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Demographic differences in district-level policies related to school mental health and social services —United States, 2012

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Abstract

BACKGROUND: Mental health conditions among youth are a major concern. Schools can play an important role in supporting students affected by these conditions. This study examined district-level school health policies related to mental health and social services to determine if they varied by district demographic characteristics.

METHODS: The School Health Policies and Practices Study (SHPPS) 2012 collected cross-sectional data on school health policies and practices from a nationally representative sample of public school districts (N=684). We used logistic regression to examine the association between district-level demographic characteristics and school mental health policies.

RESULTS: Southern and low affluence districts had higher odds of requiring schools to have a specified counselor-to-student ratio as compared to Northeastern and average affluence districts, respectively. Northeastern and urban districts had higher odds of requiring educational and credentialing requirements for school mental health or social services staff, compared to other regions and rural districts, respectively.

CONCLUSIONS: Results describe the extent to which school mental health and social services programs in the United States are meeting various guidelines. More work is necessary to ensure that all schools have the resources needed to support their students' mental health and meet national guidelines, especially in districts with certain characteristics.

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Keywords

Schools; Mental Health; Policy; Demographic Factors

School mental health programs and services play an important role in addressing the needs of students who come to school each day with a variety of mental health issues. Many mental health conditions develop during adolescence; therefore, this time period is critical for the prevention and early treatment of mental health concerns. ^{1–3} Estimates show that prevalence of anxiety, mood, behavior, and substance use disorders over the past 12 months among adolescents is 40.3%. ⁴ As children transition into adolescence, any existing mental health problems become more intense and complex, including the development of comorbid conditions. ⁵ Unfortunately, many adolescents do not seek out or receive treatment for their conditions due to multiple reasons, such as lack of access, insurance coverage problems, lack of coordinated care, a shortage of specialized care providers, lack of stable living conditions, confidentiality issues, and fear of stigmatization. ^{1–4,6}

Among American children who receive professional care for a mental health problem, up to three-quarters of them obtain their services from a school-based program. In addition to offering screening for adolescent mental health conditions, school-based programs are also able to provide students access to diagnoses and treatment. Schools can reach a large number of adolescents since students spend the majority of their waking hours in school and school-based services are accessible to groups that may traditionally have problems with accessing care. According to a policy statement from the American Academy of Pediatrics, schools should have a multidisciplinary student support team to assist students identified with a mental health problem. By incorporating mental health into a coordinated school health program, schools are better prepared to promote the positive social and emotional development of all students, provide early interventions for students who are at risk of developing mental health problems, and work directly with students with more serious problems. Leadership, in the form of a coordinator for mental health or social services for example, is essential for successful implementation of these integrated school health services.

School Mental Health Services

Multidisciplinary school-based programs may include a staff of school counselors, psychologists, social workers, nurses, nurse practitioners, physicians, and other specialized professionals.^{6,7} School nurses and school counselors can provide early assessment, intervention, planning, and follow-up of students in need of mental health services. School nurses are often the first to identify students that may be experiencing mental health issues and advocate for their care; they also connect them with school counselors.¹⁰ Schools can also refer students to community-based mental health services and help provide additional care and follow-up when needed.^{11,12} Schools may provide services in a school-based health center (SBHC) and provide different levels of service based on the severity of mental health issues experienced at the school.⁶ Schools may also establish student support teams, crisis

response teams, and other multidisciplinary teams to assist students with mental health concerns. ^{6,7}

Staffing and Staffing Qualifications

It is important to ensure that school staff working on mental health and social services have the necessary knowledge, skills, and attitudes to perform in their roles and are involved in continued professional development. To facilitate this, schools may ensure they (1) employ sufficient staff, including a sufficient number who have needed licenses/credentials, to address the school's comprehensive needs and (2) provide ongoing opportunities for staff to participate in relevant, effective learning experiences, including cross-disciplinary, cross-role, and cross-agency learning. 13

Using data from the School Health Policies and Practices Study (SHPPS), previous studies have found some variations in school health policies and practices, including some mental health and social service policies and practices, by school demographic characteristics. ^{14,15} Aside from these earlier SHPPS analyses, no other studies were identified that examined differences in a variety of school mental health and social service policies by demographics. This analysis therefore builds upon this previous work by using SHPPS 2012 data to examine multiple district-level school health policies related to mental health and social services to determine if they varied by school district region, metropolitan status, affluence, percentage of students receiving free or reduced price lunch, and percentage of minority students. Compared to previous publications, this analysis focused on school districts rather than schools and included additional variables, such as geographic region and several school mental health and social services topics. This work also has the potential to identify persistent and new patterns in associations between district characteristics and policies since the previous studies used data from 2000 and 2006.

METHODS

SHPPS 2012 was conducted by the Centers for Disease Control and Prevention (CDC) during October 2011–August 2012. SHPPS 2012 examined eight components of school health at the state and district levels: health education, physical education and activity, health services, mental health and social services, nutrition services, healthy and safe school environment, faculty and staff health promotion, and family and community involvement. A detailed description of the SHPPS 2012 methods has been published previously. ¹⁶ Although SHPPS 2012 collected data at the state and district levels, this analysis uses district-level data only, as the state-level survey did not collect information on state-level policies.

Instrumentation

SHPPS 2006 questionnaires underwent a question-by-question review to determine questionnaire content for 2012. New questions added for SHPPS 2012, and questions that were modified substantially from SHPPS 2006, were subjected to cognitive testing using telephone interviews with state education agency staff and school district staff. Trained interviewers asked these respondents to answer questions and then asked follow-up questions to ascertain the respondents' understanding of each question and its response

options. Then draft questionnaires were evaluated by reviewers from federal agencies, nongovernmental organizations, foundations, universities, and businesses nationwide and appropriate revisions were made. Copies of the SHPPS 2012 questionnaires can be obtained at www.cdc.gov/shpps.

Participants and Procedures

District-level SHPPS data were collected from a nationally representative sample of public school districts. Sampled district education agencies were asked to identify respondents who were responsible for or most knowledgeable about the component covered within a questionnaire or module. This analysis examined data from the district-level Mental Health and Social Services questionnaire. Of 1408 eligible school districts, 65.3% completed at least one module in that questionnaire. Most (85.4%) of the district-level questionnaires were completed via Web-based self-administered questionnaires; the remaining 14.6% were completed using self-administered paper and pencil questionnaires. District-level data were weighted to produce national estimates.

These data were then linked with extant data on district characteristics from the Market Data Retrieval (MDR) database. The MDR database contains a range of information about individual US school districts, such as student characteristics, teacher characteristics, and environmental characteristics. The database is updated annually by contacting the districts directly. ¹⁷

Measures

This analysis examined data on 13 school mental health and social services policies related to staffing, staff qualifications, and provision of services.

Staffing and staff qualifications.—We examined various policies related to school staffing: whether the district had adopted a policy stating that each school have someone to oversee or coordinate mental health or social services at the school; whether the district had adopted a policy stating that each school have a specified ratio of counselors to students (separately for elementary, middle, and high schools); the minimum level of education the district required for a newly hired school counselor, school psychologist, or school social worker (assessed separately by staff type); whether the district required a newly hired school counselor, school psychologist, or school social worker to be licensed, certified, or credentialed by a state agency or board (assessed separately by staff type); and whether the district had adopted a policy stating that school mental health or social services staff were required to earn continuing education credits on mental health or social services topics. For the minimum level of education questions, we assessed if districts required a minimum of a master's degree.

Provision of services.—We examined district-level policies related to two general school mental health and social services: student assistance programs and student support teams. Student assistance programs were defined on the questionnaire as services designed to assist students experiencing personal or social problems that can impact school performance, physical health, mental health, or overall well-being. We assessed whether districts had

adopted a policy stating that student assistance programs will be offered to all students. Student support teams may also be known as student assistance teams or student guidance teams. These were defined on the questionnaire as teams of school staff who collaborate to provide assistance to students with disabilities or those who are experiencing academic difficulties or behavioral problems. We assessed whether districts had adopted a policy stating that schools will create and maintain such teams.

Demographics.—District-level demographic characteristics were assessed using MDR data. The state indicated in the mailing address of the school district was used to classify districts into Census regions: Northeast, South, Midwest, and West. Metropolitan status was defined by the Census Bureau and describes the size of the community in which the school district resides. Initial assessment included eight categories: (1) large central city, (2) mid-size central city, (3) urban fringe of a central city, (4) urban fringe of a mid-size city, (5) large town, (6) small town, (7) rural- outside a metropolitan statistical area, and (8) rural- inside a metropolitan statistical area. This variable was then dichotomized combining cities and urban fringes into an urban classification and towns and rural areas into a rural classification. The MDR dataset includes an affluence indicator that assesses socioeconomic status based on a proprietary algorithm incorporating data points ranging from MDR specific variables to Census data. The original variable was a five-level scale: low, below average, average, above average, and high. For this study, we re-categorized this variable into three levels: low/below average, average, and above average/high. The percentage of students receiving free or reduced-price lunch was assessed on a continuous scale and was then categorized into three levels: low (0-33%), medium (34%-66%), and high (67%). MDR assessed the percentage of students in the district by race/ethnicity (Caucasian, African American, Asian American, Hispanic American, and Native American) on a continuous scale. Districts were classified as majority minority if 50% of the district population was non-Caucasian.

Data Analysis

This analysis was conducted using weighted data and with SUDAAN statistical software which accounts for the complex sampling design at the district level. Descriptive data on the district-level demographic characteristics and the prevalence of each of the 13 district mental health or social services policies are presented. Logistic regression was used to examine whether there was an association between these district-level policies and district-level demographic characteristics. Separate logistic regression models were run for each policy, and the models were adjusted for all demographic characteristics listed above.

RESULTS

District-level demographic characteristics are shown in Table 1. Table 2 presents the percentage of districts that adopted policies regarding specific school mental health or social services topics related to staffing and staff qualifications and student support services.

Table 3 shows the associations between district-level characteristics and district policies related to school mental health and social services. Having a policy stating that each school will have someone to oversee or coordinate mental health or social services at the

school significantly varied by affluence. That is, low/below average affluence districts had significantly higher odds of having such a policy as compared to average affluence districts (OR=2.30, 95% CI=1.36, 3.88). Specifically, 49.1% of low/below average affluence districts had this policy as compared to 33.0% of average affluence districts (data not shown).

Results regarding counselor-to-student ratios were similar by school level. For all school levels, having a policy stating that each school will have a specified ratio of counselors to students significantly differed by region. That is, districts in the South had higher odds of having such as policy as compared to districts in the Northeast (elementary: OR=7.88, 95% CI= 3.17, 19.60; middle: OR=8.56, 95% CI=3.46, 21.23, high: OR= 7.21, 95% CI= 3.00, 17.36). For high schools, the odds were also higher among districts in the Midwest as compared to districts in the Northeast. For middle schools and high schools, there was also a significant difference by affluence. The odds were higher among low/below average affluence schools as compared to average affluence schools (middle: OR=1.77, 95% CI=1.02, 3.06; high: OR=2.43, 95% CI=1.33, 4.46).

Having a policy that required newly hired school counselors to have a master's degree in counseling significantly differed by region. That is, districts in the West had lower odds of having such a policy as compared to districts in the Northeast (OR=0.47; 95% CI=0.23, 0.97). Specifically, 56.4% of districts in the West had this policy as compared to 71.4% of districts in the Northeast (data not shown). Having a policy that required newly hired school counselors to be licensed, certified, or credentialed by a state agency or board significantly differed by region and metropolitan status. Districts in the West had lower odds of having such a policy as compared to districts in the Northeast (OR=0.39, 95% CI=0.17, 0.92) and rural districts had lower odds as compared to urban districts (OR=0.56, 95% CI=0.32, 0.96).

There were no demographic differences regarding policies requiring newly hired school psychologists to have a master's degree in psychology. However, there was a difference by metropolitan status in whether districts required newly hired school psychologists to be licensed, certified, or credentialed by a state agency or board. Rural districts had significantly lower odds as compared to urban districts (OR=0.31; 95% CI=0.17, 0.57).

Demographic differences regarding policies requiring newly hired school social workers to (1) have a master's degree in social work and (2) be licensed, certified, or credentialed by a state agency or board were similar. Both policies differed by region, metropolitan status, affluence, and majority minority status. Districts in the Midwest, South, and West had lower odds of having such policies as compared to districts in the Northeast; rural districts had lower odds as compared to urban districts; above average/high affluence districts had higher odds as compared to average affluence districts; and majority minority districts had higher odds as compared to majority Caucasian districts. In addition, districts with a low percentage of students receiving free or reduced-priced lunch had significantly lower odds of requiring newly hired school social workers to be licensed, certified, or credentialed by a state agency or board as compared to districts with a medium percentage (OR=0.46; 95% CI=0.23, 0.92).

Having a policy stating that school mental health or social services staff are required to earn continuing education credits on mental health or social services topics significantly differed

by region and metropolitan status. That is, districts in the West had lower odds of having such a policy as compared to districts in the Northeast (OR=0.34; 95% CI=0.18, 0.64) and rural districts had lower odds as compared to urban districts (OR=0.57; 95% CI=0.38, 0.85).

Having a policy that student assistance programs will be offered to all students significantly differed only by affluence. Low/below average affluence schools had higher odds of having this policy as compared to average affluence schools (OR=2.39; 95% CI=1.29, 4.44). Having a policy stating that schools will create and maintain student support teams did not differ by any of the district-level demographic characteristics included in this analysis.

DISCUSSION

This analysis examined the odds of prevalence of policies and practices in school districts relative to one another. Some patterns emerged regarding the association between district-level demographic characteristics and school mental health and social services policies. In general, Southern and low affluence districts were more likely to have policies requiring counselor-to-student ratios. The American School Counselors Association (ASCA) recommends a counselor-to-student ratio of 1:250. 11 SHPPS does not ascertain the actual ratio of counselors to students, but having a district-level policy establishing a specified ratio demonstrates support for sufficient counselors. Southern and low affluence districts may be more likely to have policies requiring counselor-to-student ratios because of a greater need for counselors in these districts and/or lower availability of school counselors in these areas. A report of school counselors found that the average caseload were highest for counselors in the South as compared to other regions. 18 Further, low income students tend to have more mental health issues. 2 Therefore, these districts may make establishing counselor-to-student ratios a priority.

Northeastern and urban districts were generally more likely to have staff education and credentialing requirements. Perhaps there is a greater pool of potential candidates in these types of districts, so they can set requirements that allow them to be more selective in their hiring. School psychologist salaries tend to be higher in the Northeast as compared to other regions which may drive psychologists to that region. ¹⁹ In addition, there is a lack of highly trained school psychologists in rural areas.²⁰ Regardless, it is important for districts to set high standards for staff education and credentialing. Mental health and social services staff must be prepared to develop student-focused initiatives within a changing climate and new information. The growing knowledge base in various disciplines and fields of practice and initiatives can help change and restructure educational efforts.¹³ Further, the American Academy of Pediatrics recommends that school mental health professionals have training specific to child and adolescent mental health and are competent to provide mental health services in the school setting.⁶ Educational requirements and state credentialing can play a major role in determining that individuals are prepared for school mental health work. Professional organizations for school counselors, school psychologists, and school social workers each recommend some graduate training, if not a completed master's degree, for professionals in their field. They also recommend certain credentialing, licensure, or qualification standards. 11,21,22 The most consistent associations with districtlevel demographics occurred for school social worker requirements. This may be due to the

fact that, compared to the need for school counselors or psychologists, the need for school social workers is more dependent on factors related to the income of students because social workers help access resources that students with lower incomes are more likely to need.

Western and rural districts were less likely to have a policy requiring school mental health or social services staff to earn continuing education credits on mental health or social services topics. Districts in these areas may be less likely to have such requirements because of a lower level of competition for these positions or because they have fewer resources than other districts to support staff training. Schools in the West receive less funding per pupil compared to schools in the Northeast or Midwest, ²³ and rural schools must often deal with funding shortfalls. ²⁴ It is important for districts to devote resources to professional development for mental health and social services staff, because the possession of certain knowledge, abilities, skills, and attitudes can help school mental health or social services staff be continually prepared for the changing demands of the job. ¹¹ Professional development is critical for staff to develop skills, maintain competencies that help students succeed, identify areas for improvement, adopt best practices, address problems. ²⁵ Commitment to professional development can help schools develop quality programs and interventions. ²⁵

There were few or no associations between demographic characteristics and requiring a mental health or social services coordinator, student assistance programs, or student support teams. Reasons for this consistent lack of association are unknown. School health coordination is key to effective mental health services and involves organizing and managing multiple school health initiatives, such as instruction and environmental changes.²⁶ Coordination connects diverse initiatives designed to reduce health risks and promote health and student achievement. Promotion of coordination of these services at the school level may assist schools in their planning efforts and help schools more efficiently use their resources. However, less than half of districts nationwide had a policy stating that each school will have a mental health or social services coordinator. All types of districts would benefit from striving toward coordinator requirements given the value of these positions. Interest in student assistance programs has increased in most states as it is seen as a promising avenue to help students overcome barriers to learning.²⁷ The Health. Mental Health, and Safety Guidelines for Schools states that schools should have student support teams. 7 It is a positive finding that more than three-fourths of districts required schools to have student assistance programs and student support teams. However, though many schools may offer these services, expansion of district policies would likely result in more students who are in need of various types of support having access to services and promoting their academic and emotional development.

This study also revealed that some district-level demographic characteristics were not consistently associated with the school mental health and social services policies included in this analysis. The percentage of students receiving free or reduced-price lunch was only associated with school social worker educational requirements and district-level minority concentration was only associated with policies regarding social worker education and credentialing requirements. This finding might be the result of these characteristics being related to other characteristics in the model, such as affluence, which were more strongly

associated with the policies. It is encouraging, however, that districts with high percentages of students receiving free or reduced-price lunch or high percentages of minority students do not appear to lack key district-level policies related to mental health and social services. However, since more than half of the districts in this study had medium or high percentages of students qualifying for free or reduced price lunch, this may mean that the tax systems for these schools may not be sufficient to generate needed funds to support ideal mental health and social services programs for all schools. The percentage of schools qualifying for free or reduced price lunch is a marker of poverty status and, in many states, high poverty districts receive less funding. ²³

We can compare these results to previous studies that have examined associations between demographic characteristics and mental health and social services policies. ^{14,15} Two previous manuscripts have reported differences in school-level policies using SHPPS data. Though the variables of interest were different for these studies, there was some overlap. Both studies examined associations of urbanicity and percent white student population with student assistance programs and found no significant associations; this is consistent with our findings. Neither study included an affluence indicator which we found was significantly associated with student assistance programs. Balaji and colleagues also examined free lunch and found no association with student assistance programs. ¹⁵ Brener and co-authors examined demographic differences with having a mental health or social services coordinator. ¹⁴ Results were not significant by percent white student population or urbanicity, consistent with our findings.

Limitations

The results of this study should be evaluated in the context of its limitations. First, the development of policies at the district level is not a direct measure of practices that occur in schools. Further research could examine the association between these and other district-level policies and school-level practices. Second, these data do not measure the quality and enforcement of district policies, only whether such policies are in place. Third, SHPPS 2012 data are cross-sectional. Fourth, these data are based on self-report; therefore, the data relies on knowledge of the respondents and their interpretation of existing policies. A content analysis of district policies may have yielded different findings. Lastly, the SHPPS 2012 study is not designed to determine why demographic differences in school mental health or social services policies exist.

Conclusions

Schools can provide safe and confidential access to services and support for improved cognitive, behavioral, and emotional functioning of all students. ^{28,29} Given the overwhelming need for mental health services for children and adolescents, the New Freedom Commission on Mental Health published a report that highlighted the vital role that schools play in the mental health system and recommended improvement and expansion of school mental health programs. ^{30,31} This study found variation among school districts by demographics on the extent to which they addressed certain policies related to school mental health or social services. While district-level policies may be an important step to getting these services offered in more schools and securing a competent workforce, states, districts,

and schools can work together to ensure that policies and programs are of high quality and accessible to all students.

IMPLICATIONS FOR SCHOOL HEALTH

School districts can use the results of this study to help improve their policies and practices, which can in turn help schools develop and sustain environments supportive of student mental health. Some specific examples of actions school districts can take include:

- Assess the extent to which their district has these mental health and social services policies and practices in place. With the use of these study findings, districts can determine how successful they are, relative to other districts with similar characteristics, in implementing quality policies.
- Work with schools, families, and others involved with school health to strengthen
 areas in need of improvement. Specifically, districts can seek additional support,
 in the form of financial and human resources, needed to implement stronger
 policies and practices related to mental health and social services.
- Require schools in their jurisdictions to designate mental health or social services coordinators. By establishing such positions, schools will be able to better promote healthy and safe school environments and student health though the integration of mental health and social service issues into overall school improvement efforts.
- Require schools to establish counselor-to-student ratios. Specifying such ratios is
 the first step in ensuring that schools have adequate counselor staffing to support
 the timely and adequate care of students.

A lack of resources may preclude districts' ability to take some or all of these actions. However, it is important to use limited resources for school mental health and social services as addressing mental health issues in schools can promote students' success through improvements in behavior and academics, improve teaching conditions, and reduce societal costs related to untreated mental health conditions.⁸

Human Subjects Approval Statement

SHPPS 2012 was reviewed by the Institutional Review Boards at both CDC and ICF Macro, Inc., the study contractor, and determined to be exempt.

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Table 1.

Demographic Characteristics of Districts—School Health Policies and Practices Study, 2012

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Characteristic	%*
Region	
Northeast	19.6
South	35.8
Midwest	28.4
West	16.1
Metropolitan status	
Urban	37.9
Rural	62.1
Affluence	
Low/Below average	40.4
Average	19.9
Above average/High	39.7
Percentage of students qualifying for free or reduced price lunch	
Low (0%–33%)	38.4
Medium (34%–66%)	47.5
High (67%)	14.1
Majority minority	
No (<50% non-Caucasian)	83.6
Yes (50% non-Caucasian)	16.4

 $^{^{*}}$ Weighted percentages. May not total to 100% due to rounding.

Table 2.

Weighted Prevalence of School Mental Health and Social Services Topics Related to Staffing and Staff
Qualifications and Provision of Services—School Health Policies and Practices Study, 2012

Policy/Requirement	%
Required schools to have a mental health or social services coordinator	43.6
Required elementary schools to have a specified counselor-to-student ratio	26.4
Required middle schools to have a specified counselor-to-student ratio	28.1
Required high schools to have a specified counselor-to-student ratio	32.0
Required newly hired school counselors to have at least a master's degree in counseling	70.7
Required newly hired school counselors to be licensed, certified, or credentialed by a state agency or board	84.3
Required newly hired school psychologists to have at least a master's degree in psychology	67.4
Required newly hired school psychologists to be licensed, certified, or credentialed by a state agency or board	80.3
Required newly hired school social workers to have at least a master's degree in social work	42.8
Required newly hired school social workers to be licensed, certified, or credentialed by a state agency or board	58.4
Required school mental health or social services staff to earn continuing education credits on mental health or social services	51.4
Required student assistance programs	76.2
Required student support teams *	80.1

^{*}Student support teams, student assistance teams, or student guidance teams.

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Table 3.

Odds Ratios (95% Confidence Intervals) for the Associations Between District-level Demographic Characteristics and School Mental Health and Social Services Policies—School Health Policies and Practices Study, 2012

		Metropolitan		Free/Reduced	
	Region	Status	Affluence*	Price Lunch	Majority Minority
Required schools to have a mental health or social services coordinator	NS	NS	Low > Average 2.30 (1.36, 3.88)	NS	NS
Required elementary schools to have a specified counselor-to-student ratio	South > Northeast 7.88 (3.17, 19.60)	NS	NS	NS	NS
Required middle schools to have a specified counselor-to-student ratio	South > Northeast 8.56 (3.46, 21.23)	SN	Low > Average 1.77 (1.02, 3.06)	SZ	NS
Required high schools to have a specified counselor-to-student ratio	Midwest > Northeast 2.40 (1.02, 5.68) South > Northeast 7.21 (3.00, 17.36)	SN	Low > Average 2.43 (1.33, 4.46)	X X	SS
Required newly hired school counselors to have at least a master's degree in counseling	West < Northeast 0.47 (0.23, 0.97)	SN	NS	NS	NS
Required newly hired school counselors to be licensed, certified, or credentialed by a state agency or board	West < Northeast 0.39 (0.17, 0.93)	Rural < Urban 0.56 (0.32, 0.96)	NS	NS	NS
Required newly hired school psychologists to have at least a master's degree in psychology	NS	NS	NS	NS	NS
Required newly hired school psychologists to be licensed, certified, or credentialed by a state agency or board	SN	Rural < Urban 0.31 (0.17, 0.57)	NS	NS	NS
Required newly hired school social workers to have at least a master's degree in social work	Midwest < Northeast 0.57 (0.34, 0.95) South < Northeast 0.36 (0.19, 0.68) West < Northeast 0.22 (0.11, 0.42)	Rural < Urban 0.49 (0.32, 0.74)	High > Average 2.06 (1.15, 3.71)	N N	Yes > No 2.26 (1.27, 4.01)
Required newly hired school social workers to be licensed, certified, or credentialed by a state agency or board	Midwest < Northeast 0.37 (0.19, 0.76) South < Northeast 0.25 (0.11, 0.55) West < Northeast 0.09 (0.04, 0.21)	Rural < Urban 0.44 (0.28, 0.69)	High > Average 2.36 (1.27, 4.39)	High < Medium 0.46 (0.23, 0.92)	Yes > No 2.34 (1.23, 4.43)
Required school mental health or social services staff to earn continuing education credits on mental health or social services	West < Northeast 0.34 (0.18, 0.64)	Rural < Urban 0.57 (0.38, 0.85)	NS	NS	NS

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	Region	Metropolitan Status	Affluence*	Free/Reduced Price Lunch	Free/Reduced Price Lunch Majority Minority
Required student assistance programs	NS	NS	Low > Average 2.39 (1.29, 4.44)	SN	NS
Required student support teams †	NS	NS	NS	NS	NS

NS=Not significant

^{*} Low=low/below average; High=above average/high

 $[\]mathring{\tau}_{\text{Student}}$ support teams, student assistance teams, or student guidance