

Poster Title: Surveying the (cor)relations: Tier 1 PBIS Implementation and School Climate

Michael Li
MA/6th Year
Doctoral Student
University of Connecticut
mike.li@uconn.edu

Dr. Adam Feinberg
Assistant Research Professor
University of Connecticut
adam.feinberg@uconn.edu

Dr. Susannah Everett
Assistant Professor in Residence
University of Connecticut
susannah.everett@uconn.edu

Abstract

How does the quality of PBIS implementation impact aspects of school climate? Through examination of survey data, practitioners will be able to identify potential relationships and practical implications between PBIS fidelity and school climate.

Introduction

Positive Behavior Intervention & Supports (PBIS) has garnered attention with regards to promoting academic achievement, school success, violence prevention, and teacher retention (Cohen et al., 2009). Furthermore, results from a randomized control trial investigating PBIS training, school climate, and implementation quality suggested that PBIS training was associated with significant improvements in schools' organizational health (Bradshaw et al., 2008). However, the translation of data informing educational policy is continually being bridged. The current poster attempted to provide further evidence and a line of investigation into the impact of PBIS fidelity on school climate outcomes. It was predicted that higher levels of schools' implementation fidelity would translate to overall improvements in school climate, as measured by survey ratings.

Participants

The poster examined one state's multiyear effort to support high-needs schools and districts in the implementation of Tier 1 PBIS. This subset of schools provided a unique context in which to examine both implementation fidelity and school climate. High-needs schools in this state in the Northeast are defined as consistently underperforming in either academic or social indicators. Over the past six years, the state has supported over 150 schools through a three-year academy training model

targeting school-wide PBIS. Although all these schools have been identified as high-needs schools, they represent a variety of demographics including school size, grade level, and rural versus urban. The goal of the academy is to support school team's development and implementation of universal PBIS framework, which, in turn, will increase the probability of improved school climate, improved student behavior, and academic engagement and achievement.

Procedures

Participating schools completed formal and informal fidelity checks throughout the statewide support model, with the purpose of revisiting and refining their PBIS framework action plan and to measure progress. School leadership teams assessed their implementation fidelity each spring using the Tiered Fidelity Inventory 2.1 (TFI 2.1) (Algozzine, 2019) to evaluate their implementation of Tier I PBIS across a total composite and the following subscales: Teams (e.g., team composition, operating procedures), Implementation (e.g., teaching expectations, problem behavior definitions, professional development, classroom procedures), and Evaluation (e.g., data-based decision making, fidelity data). In addition, the TFI 2.1 was used to identify strengths as well as areas of need for action planning. Along with the TFI 2.1, the School Climate Survey: Staff Survey (La Salle et al., 2018) assessed how staff perceived school climate across a total composite and within six subscales: staff connectedness, structure for learning, school safety, physical environment, peer/adult relationships, and parental involvement.

Results

This poster investigated the School Climate and TFI 2.1 survey results from an identified subset of the schools (N=10) in the statewide academy that have used both measures. The impact of PBIS on school outcomes was investigated. Specifically, polychoric correlation was used to determine correlational relationships between survey totals/subscales. The correlations computed by R Hetcor package using SPSS. Moderate to strong correlations were found among the relationships listed in the Appendix. The remaining totals/subscales relationships yielded weaker correlations. The strongest correlations were between Peer/Adult Relations and Physical Environment, Peer/Adult Relations and Overall School Climate, and Parent Involvement and Overall School Climate.

Implications

The poster illustrates potential implications for school psychologists. Specifically, it suggests a relationship between Tier 1 Implementation and Evaluation on several school climate outcomes (i.e., structure for learning and school safety, respectively). Contrary to the prediction, only selected aspects of schools' implementation fidelity were strongly correlated to school climate outcomes, as measured by survey ratings. The strongest correlations revolved around Peer/Adult Relations and Parent Involvement, which impacted Physical Environment and Overall School Climate. This raises several questions: (1) what specific factors of Tier 1 Evaluation (e.g., discipline data, data-based decision making, fidelity data) influence School Safety perceptions, (2) what specific factors of Tier 1 Implementation (e.g., behavioral expectations, discipline policies) influence Structure for Learning perceptions, (3) what specific factors influence between total/subscale correlations, and (4) what specific factors of Peer/Adult Relations and Parent Involvement influence Overall School Climate/Physical Environment? Thus, this warrants further investigation of PBIS fidelity on school outcomes. Future directions include further considerations to the limitations of this poster (e.g., sample size, sample profile).

Appendix: Polychoric Correlation Matrix Table

Variables	Statistics	Variables										
		School Climate Overall	STAFF CONNECTEDNESS	STRUCTURE FOR LEARNING	SCHOOL SAFETY	PHYS. ENV	PEER/ADULT RELATIONS	PARENT INVOLVE MENT	TIER 1 OVERALL	TIER 1 TEAMS	TIER 1 IMPLEME NTATION	TIER 1 EVALUATION
School Climate	Correlation	1.000	.178	.631	.512	.544	.892	.723	.340	-.021	.425	.315
Overall	Std. Error	.000	.318	.174	.220	.221	.060	.151	.283	.354	.267	.312
STAFF CONNECTEDNESS	Correlation	.178	1.000	.633	.448	-.129	-.122	-.142	.013	-.056	.031	-.097
	Std. Error	.318	.000	.177	.254	.323	.321	.315	.342	.366	.325	.333
STRUCTURE FOR LEARNING	Correlation	.631	.633	1.000	.432	.201	.427	.175	.454	.204	.611	.025
	Std. Error	.174	.177	.000	.258	.310	.259	.312	.248	.347	.200	.348
SCHOOL SAFETY	Correlation	.512	.448	.432	1.000	-.097	.512	-.013	.154	.050	.097	.548
	Std. Error	.220	.254	.258	.000	.320	.224	.320	.315	.357	.325	.238
PHYSICAL ENV	Correlation	.544	-.129	.201	-.097	1.000	.748	.504	.381	.059	-.130	-.053
	Std. Error	.221	.323	.310	.320	.000	.132	.223	.281	.380	.328	.365
PEER/ADULT RELATIONS	Correlation	.892	-.122	.427	.512	.748	1.000	.590	.394	.026	.158	.397
	Std. Error	.060	.321	.259	.224	.132	.000	.204	.268	.367	.330	.291
PARENT INVOLVEMENT	Correlation	.723	-.142	.175	-.013	.504	.590	1.000	.070	-.255	.153	-.161
	Std. Error	.151	.315	.312	.320	.223	.204	.000	.330	.343	.342	.332
TIER 1 OVERALL	Correlation	.340	.013	.454	.154	.381	.394	.070	1.000		.683	.478
	Std. Error	.283	.342	.248	.315	.281	.268	.330	.000	.000	.178	.280
TIER 1 TEAMS	Correlation	-.021	-.056	.204	.050	.059	.026	-.255		1.000	.639	.497
	Std. Error	.354	.366	.347	.357	.380	.367	.343	.000	.000	.230	.302
TIER 1 IMPLEMENTATION	Correlation	.425	.031	.611	.097	-.130	.158	.153	.683	.639	1.000	.192
	Std. Error	.267	.325	.200	.325	.328	.330	.342	.178	.230	.000	.356
TIER 1 EVALUATION	Correlation	.315	-.097	.025	.548	-.053	.397	-.161	.478	.497	.192	1.000
	Std. Error	.312	.333	.348	.238	.365	.291	.332	.280	.302	.356	.000

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