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School Climate and Academic Growth: Investigating One State's School Performance Report

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Abstract

The purpose of this study was to examine relationships between six school climate proxies included in the 2015-2016 New Jersey School Performance Report (SPR) and median school growth percentiles in English language arts and math, and to assess the predictive value of these proxies on academic growth. I collected and analyzed data from the SPR for 1,618 elementary and middle schools. Results indicate the school climate proxies are weakly related with academic performance, and the prediction models explained little of the variance in school growth. I discuss the educational significance of these findings for policymakers and practitioners in all schools.

Keywords: School Climate; School Leadership; Educational Outcomes

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School Climate and Academic Growth: Investigating One State's School Performance Report

A positive school climate can mitigate the continued strong influence of socioeconomic status on academic achievement (Berkowitz, Moore, Astor, & Benbenishty, 2016), and it can positively influence a host of educational outcomes that are measured at either the student or school level (Berkowitz et al., 2016; Davis & Warner, 2015; Hopson, Schiller, & Lawson, 2014; Sulak, 2016; Thapa, Cohen, Guffey, & Higgins-D'Alessandro, 2013; Weng & Degol, 2016). Additionally, the evidence in the recent school climate literature suggests that a positive school climate influences students' sense of belonging and connection with their schools, which serves to mediate increased levels of academic achievement (Reynolds, Lee, Turner, Bromhead, & Subasic, 2017). Given these positive findings and the emphasis the United States Department of Education has placed on improving school climate (2016), states and local education agencies are measuring and reporting school climate more consistently and at regular intervals.

Some concerns regarding the utility of school climate as a predictor of and administratively mutable variable to improve school and student outcomes for both researchers and practitioners, respectively, is the lack of a consistent measurement and reporting policy, consensus definition, widely used instrument, and consistent indicators to serve as school climate proxies. As a result, it remains difficult to generalize whether any given state's school climate measures or proxies can serve as antecedents to improved educational outcomes in other states or local education agencies. This becomes especially problematic for evidence-based school leaders who prioritize their leadership agendas to focus on variables that they can address within their schools that are supported in the literature to positively influence and predict student and school outcomes. For example, the New Jersey Department of Education (NJDoE) policy for reporting school climate in its 2015-2016 School Performance Report (SPR) database reflects eight different school level indicators to serve as school climate proxies, which includes length of school day, full-time instructional time, shared-time instructional time, student to faculty ratio, student to administrator ratio, faculty attendance, student suspensions, and student expulsions. This NJDoE policy presents a challenge to principals and superintendents because these proxies do not seem analogous with most items from any of the school climate instruments that are readily available from ED or other sources (NCSSLE, n.d.a; Zullig, Koopman, Patton, & Ubbes 2010). Therefore, my purpose in conducting this inquiry was to examine the NJDoE reported school climate proxies to identify relationships or influences on school academic growth. The educational significance of this work is that the findings should assist the NJDoE regarding its policy for measuring and publicly reporting school climate, as well as to guide principals and superintendents to determine how to prioritize their leadership agendas with respect to this policy as they work to improve learning for all students. Additionally, findings from this inquiry can help policymakers and practitioners in other states develop more evidence-based school climate policies.

I developed the following research questions to guide this study:

RQ_1: Are the NJDoE reported school climate proxies associated with median school academic growth?

RQ_2: Do the NJDoE reported school climate proxies predict median school academic growth when modeled with school socioeconomic status?

The conceptual framework that I developed for this study specified that school socioeconomic status influences each of the six school climate proxies and school academic growth in English language arts (ELA) and math, and each of the six school climate proxies influences school academic growth in ELA and math, as reported by the NJDoE in the SPR.

Literature Review

The United States Department of Education (ED) has made school climate a priority, since its Office of Safe and Healthy Schools began awarding funding to states to improve school climate in 2010 (NCES, n.d.). Zullig et al. (2010) examined school climate from a historical context and identified five school climate domains most commonly measured, which included: "order, safety, and discipline; academic outcomes; social relationships; school facilities; and school

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connectedness" (p. 141). The specifics of these domains have varied over time, but Zullig et al. (2010) stated, "these domains offer specific clues as to what actually composes school climate including norms, values, and expectations that positively promote the social and emotional development of students while concurrently guaranteeing safety in a social and physical sense" (p. 141). A consensus definition of school climate does not presently exist for states and local education agencies to use to guide their work (Thapa et al, 2013; Wang & Degol, 2015), although the most recent definition for school climate put forth by the ED (2016) states:

> School climate reflects how members of the school community experience the school, including interpersonal relationships, teacher and other staff practices, and organizational arrangements. School climate includes factors that serve as conditions for learning and that support physical and emotional safety, connection and support, and engagement. A positive school climate reflects attention to fostering social and physical safety, providing support that enables students and staff to realize high behavioral and academic standards as well as encouraging and maintaining respectful, trusting, and caring relationships throughout the school community. (p. 1)

Regardless of the definition used for school climate, scholars and practitioners can look to these previous works to better conceptualize how a positive school climate provides students with a sense of belonging and connection to a school that is nurturing, safe, and focused on providing engaging experiences that provide a breadth of learning opportunities (Anderson, Hegarty, Henry, Kim, & Care, 2018) and promote academic growth.

The way states and local education agencies measure school climate varies, too (Holfeld & Leadbeater, 2013; Thapa et al., 2013). Like its definition, instruments to measure school climate have varied throughout its study, although "most of these were not published in peer-reviewed journals and were developed approximately 20 years ago with no reported psychometrics" (Zullig et al., 2010, p. 147-148). Gase et al. (2017) concluded that improvement is needed in how school climate is measured for inclusive perceptions of students, staff, and parents to help school personnel initiate efforts to improve school climate. Zullig et al. (2010) did identify five distinct instruments that measure school climate across the five domains, which included "the San Diego Effective Schools Student Survey, the National Education Longitudinal Study, the California School Climate and Safety Survey, the NASSP Comprehensive Assessment of School Environments, and the School Development Program" (p. 142).

In addition to these five instruments, ED developed School Climate Surveys (EDSCLS) to help "states, local districts, and schools to collect and act on reliable, nationally-validated school climate data" (NCSSLE, n.d.a). The EDSCLS measures three domains of school climate, which includes engagement, safety, and environment. Each of these three domains is comprised of three to five topics. Topics included in the engagement domain are cultural and linguistic competence, relationships, and school participation. The safety domain includes the topics emotional safety, physical safety, bullying/cyberbullying, substance abuse, and emergency readiness/management. Topics that comprise the environment domain include physical environment, instructional environment, physical health, mental health, and discipline (NCSSLE, n.d.b). Four versions of the EDSCLS are currently available to collect data from students, instructional staff, non-instructional staff, and parents, and the ED has standardized scale scores to show three performance levels to help schools understand these data. Although freely available, states are not required to utilize the EDSCLS to assess school climate, rather states have the autonomy to determine how to define, measure, and assess school climate. So, based on this work by Zullig et al. (2010) and the availability of the EDSCLS, states and local education agencies have several instruments from which to choose to collect school climate data.

The lack of agreement regarding a definition and measure of school climate has not limited its study. In their review of school climate research, Thapa et al. (2013) wrote that "school climate-by definition-reflects students', school personnel's, and parents' experiences of school life socially, emotionally, civically, and ethically as well as academically" (p. 369). Although many different definitions, conceptualizations, and measurements of school climate exist, there has been an increase in studies that examine students' perceptions of school climate and various educational outcomes (Berkowitz et al., 2016; Davis & Warner, 2015; Gase et al, 2017; Hopson, Schiller, & Lawson, 2014; Sulak, 2016; Thapa et al., 2013; Weng & Degol, 2016).

Van Eck, Johnson, Bettencourt, and Lindstrom Johnson (2017) reported an inverse relationship between chronic student absenteeism and student perceptions of school climate. Additionally Bear, Yang, Mantz, and Harris (2017) found that "in promoting a positive school climate, one's primary focus should be on implementing strategies that students view as developing their social and emotional competencies, rather than on the systematic and frequent dissemination of praise and rewards or the frequent use of punishment" (p. 382). These researchers found that less frequent use of punitive consequences was associated with improved student perceptions of school climate (Bear et al., 2017). Cosgrove and Nickerson (2017) reported that educator perceptions of school climate were improved when schools implemented policies reflected in anti-bullying/harassment legislation in New York. Other researchers have reported positive associations between school climate and student outcomes related with academic achievement (Davis & Warner, 2015; Sulak, 2016), and some have found that a positive school climate can mitigate the continued strong influence that school socioeconomic status continues to have on academic achievement (Berkowitz et al., 2016). Reynolds et al. (2017) reported that school climate influences levels of achievement mediated by students' school identification, so students in schools with positive school climates feel more connected to their schools and achieve at higher academic levels.

Although these scholars reported positive educational outcomes with improved school climate, Benbenishty, Astor, Roziner, and Wrable (2016) tested the causal links between school violence, school climate, and academic performance and did "not find evidence to suggest that improving school climate or reducing incidences of violence leads to improved school performance over time" (p. 201). Perhaps the influence of school climate to positively influence school performance is a finding unique to cross-sectional study designs. Nevertheless, the social-emotional benefits students realize in schools with positive school climates perhaps surmount the need to identify continued school academic growth. This might be just one reason principals and superintendents are likely to continue prioritizing their leadership agendas to focus on improving school climate.

As I discussed above, various instruments exist for states and schools to administer to their communities to measure and report school climate, however, New Jersey (NJ) is an example of one state that chooses to use proxies to publicly report school climate data. In its 2015-2016 School Performance Report (SPR; NJDoE, n.d.), NJ publicly reported data for eight different school level variables and categorized the data for these variables in the SPR as school climate. These eight proxies include: length of school day, full-time instructional time, shared-time instructional time, student to faculty ratio, student to administrator ratio, faculty attendance, student suspensions, and student expulsions. It was difficult to identify in previous work whether any of these eight school level variables reported in NJ are components of the school climate domains identified in other research instruments (NCSSLE, n.d.a; Zullig et al., 2010). Although these proxies might be loosely suggestive of some of these previously identified school climate domains, none of the school climate instruments relied on these specific indicators to quantify school climate. Therefore, NJ's inclusion of these eight aforementioned proxies for publicly reporting school climate is not an evidence-based policy.

Method

The school served as the unit of analysis for this correlational study. I collected data from the 2015-2016 New Jersey School Performance Report (SPR), which is a publicly available database that includes a variety of measures the NJDoE collected from 2,508 public and charter schools in the state (NJDoE, n.d.). This study's sample of 1,618 elementary and middle schools included all schools in the SPR that met the following four inclusion criteria that I established for this inquiry:

1. The school reported its percentage of economically disadvantaged students.
2. The school reported its length of school day, faculty to student ratio, administrator to student ratio, faculty attendance percentage, percentage of students suspended from

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school, and percentage of students expelled from school, which are six NJDoE defined school climate proxies.

3. The NJDoE reported median school growth in English language arts (ELA) in the SPR for the school.
4. The NJDoE reported median school growth in math in the SPR for the school.

For each school that met the inclusion criteria, I copied the data from the SPR for each variable included in my conceptual framework and constructed a separate database. As a result, I created a spreadsheet that included data for the nine study variables for each of the 1,618 elementary and middle schools that comprised this sample.

The percentage of economically disadvantaged students in a school, which includes students who qualified for either free or reduced-price lunch, served as the school level measure of socioeconomic status (SES) for this study. Although not appropriate for use as a student level measure of SES, Harwell (2018) reported that using the percentage of economically disadvantaged students in a school is a "useful index to compare the economic need of a school or district with other schools or districts" (p. 4). I included the percentage of economically disadvantaged students in my conceptual framework as a predictor of the six school climate proxies and school growth in ELA and math.

In the school climate category, the NJDoE reports school level measures in the SPR for the following eight variables: length of school day; full-time instructional time; shared-time instructional time; student to faculty ratio; student to administrator ratio; faculty attendance; student expulsions; and student suspensions. For this inquiry, I excluded the use of full and shared-time instructional time as two separate school climate proxies for the following reasons. First, based on my previous experiences as a public school leader, it is unlikely that any interactions that occur in a school that might influence school climate are limited to instructional time only. Thus, I eliminated the full-time instructional time variable from consideration in my conceptual framework. Second, my cursory analysis of the SPR indicated that 87.4% of schools had a value of zero for the shared-time instructional time variable, therefore, I eliminated this variable from inclusion in my conceptual framework. I included the remaining six indicators the NJDoE includes in the SPR as school climate proxies as predictor variables of school growth in ELA and math.

The two dependent measures I identified for this inquiry were median school growth in ELA and math. The NJDoE reports school growth in the SPR for elementary and middle schools using

> the Student Growth Percentile (SGP) methodology. SGP measures student growth year over year by comparing a student's achievement to a group of students that had similar achievement in previous years. SGP makes it possible to measure how much a student has grown relative to his or her academic peers with a similar test score history. The SGP score is a percentile rank that demonstrates the percentage of the peer group the student outperformed. Each student gets a student growth percentile for ELA/L (4th to 8th grade) and Math (4th to 7th grade). (NJDoE, n.d.a., p. 26)

For this SPR, the NJDoE calculated SGP scores for each student based on individual performance on two separate standardized tests, the NJ Assessment of Skills and Knowledge, which NJ schools last administered to students during the 2013-2014 school year, and the Partnership for Assessment of Readiness for College and Careers (PARCC), which NJ schools began administering to students during the 2014-2015 school year. The measures of school growth in ELA and math that I used as dependent measures in this study are not individual student scores, but the median SGP score for all students in a school, as reported by the NJDoE in this SPR.

I analyzed all data using SPSS to compute Pearson product-moment correlation coefficients (r) to answer the first research question. For each of the significant relationships that I assessed with respect to RQ_1, I calculated the coefficient of determination (r^2) to examine the variance shared between the variables. To answer the second research question, I analyzed all data using SPSS to conduct two separate multiple regression analyses to determine whether each of the six school climate proxies predict median school growth in math, and ELA, when modeled with the percentage of economically disadvantaged students.

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Results

The average percentage of economically disadvantaged students in this sample of 1,618 elementary and middle schools was 37.02% (*SD* = 29.35). Academic growth for ELA (*M* = 50.88, *SD* = 11.22) and math (*M* = 50.64, *SD* = 11.69) in these sample schools was nearly identical, which I expected because the NJDoE reports academic growth as a median percentile score and I excluded only those NJ elementary and middle schools from the sample for missing data. Descriptive measures for the six school climate proxies in this sample follow: length of school day in minutes (*M* = 394.98, *SD* = 21.35); faculty to student ratio (*M* = 11.39, *SD* = 5.97); administrator to student ratio (*M* = 286.99, *SD* = 133.94); faculty attendance percentage (*M* = 95.79, *SD* = 5.72); percentage of students in a school who are suspended (*M* = 3.80, *SD* = 6.54); percentage of students in a school who are expelled (*M* = 0.01, *SD* = 0.10).

Results of the correlation analysis include the presence of relationships between four of the six NJDoE school climate proxies and academic growth in ELA, math, or both content areas. These relationships, however, are weak and explain little of the variance between the identified school climate proxies and academic growth. The inverse relationships between academic growth in ELA and math, and student suspensions, indicates that median school growth in ELA and math decreases as the percentage of students suspended from school increases.

School socioeconomic status (SES), as measured by the percentage of students who were eligible for free or reduced-price lunch in these sample schools, was related with four of the six school climate proxies. SES was weakly related with length of school day (r = .163, r^2 = .027), faculty to student ratio (r = .068, r^2 = .005), and student expulsions (r = .057, r^2 = .003). SES, however, was moderately related with student suspensions (r = .404, r^2 = .163), which is a troubling finding because it suggests as the level of economic disadvantage increases in these sample schools, a greater percentage of students are suspended from school.

Four of the six NJDoE school climate proxies that I examined are related with academic growth in ELA and math. I identified relationships between academic growth in ELA and three of the six NJDoE defined school climate proxies, including faculty attendance percentage (r = .060, r^2 = .004), student suspensions (r = -.127, r^2 = .016), and student expulsions (r = .050, r^2 = .003). Examination of the coefficients of determination for each of these relationships, however, suggests little of the variance between ELA and each of these three school climate proxies is shared by the other variable. Additionally, I identified relationships between academic growth in math and four of the six NJDoE defined school climate proxies, including administrator to student ratio (r = .052, r^2 = .003), faculty attendance percentage (r = .080, r^2 = .006), student suspensions (r = -.173, r^2 = .030), and student expulsions (r = .037, r^2 = .001). Like the findings for academic growth in ELA, the coefficients of determination suggest little of the variation between variables is accounted for by the relationship. Therefore, the data partially support the first research question (RQ_1) that I developed for this study.

In Table 1 and Table 2, I presented the summary of each regression analysis to address the second research question (RQ_2) that I developed for this study. Three of the six school climate proxies, which included length of school day, student suspension rate, and student expulsion rate, predicted school growth in ELA. This model, however, accounted for just 3% of the variance in academic growth in ELA. The percentage of economically disadvantaged students and two of the six school climate proxies, which included student suspension rate and student expulsion rate, predicted school growth in math. Although this model accounted for just 6.8% of the variance in academic growth in math, the data better support this model of academic growth when compared to the model of academic growth in ELA. Therefore, the data partially support the second research question (RQ_2) that I developed for this study.

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Table 1
Summary of Regression Analysis for Academic Growth in ELA

Variable	*B*	β	*t*	*p*
EDS	-.014	-.037	-1.35	>.05
LSD	.042	.079	3.07	<.05
F:S	.009	.005	.20	>.05
A:S	.002	.018	.72	>.05
FA	.093	.047	1.83	>.05
SUS	-.230	-.134	-4.81	<.05
EXP	7.023	.062	2.486	<.05

Note. $R^2 = .030$, $F(7, 1610) = 7.156$, $p < .05$
EDS = percentage of economically disadvantaged students; LSD = length of school day in minutes; F:S = faculty to student ratio; A:S = administrator to student ratio; FA = faculty attendance percentage; SUS = percentage of students suspended from school; EXP = percentage of students expelled from school

Table 2
Summary of Regression Analysis for Academic Growth in Math

Variable	*B*	β	*t*	*p*
EDS	-.073	-.183	-6.931	<.05
LSD	.014	.026	1.030	>.05
F:S	-.054	-.028	-1.118	>.05
A:S	.003	.037	1.472	>.05
FA	.125	.061	2.536	<.05
SUS	-.186	-.104	-3.808	<.05
EXP	7.100	.060	2.460	<.05

Note. $R^2 = .068$, $F(7, 1610) = 16.829$, $p < .05$
EDS = percentage of economically disadvantaged students; LSD = length of school day in minutes; F:S = faculty to student ratio; A:S = administrator to student ratio; FA = faculty attendance percentage; SUS = percentage of students suspended from school; EXP = percentage of students expelled from school

To summarize, the data partially support both RQ_1 and RQ_2 that I developed for this study. Faculty attendance and student suspensions are two school climate proxies in NJ that are associated with school academic growth in ELA and math. Student expulsions is a school climate

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proxy in NJ that is associated with academic growth in ELA only, while administrator to student ratio is a school climate proxy in NJ that is associated with school academic growth in math only. So, four of the six NJ defined school climate proxies are associated with academic growth in either ELA, math, or both content areas. The data better supported my hypothesized model of academic growth in math, in which school SES and three school climate proxies, faculty attendance, student suspensions, and student expulsions, predicted this outcome.

Discussion

My purpose in conducting this inquiry was to examine the school climate proxies reported by the NJDoE to identify relationships with, or influences on, school academic growth, and to answer the two research questions that I developed for this study. First, are the NJDoE reported school climate proxies associated with median school academic growth? Four of the six NJ defined school climate proxies that I examined are associated with academic growth in either ELA, math, or both content areas. Faculty attendance and student suspensions are associated with school academic growth in both content areas, student expulsions is associated with school academic growth in ELA, and administrator to student ratio is associated with school academic growth in math. These relationships, however, are weak with small effect sizes. Therefore, the associations that I found between school climate and academic growth in NJ offer little value to evidence-based school leaders. Second, do the NJDoE reported school climate proxies predict median school academic growth when modeled with school socioeconomic status? Length of school day, student suspension rate, and student expulsion rate predict school academic growth in ELA, while faculty attendance, student suspensions, and student expulsions predict school academic growth in math. These prediction models, however, explained little of the variance in school academic growth in either ELA or math. So, like my analysis of RQ_1, the two models of academic growth I examined offer little value to school leaders. Earlier, I reviewed several studies from the contemporary school climate literature whose authors reported that a positive school climate is associated with higher levels of academic achievement (Davis & Warner, 2015; Reynolds et al., 2017; Sulak, 2016). Additionally, Berkowitz et al. (2016) reported that a positive school climate can attenuate the influence school socioeconomic status continues to have on academic achievement. The findings from this sample of NJ schools provide some support for these previous works, albeit weak.

These findings are educationally significant because they offer value to both the NJDoE and current school leaders. For the NJDoE, these findings should urge the state to develop a more robust policy for measuring and publicly reporting school climate that is supported by evidence in the contemporary school climate literature. A policy that provides guidance to schools and local education agencies regarding the availability of reliable and valid school climate instruments for use would be a valuable revision, as opposed to the continued use of the current eight proxies to report school climate. For NJ principals and superintendents, these findings should help them develop more focused leadership agendas that prioritize other school level variables, for which evidence exists, as they lead their schools and districts to improved educational outcomes for all students. A leadership agenda focused on any or all eight NJDoE school climate proxies is likely to yield little improvement in school academic growth in either ELA or math.

As I progressed through this inquiry, especially during the data analysis and results stages, it became clear to me that the NJDoE reported school climate proxies in the SPR are neither supported by prior school climate research, nor do they represent administratively mutable variables that school leaders can target to improve school and student outcomes. I found the NJDoE's use of these school climate proxies to be mostly puzzling, given the work by Zullig et al. (2010) and the ED (NCSSLE, n.d.a). These previous works make it clear that several instruments are available for schools and local education agencies to use to measure school climate, yet it appears the NJDoE conveniently selected eight loosely coupled proxies to represent school climate in NJ's schools. I initiated an inquiry with the NJDoE in fall 2017 via its website to gain additional insights regarding the selection of these eight indicators to serve as proxies for school climate in NJ schools, however, I have not yet received a reply.

One important component the NJDoE school climate proxies seem to miss is the social-emotional benefit students realize because of positive school climates. It is not unrealistic to suggest

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that none of these proxies address the social-emotional domains prevalent in school climate instruments. Therefore, these proxies fail to adequately represent data that is garnered in two of five historically common school climate domains, because none address variations in the domains of social relationships and school connectedness. The NJDoE school climate proxies appear to focus on two of the most common school climate domains, which includes: order, safety, and discipline; and academic outcomes (Zullig et al., 2010, p. 141). Perhaps the NJDoE will use this study's findings as impetus to incorporate measurement of all domains when it revises its school climate policy. Given the social-emotional benefits students realize in schools that have positive school climates, creating schools with positive climates should remain a focus of school leaders. This will remain a challenge in practice, though, primarily due to the accountability demands principals and superintendents continue to face regarding improving student growth and school academic achievement in the dominant content areas of literacy and numeracy.

To conclude, my examination of school climate and academic growth in NJ schools adds value to the contemporary school climate literature in several ways. First, the findings indicate select NJDoE school climate proxies are associated with, and serve to predict, academic growth, but these associations and predictive values are weak. These findings do, however, support previous work that found higher levels of academic achievement in schools with positive school climates (Davis & Warner, 2015; Reynolds et al., 2017; Sulak, 2016). Second, schools, local education agencies, and states should avoid using proxies to report school climate, especially if the proxies are not inclusive of the five most commonly assessed domains that research-based school climate instruments measure. Although my findings suggest some value in using school climate proxies, schools and students might be better served with a more comprehensive policy. A school climate measurement and reporting policy at the state level would provide local education agencies and schools better guidance regarding the availability of research-based instruments to measure school climate, as well as knowledge regarding specific measurements that might be included in publicly available databases. School leaders could then solicit all community members, including students, staff, and parents, regarding their perspectives of the school's climate, and develop a leadership agenda that is focused on identified areas of needed improvement.

Recommendations for Research, Policy, and Practice

Future research should continue to examine associations between school climate and a variety of educational outcomes in NJ and other states. I especially look forward to future work that conceptualizes school climate with the breadth of learning opportunities that schools offer to their students. Perhaps school climate influences the types of learning opportunities schools offer their students, or the reciprocal relationship might be a factor. Scholars interested in conceptualizing school climate in this manner could look to the work of Anderson et al. (2018) for more guidance. Additionally, future school climate research could benefit from more longitudinal analyses, especially when considering the results Benbenishty et al. (2016) reported, to examine the influence of school climate on educational outcomes over time.

States should develop robust school climate policies to provide schools with guidance on how to measure, report, and improve this important school level variable. Departments of education at the state level should provide schools with a variety of school climate instruments to choose from, which schools can then administer to parents, staff, and students. Guidance on data analyses for each of the recommended school climate instruments needs to be included in any state level policy, as do suggestions for addressing the results if various state departments of education envision widespread adoption by the leadership in many schools. States that rely on proxies to publicly report school climate should consider discontinuing this practice, then develop a policy that is robust, research-based, and includes input and recommendations from all levels of the educational community.

School leadership should continue to focus on improving school climate, because an abundance of evidence indicates that improving this school level variable is likely to benefit a variety of educational outcomes (Berkowitz et al., 2016; Davis & Warner, 2015; Hopson, Schiller, & Lawson, 2014; Sulak, 2016; Thapa et al., 2013; Weng & Degol, 2016). More consistent measurement and analysis practices are likely to help practitioners focus on specific areas of need to improve school climate. In the absence of improved school climate policies that address these concerns, it is unlikely that school leaders will have the specific knowledge and information to substantially alter their leadership strategies that places a greater focus on improving school climate.

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