

# EXAMINING THE IMPACT OF STUDENT SOCIOECONOMIC STATUS AND SCHOOL ATTRIBUTES ON SCHOOL BASED MENTAL HEALTH PARTNERSHIPS

Lucy Rabinowitz, M.P.H., CHES; Ann DiGirolamo, M.P.H., Ph.D.; Susan McLaren, M.P.H., FACHE; Center of Excellence for Children's Behavioral Health, Georgia State University, Atlanta, GA; Danté McKay, J.D., M.P.A.; Stephanie Pearson, Ph.D., Office of Children, Young Adults & Families; Behavioral Health Division; Georgia Department of Behavioral Health & Developmental Disabilities, Atlanta, GA.

## INTRODUCTION

- An estimated one in five youth ages 13-18 has a diagnosable mental health problem; 75-80 percent do not receive required services.<sup>1</sup>
- School-based mental health (SBMH) programs are a proven strategy for minimizing barriers to accessing services and to help address behavioral health issues that negatively influence a student's ability to thrive in school and life.<sup>2</sup>
- Strong partnerships and collaboration between mental health providers and schools are essential factors in the success of implementation and sustainability of SBMH programs.<sup>3</sup>
- Since its inception in 2015, 29 community-based Georgia Apex Program (GAP) providers funded by the GA Department of Behavioral Health and Developmental Disabilities have partnered with more than 200 schools to provide access to SBMH services to approximately 4,000 students.
- SBMH funders and providers need to understand school contextual factors that contribute to strong partnerships, including student socioeconomic and demographic indicators, to support sustainable implementation of SBMH programs.<sup>4</sup>

The intent of this analysis is to inform providers about elements to consider when choosing school partners for the expansion of SBMH services. Specifically, we examine relationships between school demographic and county-level socioeconomic indicators and levels of collaboration between community mental health providers and their school partners using publicly available state-wide school data and the Mental Health Planning and Evaluation Template (MHPET).

## STUDY DESIGN

Timeline	Apex program year 1 (September 2015 - May 2016)
Population	29 community behavioral health providers and 136 school partners
Tools	National Assembly on School-Based Health Care's 34-question MHPET Survey 8 domains: operations; stakeholder involvement; staff and training; identification, referral, and assessment; service delivery; school coordination and collaboration; community coordination and collaboration; and quality assessment and improvement).
Tool Administration	Baseline (September) and year-end (May) completed online by behavioral health providers and school partners. Response scale 1=Not at all in place; 6=Fully in place
Data	* MHPET Survey results (n=64) * Publicly available school and county-level SES indicators (race, annual family income <150% of Federal Poverty Level (FPL), lack of parent secure employment)
Analytic Metrics	Change in overall baseline and year-end mean MHPET survey scores by: * % of non-white minority (African American, Hispanic, Asian, Native American, Multiracial or Other) * % of families with children living in the county with annual income of less than 150% of the FPL * % of children in the county whose parents lack secure employment

## PRINCIPAL FINDINGS

- Partnerships at the end of the first year of implementation as reported through the MHPET were perceived as strong, with an average score of 5.14 out of 6.
- Lower percentages of children living in poverty and a higher percentage of non-White minority students were school characteristics significantly associated with higher levels of perceived partnership (as measured by the MHPET scores) at the end of the school year. Parental unemployment, rates of homeownership and Title I status were not significant predictors of MHPET scores at follow-up.
- These results remained significant in multivariate models controlling for reported levels of partnership at baseline as well.
- Our model suggests that 16.9% of the total variability in MHPET scores can be explained by the combined effects of children living in poverty and the percent of non-White students at the school.



Table 1: Descriptive Statistics for Variables in Model

Variable	Year 1 (n=64)		
	Min	Max	Mean
MHPET Total Score at Baseline	1.59	5.94	4.81
MHPET Total Score at Follow-Up	2.31	5.98	5.14**
Students Identifying as any Non-White Minority (%)	9.00	100.00	58.70
Families, with children, with annual income less than 150% FPL (%)*	22.20	50.20	37.80
Children whose parents lack secure employment (%)*	2.90	26.40	11.06

\*Indicators are at the county-level  
\*\*Change in average score from baseline to follow-up is significant (p<.05)

## CONCLUSIONS

Results indicate that in a SBMH initiative in Georgia, perceived levels of partnership and collaboration between provider agencies and local schools increased over time. Factors associated with increased levels of partnership over time included sociodemographic characteristics such as higher percentage of non-White minority students and lower percentage of children living in poverty. Providers should consider school attributes like student demographics and county socioeconomic indicators in determining where to place their services, as these may have a predictive effect on the increase in perceived levels of partnership throughout the year. Strong partnership has been shown to be an important factor in successful SBMH programs.

## IMPLICATIONS FOR POLICY AND PRACTICE

To promote positive recovery and resiliency outcomes in children's mental health, policy makers, administrators, providers, and other funders, should factor in considerations beyond clinical and therapeutic mental health treatment. Mental health programs that operate in a vacuum and do not take into consideration social determinants, particularly as they relate to the school environment, may have a limited impact. Policies and programs must take into consideration socioeconomic determinants of health that influence children's mental health including parental employment, transportation, poverty levels, and health literacy. As our findings indicate, SBMH programs foster partnerships that support schools, especially those that are under-resourced. States and communities may use evidence from this analysis and similar evaluations to better identify how they may better support under-resourced schools through a systems of care approach to improving children's mental health.

## REFERENCES

1. Any Disorder Among Children. (n.d.) Retrieved January 16, 2015, from <http://www.nimh.nih.gov/health/statistics/prevalence/any-disorder-among-children.shtml>
2. The Impact of School Mental Health: Educational, Social, Emotional, and Behavioral Outcomes. University of Maryland School of Medicine. (n.d.) Retrieved January 23, 2018, from, <http://csmh.umaryland.edu/media/SOM/Microsites/CSMH/docs/CSMH-SMH-Impact-Summary-July-2013-.pdf>
3. Ringeisen, H., et al. (2003). "Context Matters: Schools and the "Research to Practice Gap" in Children's Mental Health." School Psychology Review 32(2): 153.
4. Ringeisen, H., et al. (2003). "Context Matters: Schools and the "Research to Practice Gap" in Children's Mental Health." School Psychology Review 32(2): 153.

Table 2: Single Linear Regression Coefficients for Each Unique Predictor of MHPET Scores at Follow-Up

Coefficients	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
	B	Std. Error				Lower Bound	Upper Bound
Families, with children, with annual income less than 150% FPL (%)*	6.116	.355		17.249	.000	5.407	6.824
	-2.590	.919	-.337	-2.818	.006	-4.428	-.753
Students Identifying as any Non-White Minority (%)	4.830	.167		28.960	.000	4.497	5.164
	.522	.256	.250	2.037	.046	.010	1.033
Children whose parents lack secure employment (%)*	5.415	.182		29.774	.000	5.051	5.778
	-2.518	1.506	-.208	-1.671	.100	-5.529	.493

Table 3: Multiple Linear Regression Model for All Predictors of MHPET Scores at Follow-Up

Coefficients	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
	B	Std. Error				Lower Bound	Upper Bound
(Constant)	5.179	.507		10.213	.000	4.164	6.193
Families, with children, with annual income less than 150% FPL (%)*	-2.979	1.219	-.387	-2.444	.018	-5.417	-.540
Students Identifying as any Non-White Minority (%)	.503	.255	.242	1.975	.053	-.007	1.013
Children whose parents lack secure employment (%)*	1.748	2.008	.144	.871	.387	-2.269	5.765
MHPET Score at baseline (control)	.124	.063	.228	1.976	.053	-0.002	.249

Table 4: Multiple Linear Regression Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
				R Square Change	F Change	df1	df2	Sig. F Change
.468	.219	.166	.541	.219	4.137	4	59	.005

For more information, please contact the Georgia Health Policy Center at 404.413.0314 or visit us online at [www.ghpc.gsu.edu](http://www.ghpc.gsu.edu)

