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FACTORS INFLUENCING THE IMPLEMENTATION OF SCHOOL-BASED MENTAL HEALTH SERVICES IN GEORGIA: RESULTS FROM A TWO YEAR LONGITUDINAL ANALYSIS

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INTRODUCTION

- Over the past three decades, school-based mental health (SBMH) services have become an increasingly popular avenue to increase access to mental health care, provide preventative care, and provide for the early detection of mental health needs.
- Most of the published literature on SBMH implementation focuses on workforce capacity and training issues, as well as stakeholder buy-in from schools as the most important factors that influence the successful uptake of SBMH services.
- In this research, we shift attention to factors outside of the SBMH workforce and examine various school-level characteristics that affect implementation of services over time using a two-year case study of a statewide SBMH program in Georgia.

THE GEORGIA APEX PROGRAM BY THE NUMBERS

Established in 2015

More than 5000 students received services

62,684 services provided

Collaboration with more than 200 schools

METHODS

The data for this analysis come from a broader evaluation of the Apex program in Georgia. Over the two-year study period, we received standardized, ongoing monthly reports from providers implementing SBMH services across the state. Data from these reports were pooled and then merged with year-end surveys as well as publicly available school-level data from the Georgia Department of Education.

The dependent variable of interest in this study was the number of students served at each school across time.

- We examined the following variables as potential factors that may influence the number of students served across time:
- the existence of positive behavioral interventions and supports (PBIS) or other behavioral health programs at the school prior to Apex implementation
 - school type (elementary, middle, high, or alternative)
 - school urbanicity (rural, suburban, or urban)
 - school climate rating
 - seasonality (summer vs. non-summer month)
 - provider integration into the school setting. Integration was measured as the degree to which each provider exhibited the following at a given school: obtained a school issued email address, obtained a school issued badge or ID card, attended staff and/or committee meetings.

Three-level growth curve models were utilized to estimate longitudinal changes in the number of students served. Repeated (time-varying) school-level observations were modeled at level 1 (N = 2,906) and time-invariant school-level predictors were modeled at level 2 (N = 199). To account for the clustering effect of different agencies (N = 28) implementing SBMH services across Georgia, the level 1 time effects were modeled as random across levels 2 and 3, and the level 2 effects were modeled as fixed.

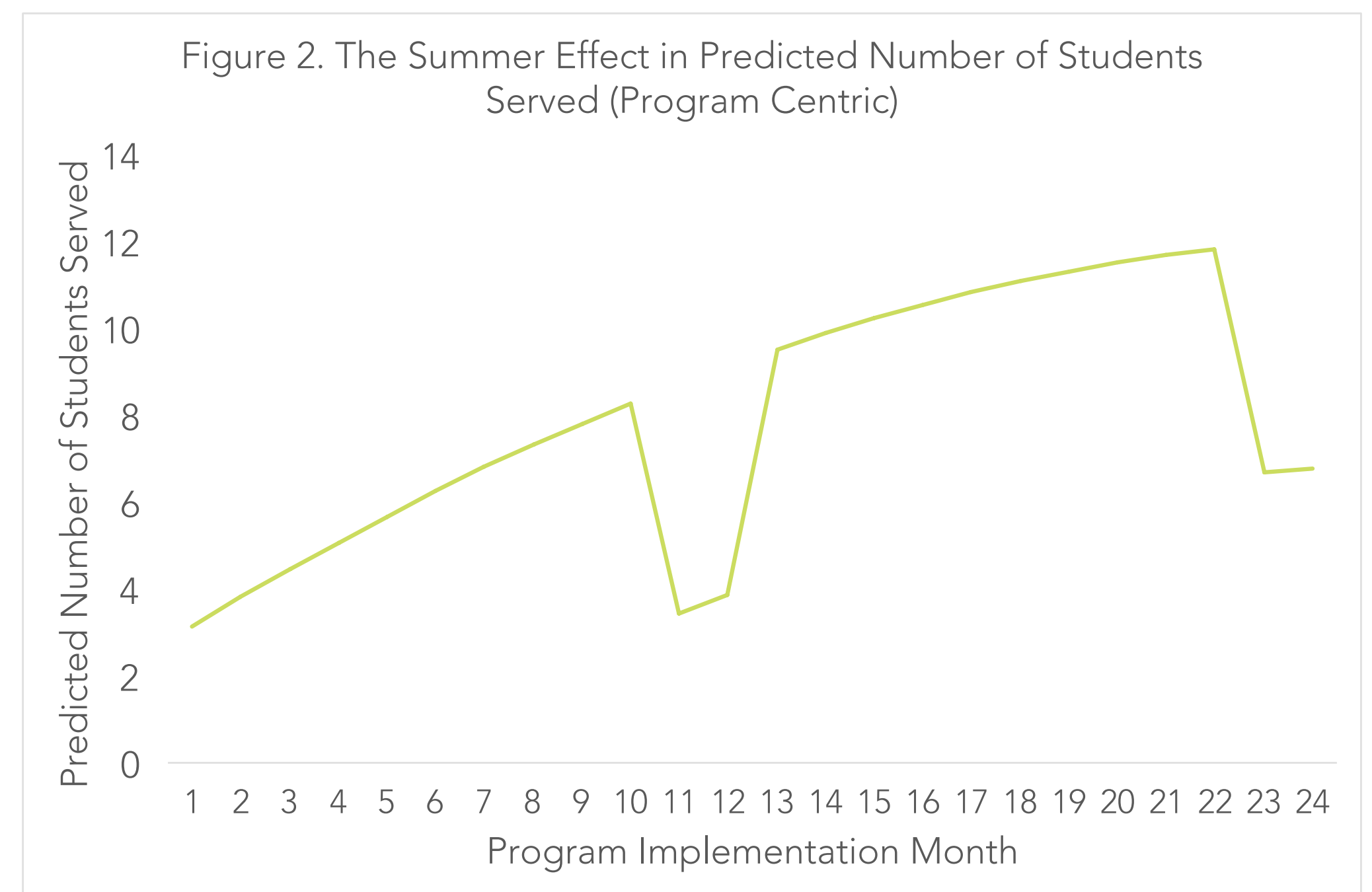
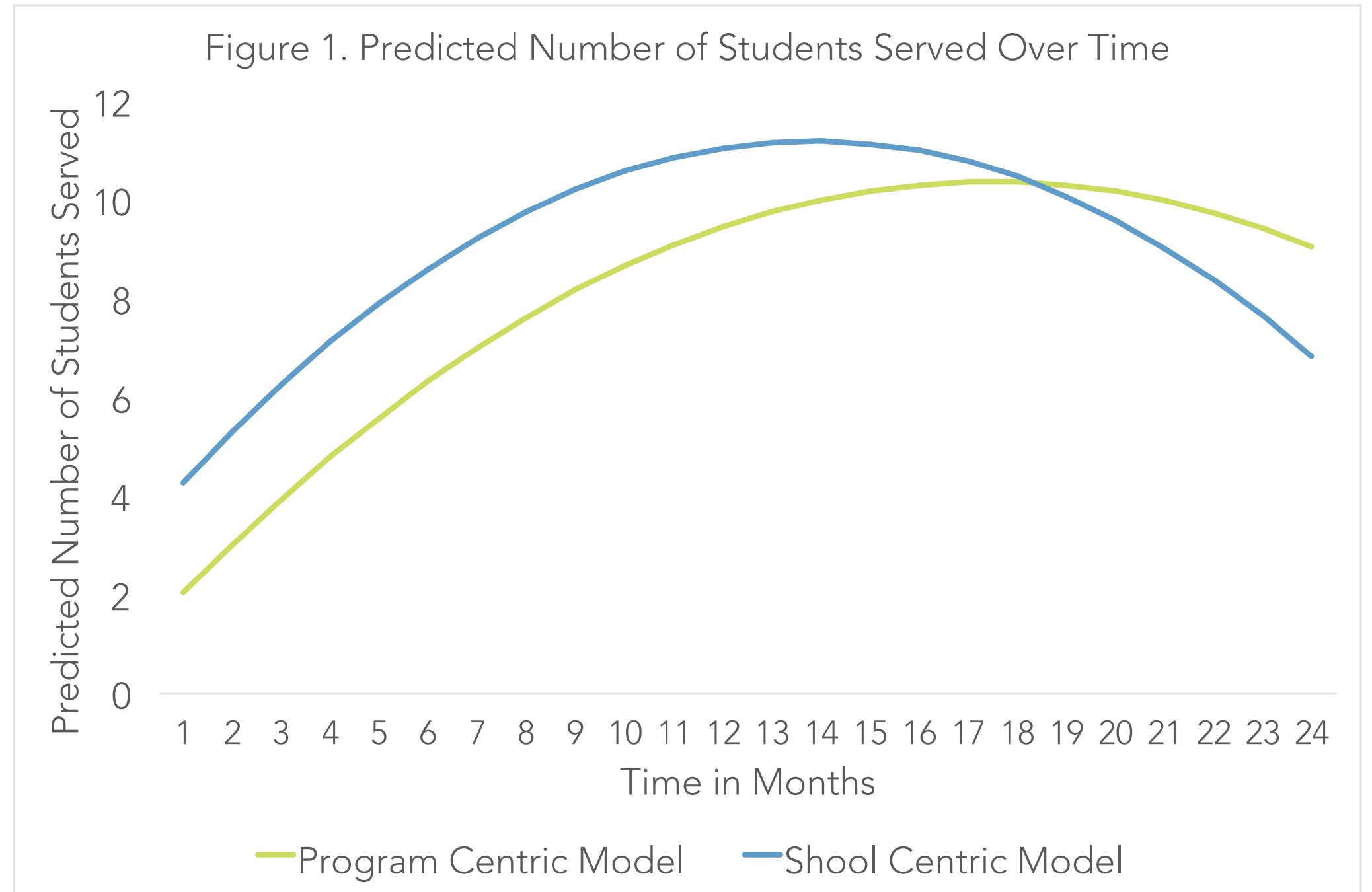
We considered two broad models to account for longitudinal changes in the number of students served over time (see table handout). The program centric model centers the starting point of time as the beginning of the program. The school centric model centers the starting point of time as the first month that a school was onboarded, regardless of overall timing of the program.

KEY FINDINGS

- About nine students were served per month on average across all schools during the first two years of SBMH implementation.
- We found evidence of a curvilinear trend in the number of students served over time, such that the number of students peaked around month 15 of implementation.
- During summer months, the number of students served dropped by about five across all schools and providers.
- In schools with behavioral health programs implemented prior to Apex, about two fewer students were served on average.
- Compared to elementary schools, about two fewer students were served on average in high schools. Compared to rural schools, about three fewer students were served on average in urban schools.
- There was a strong effect of provider integration into the schools, such that those who were highly integrated served more students over time.

IMPLICATIONS FOR POLICY AND PRACTICE

The results of our analysis demonstrate several of the many potential factors that may influence the implementation of SBMH services over time. Beyond workforce capacity and stakeholder buy-in, our results indicate that for those wishing to implement SBMH services, provider integration into the school is an extremely important predictor of uptake in SBMH services. Providers should also consider the extent to which existing behavioral health programs are in place in the schools they choose to partner with, as well as issues like school type (elementary vs. high) and school urbanicity.



	Program Centric Model				School Centric Model			
	M1	M2	M3	M4	M1	M2	M3	M4
Level 1 Fixed Effects (Repeated Measures)								
Intercept	2.04	3.12	-1.57	1.88	4.28***	4.48***	2.72	3.66***
Time	1.01***	0.69**	1.02***	0.90*	1.08***	1.23***	1.07***	1.02***
Curvilinear Time	-0.03***	-0.01	-0.03***	-0.03**	-0.04***	-0.04***	-0.04***	-0.04**
Summer Effect		-5.27***				-5.30***		
Level 2 Fixed Effects (School Level)								
PBIS Prior to Apex			1.16				0.54	
Other Behavioral Health Program Prior to Apex			-1.44				-2.18	
Middle School (ref = elementary)			-0.14				-0.60	
High School (ref = elementary)			-1.66				-2.38*	
Alternative School (ref = elementary)			-0.38				-0.65	
Provider Integration			1.41*				0.83	
Urban School (ref = rural school)			-3.80*				-2.63	
Suburban School (ref = rural school)			1.29				1.06	
School Climate Rating			0.57				0.44	
Cross-Level Interactions								
L2 Integration regressed on L1 intercept				0.09				0.49
L2 Integration regressed on L1 time				0.10				0.04
L2 Integration regressed on L1 curvilinear time				0.00				0.00
Level 2 Random Effects (School Level)								
Linear Time	1.59***	1.78***	1.53***	1.59***	1.32***	1.33***	1.31***	1.33***
Curvilinear Time	0.00***	0.00***	0.00***	0.00***	0.05***	0.06***	0.05***	0.05***
Level 3 Random Effects (Provider Level)								
Linear Time	1.00***	0.85***	0.98***	1.00***	0.67***	0.53***	0.70***	0.66***
Curvilinear Time	0.00***	0.00***	0.00***	0.00***	0.04***	0.03***	0.04***	0.04***
Level 1 N = 2,906 ; Level 2 N = 199; Level 3 N = 28.								



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