

Supplement to Appendix C. Chapter 3: Summary of HLM and Regression Analyses

Table C3.16. Center-Level Relationships between Point-of-Service Quality Areas and Texas ACE Program Attendance Outcomes – Middle and High School Centers

Point-of-Service Quality Area	Hours		Duration		# of Activities		Sustained Attendance	
	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
Program Process Quality (as measured by PQA)								
Total Score	-0.241	> .10	-0.169	> .10	0.609	> .10	-0.310	> .10
Supportive Environment	-0.605	> .10	-0.051	> .10	0.662	> .10	-0.031	> .10
Interaction	0.945	> .10	0.280	> .10	-0.562	> .10	-0.339	> .10
Engagement	-0.568	> .10	-0.445	> .10	0.294	> .10	0.043	> .10
Program Content-Specific Practices (as measured by APT-O)								
Reading Practices	0.017	> .10	0.013	> .10	0.041	> .10	0.064	> .10
Reading Practices – Staff-based	-0.074	> .10	0.005	> .10	0.037	> .10	0.098	> .10
Reading Practices – Youth-based	0.079	> .10	-0.003	> .10	0.067	> .10	0.143	> .10
Writing Practices	-0.015	> .10	-0.012	> .10	0.013	< .05	-0.101	> .10
Writing Practices – Staff-based	0.013	> .10	0.015	> .10	0.067	> .10	0.133	> .10
Writing Practices – Youth-based	0.006	> .10	-0.017	> .10	-0.146	> .10	-0.534	> .10
Verbal Communication Practices	-0.047	< .05	-0.012	> .10	-0.003	> .10	0.002	> .10
Verbal Communication Practices – Staff-based	-0.042	> .10	-0.033	> .10	-0.036	> .10	-0.054	> .10
Verbal Communication Practices – Youth-based	-0.027	> .10	0.032	> .10	0.021	> .10	-0.025	> .10
Mathematics Practices	-0.012	> .10	-0.003	> .10	0.015	> .10	0.018	> .10

Table C3.16. (Continued): Center-Level Relationships between Point-of-Service Quality Areas and Texas ACE Program Attendance Outcomes – Middle and High School Centers

Point-of-Service Quality Area	Hours		Duration		# of Activities		Sustained Attendance	
	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
Mathematics Communication and Reasoning Practices – Staff-based	-0.126	> .10	-0.045	> .10	-0.006	> .10	-0.144	> .10
Mathematics Communication and Reasoning Practices – Youth-based	-0.022	> .10	0.038	> .10	0.187	> .10	0.190	> .10
Mathematics – Problem Solving – Staff-based	0.076	> .10	-0.016	> .10	-0.067	> .10	-0.168	> .10
Mathematics – Problem Solving – Youth-based	0.134	> .10	0.022	> .10	-0.186	> .10	0.300	> .10

Source. Tx21st Student Tracking System and Public Education Information Management System, 2016–17 to 2018–19. 238 scored PQA and APT-O assessments, 2017–2019.

Note. ACE refers to Afterschool Centers on Education.

Table C3.17. Center-Level Relationships between Organizational Processes and Texas ACE Program Attendance Outcomes – Middle and High School Centers

Organizational Process	Hours		Duration		# of Activities		Sustained Attendance	
	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
Program Goals								
Provide academic and creative enrichment opportunities	0.171	> .10	0.290	< .01	-0.332	> .10	1.376	< .05
Facilitate parental involvement	-0.018	> .10	0.029	< .01	0.032	> .10	-0.307	> .10
Build social and emotional learning skills	0.752	< .05	0.391	> .10	-0.222	> .10	0.480	> .10
Provide a safe learning environment	0.376	> .10	0.016	> .10	-0.014	> .10	-0.116	> .10
Address behavioral issues	-0.236	> .10	0.139	> .10	0.410	> .10	-0.104	> .10
Improve grade promotion and graduation rates	0.222	> .10	0.092	> .10	0.049	> .10	-0.099	> .10
Target Population								
Target academically at-risk students	0.238	> .10	0.019	> .10	-0.403	> .10	0.396	> .10
Broader target population	-0.429	> .10	-0.114	> .10	-0.235	> .10	-0.382	> .10
Advisory Board Practices								
General guidance and feedback	0.080	> .10	0.047	> .10	0.608	> .10	-0.019	> .10
Operational input	-0.517	> .10	-0.322	< .05	0.199	> .10	-1.231	< .10
Planning input	0.415	> .10	0.149	> .10	-0.351	> .10	0.220	> .10
Programming input	0.008	> .10	0.002	> .10	-0.222	> .10	-0.136	> .10
Programming for Parents and Adult Family Members								
ESL Classes	0.219	> .10	-0.162	< .10	-0.301	> .10	-0.029	> .10
GED Classes	-0.599	< .10	-0.073	> .10	0.481	> .10	0.139	> .10

Table C3.17. (Continued): Center-Level Relationships between Organizational Processes and Texas ACE Program Attendance Outcomes – Middle and High School Centers

Organizational Process	Hours		Duration		# of Activities		Sustained Attendance	
	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
Data Use and Evaluation								
Working with an external evaluator	-0.244	> .10	-0.182	> .10	-0.237	> .10	-0.339	> .10
Periodic review of program data	-0.500	> .10	-0.124	> .10	0.273	> .10	0.186	> .10
Obtaining youth input on programming	-0.069	> .10	-0.263	> .10	-0.008	> .10	-0.740	> .10
Use of PQA/other observational rubrics	0.104	> .10	0.154	> .10	0.286	> .10	0.312	> .10
Staffing or Operational Practice								
Mostly staffed by school-day teachers	0.150	> .10	0.075	> .10	-0.121	> .10	0.421	> .10
High summer programming hours	0.255	> .10	0.145	< .05	0.210	> .10	0.198	> .10

Source. Tx21st Student Tracking System and Public Education Information Management System, 2016–17 to 2018–19. 320 interviews, 2017–2019.
 Note. ACE refers to Afterschool Centers on Education.

Table C3.18. Center-Level Relationships between Intermediate Youth-Reported Outcomes and Texas ACE Program Attendance Outcomes – All Centers

Youth-Reported Outcome	Hours		Duration		# of Activities		Sustained Attendance	
	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
Feel good about myself	-1.421	< .05	-0.761	< .05	0.014	> .10	-4.865	< .05
With my confidence	1.101	> .10	0.009	> .10	-1.227	> .10	2.122	> .10
Support new interest development	0.547	> .10	0.011	> .10	-0.682	> .10	-0.069	> .10
Support school-related outcomes	-0.507	> .10	-0.152	> .10	-0.270	> .10	2.355	> .10
Think about the future	0.660	> .10	-0.061	> .10	-1.160	> .10	-0.259	> .10
Self-transcendent outcomes	0.208	> .10	-0.261	> .10	-1.263	> .10	-3.621	> .10

Source. Tx21st Student Tracking System and Public Education Information Management System, 2016–17 to 2018–19. 1,737 youth experience surveys, 2018–2019. Youth experience survey administered in spring 2018 and 2019 in 39 Texas Afterschool Centers on Education, N = 1,643 responses.

Note. ACE refers to Afterschool Centers on Education.

Table C3.19. Center-Level Relationships between Intermediate Youth-Reported Outcomes and Texas ACE Program Attendance Outcomes – Middle and High School Centers

Youth-Reported Outcome	Hours		Duration		# of Activities		Sustained Attendance	
	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
Feel good about myself	0.360	> .10	-0.299	> .10	-1.530	> .10	-0.306	> .10
With my confidence	-0.784	> .10	-0.413	> .10	-0.145	> .10	0.293	> .10
Support new interest development	-1.825	> .10	-1.088	> .10	1.540	> .10	-0.803	> .10
Support school-related outcomes	0.163	> .10	0.389	> .10	-1.458	> .10	4.354	< .01
Think about the future	1.029	> .10	-0.144	> .10	-1.211	> .10	5.282	< .001
Self-transcendent outcomes	-3.111	> .10	-1.439	> .10	6.538	> .10	-4.499	> .10

Source. Tx21st Student Tracking System and Public Education Information Management System, 2016–17 to 2018–19. 1,737 youth experience surveys, 2018–2019. Youth experience survey administered in spring 2018 and 2019 in 39 Texas Afterschool Centers on Education, N = 1,643 responses.

Note. ACE refers to Afterschool Centers on Education.

Table C3.20. Center-Level Relationships between Point-of-Service Quality Areas and Center-Level Effects – 60 Hours or More of Texas ACE Participation over 1 Year

Point-of-Service Quality Area	60 Hours or More – 1 Year							
	Reading		Mathematics		Attendance		Disciplinary	
	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
Program Process Quality (as measured by PQA)								
Total Score	14.765	> .10	19.803	> .10	.003	> .10	.025	> .10
Supportive Environment	-13.987	> .10	3.348	> .10	.010	< .10	-.058	> .10
Interaction	29.614	> .10	46.235	< .05	-.010	> .10	.071	> .10
Engagement	-9.370	> .10	-37.552	< .10	.006	> .10	.018	> .10
Program Content-Specific Practices (as measured by APT-O)								
Reading Practices	-.555	> .10	-.070	> .10	.000	> .10	.003	> .10
Reading Practices – Staff-based	-2.704	> .10	-2.655	> .10	.000	> .10	.000	> .10
Reading Practices – Youth-based	2.122	> .10	2.035	> .10	.000	> .10	.007	> .10
Writing Practices	1.031	> .10	-.026	> .10	.001	< .05	-.012	> .10
Writing Practices – Staff-based	-.739	> .10	.274	> .10	.000	> .10	-.012	> .10
Writing Practices – Youth-based	2.932	> .10	-.138	> .10	.003	< .05	-.016	> .10
Verbal Communication Practices	-.726	> .10	-.869	> .10	.000	> .10	-.001	> .10
Verbal Communication Practices – Staff-based	.196	> .10	-1.827	> .10	.000	> .10	-.002	> .10
Verbal Communication Practices – Youth-based	-.958	> .10	.689	> .10	.000	> .10	.000	> .10
Mathematics Practices	-.162	> .10	.188	> .10	.000	> .10	-.001	> .10

Table C3.20. (Continued): Center-Level Relationships between Point-of-Service Quality Areas and Center-Level Effects – 60 Hours or More of Texas ACE Participation over 1 Year

Point-of-Service Quality Area	60 Hours or More – 1 Year							
	Reading		Mathematics		Attendance		Disciplinary	
	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
Math Communication and Reasoning Practices – Staff-based	-3.378	> .10	-1.145	> .10	.001	> .10	.003	> .10
Math Communication and Reasoning Practices – Youth-based	1.787	> .10	1.520	> .10	.000	> .10	-.005	> .10
Mathematics – Problem Solving – Staff-based	1.708	> .10	.410	> .10	.000	> .10	-.010	> .10
Mathematics – Problem Solving – Youth-based	-1.712	> .10	-2.151	> .10	-.002	< .10	.014	> .10

Source. Tx21st Student Tracking System, Public Education Information Management System, and STAAR, 2015–16 to 2018–19. 238 scored PQA and APT-O assessments, 2017–2019.

Note. ACE refers to Afterschool Centers on Education.

Table C3.21. Center-Level Relationships between Point-of-Service Quality Areas and Center-Level Effects – 60 Hours or More of Texas ACE Participation over 2 Years

Point-of-Service Quality Area	60 Hours or More – 2 Years							
	Reading		Mathematics		Attendance		Disciplinary	
	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
Program Process Quality (as measured by PQA)								
Total Score	-44.351	> .10	33.804	> .10	.008	> .10	-.221	> .10
Supportive Environment	-20.474	> .10	2.170	> .10	.011	< .10	.326	< .10
Interaction	-3.202	> .10	24.055	< .05	-.002	> .10	-.189	> .10
Engagement	-32.043	> .10	10.840	< .10	-.005	> .10	-.406	> .10
Program Content-Specific Practices (as measured by APT-O)								
Reading Practices	-4.200	< .05	-4.275	< .05	.000	> .10	.008	> .10
Reading Practices – Staff-based	-4.925	> .10	-4.157	> .10	-.002	< .10	.012	> .10
Reading Practices – Youth-based	-5.840	> .10	-5.015	> .10	.001	> .10	-.004	> .10
Writing Practices	4.892	< .10	3.756	> .10	.000	< .05	.018	> .10
Writing Practices – Staff-based	-4.317	> .10	4.748	> .10	-.003	> .10	.022	> .10
Writing Practices – Youth-based	20.884	< .05	4.245	> .10	.003	< .05	.013	> .10
Verbal Communication Practices	.104	> .10	-1.313	> .10	.000	> .10	.010	> .10
Verbal Communication Practices – Staff-based	-1.131	> .10	-1.608	> .10	.000	> .10	.021	> .10
Verbal Communication Practices – Youth-based	1.794	> .10	-.891	> .10	-.001	> .10	.008	> .10
Mathematics Practices	1.046	< .10	1.259	< .05	.000	> .10	.002	> .10

Table C3.21. (Continued): Center-Level Relationships between Point-of-Service Quality Areas and Center-Level Effects – 60 Hours or More of Texas ACE Participation over 2 Years

Point-of-Service Quality Area	60 Hours or More – 2 Years							
	Reading		Mathematics		Attendance		Disciplinary	
	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
Math Communication and Reasoning Practices – Staff-based	-3.635	> .10	4.069	> .10	-.001	> .10	.013	> .10
Math Communication and Reasoning Practices – Youth-based	9.052	< .10	.822	> .10	.002	> .10	-.005	> .10
Mathematics – Problem Solving – Staff-based	4.271	> .10	1.429	> .10	.002	> .10	-.028	> .10
Mathematics – Problem Solving – Youth-based	-10.348	> .10	-2.786	> .10	-.005	< .05	.035	> .10

Source. Tx21st Student Tracking System, Public Education Information Management System, and STAAR, 2015–16 to 2018–19. 238 scored PQA and APT-O assessments, 2017–2019.

Note. ACE refers to Afterschool Centers on Education.

Table C3.22. Center-Level Relationships between Program Activities and Center-Level Effects – 60 Hours or More of Texas ACE Participation over 2 Years

Activity	60 Hours or More – 1 Year							
	Reading		Mathematics		Attendance		Disciplinary	
	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
Working alone on tasks	-12.454	> .10	7.207	> .10	-.012	> .10	.164	> .10
Working in small groups	25.998	> .10	48.024	> .10	.004	> .10	-.093	> .10
Direct instruction	-34.347	> .10	27.882	> .10	.006	> .10	-.346	< .10
Making/building things	.002	> .10	43.081	> .10	-.008	> .10	.065	> .10
Working on group projects	-79.964	> .10	-56.104	> .10	-.014	> .10	.236	> .10
Exploration and discovery	-3.626	> .10	-.723	> .10	-.001	> .10	.051	> .10
Learning or practicing nonacademic skills	-14.385	> .10	26.782	> .10	.011	> .10	-.332	< .10
Participating in competition	-11.452	> .10	-59.469	> .10	-.013	> .10	.154	> .10
Engaged in discussion	26.401	> .10	-31.944	> .10	-.001	> .10	-.389	< .10
Student presentations	-83.298	> .10	-36.770	> .10	.009	> .10	.579	> .10
Planning future activities	17.550	> .10	-14.221	> .10	.008	> .10	.497	> .10
Designed to make a contribution	116.041	> .10	25.141	> .10	.002	> .10	-.445	< .05

Source. Tx21st Student Tracking System, Public Education Information Management System, and STAAR, 2015–16 to 2018–19. 577 activity leader surveys, 2017–2019.

Note. ACE refers to Afterschool Centers on Education.

Table C3.23. Center-Level Relationships between Youth Experiences and Center-Level Effects – 60 Hours or More of Texas ACE Participation over 1 Year

Youth Experience	60 Hours or More – 1 Year							
	Reading		Mathematics		Attendance		Disciplinary	
	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
Youth Experience Survey								
Opportunities for agency interactions with activity leaders	-16.785	> .10	-30.115	> .10	.001	> .10	.140	> .10
interactions with other youth	-4.551	> .10	-10.214	> .10	.010	> .10	-.090	> .10
	16.960	> .10	32.922	> .10	.021	< .05	-.195	> .10
End-of-Session Survey								
Challenge	-.987	> .10	-2.314	> .10	-.008	> .10	.139	> .10
Learned something	-32.002	> .10	-6.772	> .10	.007	> .10	-.078	> .10
Engagement	-2.454	> .10	-37.352	> .10	-.034	< .05	.228	> .10
Relevance	-2.687	> .10	30.826	> .10	.018	< .10	-.026	> .10
Positive affects	14.138	> .10	6.545	> .10	.006	> .10	-.091	> .10

Source. Tx21st Student Tracking System, Public Education Information Management System, and STAAR, 2015–16 to 2018–19. 1,737 youth experience surveys, 2018–2019 and 2,459 end-of-session surveys, 2017–2019.

Note. ACE refers to Afterschool Centers on Education.

Table C3.24. Center-Level Relationships between Youth Experiences and Center-Level Effects – 60 Hours or More of Texas ACE Participation over 2 Years

Youth Experience	60 Hours or More – 1 Year							
	Reading		Mathematics		Attendance		Disciplinary	
	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
Youth Experience Survey								
Opportunities for agency interactions with activity leaders	-102.330	> .10	-83.160	> .10	.010	> .10	-.092	> .10
interactions with other youth	44.656	> .10	82.509	> .10	.013	> .10	-.434	> .10
	19.762	> .10	-41.344	> .10	.003	> .10	.063	> .10
End-of-Session Survey								
Challenge	10.921	> .10	28.527	> .10	-.019	> .10	.016	> .10
Learned something	-33.641	> .10	-18.177	> .10	.035	> .10	.040	> .10
Engagement	-154.534	> .10	-50.979	> .10	.003	> .10	.363	> .10
Relevance	153.079	< .10	77.281	> .10	-.013	> .10	-.116	> .10
Positive affects	42.344	> .10	-4.795	> .10	-.021	> .10	.025	> .10

Source. Tx21st Student Tracking System, Public Education Information Management System, and STAAR, 2015–16 to 2018–19. 1,737 youth experience surveys, 2018–2019 and 2,459 end-of-session surveys, 2017–2019.

Note. ACE refers to Afterschool Centers on Education.

Table C3.25. Center-Level Relationships between Intermediate Youth-Reported Outcomes and Center-Level Effects – 60 Hours or More of Texas ACE Participation over 1 Year

Youth-Reported Outcome	60 Hours or More – 1 Year							
	Reading		Mathematics		Attendance		Disciplinary	
	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
Feel good about myself	43.745	> .10	51.570	> .10	-.005	> .10	.315	> .10
With my confidence	-35.735	> .10	2.150	> .10	.032	> .10	-.213	> .10
Support new interest development	43.253	> .10	37.191	> .10	.013	> .10	-.097	> .10
Support school-related outcomes	11.419	> .10	16.047	> .10	-.014	> .10	.101	> .10
Think about the future	23.299	> .10	-4.225	> .10	.002	> .10	.168	> .10
Self-transcendent outcomes	39.634	> .10	42.122	> .10	.023	> .10	.136	> .10

Source. Tx21st Student Tracking System, Public Education Information Management System, and STAAR, 2015–16 to 2018–19. 1,737 youth experience surveys, 2018–2019. Youth experience survey administered in spring 2018 and 2019 in 39 Texas Afterschool Centers on Education, N = 1,643 responses.

Note. ACE refers to Afterschool Centers on Education.

Table C3.26. Center-Level Relationships between Intermediate Youth-Reported Outcomes and Center-Level Effects – 60 Hours or More of Texas ACE Participation over 2 Years

Youth-Reported Outcome	60 Hours or More – 2 Year							
	Reading		Mathematics		Attendance		Disciplinary	
	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
Feel good about myself	61.783	> .10	32.141	> .10	.044	> .10	.023	> .10
With my confidence	66.791	> .10	230.946	< .05	-.005	> .10	-.238	> .10
Support new interest development	-.166	> .10	-21.842	> .10	.050	> .10	.096	> .10
Support school-related outcomes	155.891	> .10	-126.360	> .10	-.016	> .10	.177	> .10
Think about the future	-84.757	> .10	-60.305	> .10	.056	> .10	-.010	> .10
Self-transcendent outcomes	160.294	> .10	78.615	> .10	-.050	> .10	.408	> .10

Source. Tx21st Student Tracking System, Public Education Information Management System, and STAAR, 2015–16 to 2018–19. 1,737 youth experience surveys, 2018–2019. Youth experience survey administered in spring 2018 and 2019 in 39 Texas Afterschool Centers on Education, N = 1,643 responses.

Note. ACE refers to Afterschool Centers on Education.