385		

Note. * $p < .05$; *** $p < .001$.

Table B5

Title I Subgroup Analysis of Wraparound Services Schools Impacts on Spring 2024 MAP Math Scores, Middle Grades

Variable	Estimate	Standard error	*p* value
WS	3.774*	1.862	.043
WS*Title I	-0.024	2.104	.991
Constant	225.383***	0.614	<.001
N	385		

Note. * $p < .05$; *** $p < .001$.

Appendix C: Full Reading Subgroup Regression Analyses

Table C1

Grade Level Subgroup Analysis of Wraparound Services School Impacts on Spring 2024 MAP Reading Scores, Middle Grades

Variable	Estimate	Standard error	*p* value
WS (Grade 7)	1.068	1.517	.482
WS*Grade 6	-2.798	2.321	.229
WS*Grade 8	2.437	2.385	.308
Constant	214.842***	0.687	<.001
N	313		

Note. *** $p < .001$.

Table C2

Hispanic Subgroup Analysis of Wraparound Services School Impacts on Spring 2024 MAP Reading Scores, Middle Grades

Variable	Estimate	Standard error	*p* value
WS	1.504	2.303	.514
WS*Hispanic	-0.746	2.545	.770
Constant	218.838***	0.691	<.001
N	313		

Note. *** $p < .001$.

Table C3

Black Subgroup Analysis of Wraparound Services School Impacts on Spring 2024 MAP Reading Scores, Middle Grades

Variable	Estimate	Standard error	*p* value
WS	0.897	1.045	.392
WS*Black	-0.030	3.019	.992
Constant	214.843***	0.691	<.001
N	313		

Note. *** $p < .001$.

Table C4

Gender Subgroup Analysis of Wraparound Services School Impacts on Spring 2024 MAP Reading Scores, Middle Grades

Variable	Estimate	Standard error	*p* value
WS	0.270	1.389	.846
WS*Gender	1.250	1.980	.528
Constant	214.845***	0.691	<.001
N	313		

Note: *** $p < .001$.

Table C5

Title I Subgroup Analysis of Wraparound Services Schools Impacts on Spring 2024 MAP Reading Scores, Middle Grades

Variable	Estimate	Standard error	*p* value
WS	2.275	2.119	.284
WS*Title I	-1.759	2.393	.463
Constant	214.851***	0.691	<.001
N	313		

Note. *** $p < .001$.