

Student Mental Health Since COVID-19 and Teachers' Use of Culturally-Relevant & Emotionally-Supportive Practices

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Abstract

The rising social unrest regarding social justice issues across the nation, as well as health concerns and isolation as a result of the COVID-19 pandemic, brought about a time of unprecedented distress for students across the United States. As schools transitioned back to in-person instruction, teachers may have utilized different strategies in the classroom to help support student mental health during this time of crisis. In the current study, we surveyed a sample of 1,449 full-time K-12 teachers during the Spring 2022 semester to examine the relationships between their perceptions of student mental health decline and their use of emotionally-supportive and culturally-relevant practices. We examined whether these relationships differed depending on whether students spoke a foreign language at home and the racial background of the students in the class. Structural equation modeling results revealed that teachers' perceptions of student mental health decline were associated with greater use of emotionally-supportive, but not culturally-relevant, strategies. The relationship between teachers' perceptions of student mental health decline and use of both types of strategies were stronger in classrooms with 50% or more students who spoke a foreign language at home, but not as a function of the proportion of BIPOC students in class. Results highlight teachers' responsive use of emotional support, and use of both emotionally-supportive and culturally-relevant strategies to support the mental health of students from non-English-speaking households. However, findings point to the need for teachers to utilize more culturally-relevant strategies in times of crisis, particularly in classrooms with more BIPOC students.

Keywords: student mental health, emotionally-supportive practices, culturally-relevant practices, COVID-19 pandemic, social justice

Impact Statement

K-12 teachers across the U.S. perceived an overall decline in student mental health and responded with more emotionally-supportive, but not more culturally-relevant, practices following the COVID-19 pandemic. These supportive strategies were implemented more so among teachers who perceived mental health decline in classrooms with more students from homes where English is not the primary language, but did not vary depending on the racial makeup of classrooms. Results highlight the need for more teacher training and support to implement culturally-relevant strategies during times of heightened social unrest.

Student Mental Health Since COVID-19 and Teachers' Use of Culturally-Relevant & Emotionally-Supportive Practices

The COVID-19 pandemic brought about substantial disruptions in schooling and increased social isolation for students across the globe as schools pivoted to online learning (Jones et al., 2022). At the same time, issues regarding systemic racism and discrimination dominated public discourse in the United States, with students of all ages being exposed to, and participating in, social justice centered causes like the Black Lives Matters movement (e.g., Baskin-Sommers et al., 2021). With highly publicized protests and rising social unrest across the nation, as well as health concerns and societal disconnection brought on by the pandemic, the detrimental effects of these stressors on student mental health have been well-documented over the last few years (e.g., Panchal et al., 2023). Samji et al. (2022) found higher levels of anxiety, depression, and health-related fear in students after (vs. before) the pandemic, particularly for female students, older students, and students with disabilities. Baiden et al. (2022) found that high school students of color who perceived racial discrimination during the pandemic reported

higher levels of suicidal behavior. Thomeer et al. (2023) found that Black, Latino/a, and Asian Americans experienced higher levels of depression and anxiety (compared to their white counterparts) around racially-traumatic events like the killing of George Floyd, as well as hate crimes against Asian Americans due to racist narratives regarding the origins of COVID-19.

As majority of schools reopened for in-person instruction by Spring 2022 (Education Week, 2021; National Center for Education Statistics, 2022), teachers, as leaders of the classroom, may have engaged in a variety of strategies to support their students during a particularly stressful and emotionally charged time. The current study aims to examine K-12 teachers' perceptions of student mental health as schools returned to in-person instruction, the extent to which teachers engaged in emotionally-supportive and culturally-relevant teaching strategies to support student mental health, and whether teachers differed on their use of such practices as a result of the racial and language makeup of their classes.

Emotionally-Supportive Teaching Strategies

Emotionally-supportive strategies are practices that demonstrate teachers' genuine care and concern for students (Pianta & Hamre, 2009). Teachers' use of emotional support has been examined extensively in previous research across primary and secondary levels, with emotional support components consisting of: fostering a positive climate via shared positive affect and teacher enthusiasm, demonstrating a desire to understand students' feelings, perspectives, and interests, and fostering an environment of belonging and connection (Pianta et al., 2008; Pianta et al., 2010). Past research has highlighted the benefits of teacher emotional support on student well-being, engagement, and academic performance (e.g., Roorda et al., 2017), particularly for students from racially minoritized groups (e.g., Hamre & Pianta, 2005). For example, Froiland et al. (2019) found positive teacher-student relationship quality to predict students' basic

psychological need satisfaction, and in turn, students' levels of happiness, and these relationships held across Asian, Black, and Latino/a samples.

Culturally-Relevant Teaching Strategies

Culturally-relevant teaching strategies are practices in the classroom that center and highlight the development of students' positive racial/ethnic identities, as well as foster student critical thinking regarding social inequities (Ladson-Billings, 1995). As a multi-dimensional construct, culturally-relevant strategies involve practices like incorporating students' unique cultures into activities and assignments (e.g., Gay, 2010), the use of storytelling to exchange knowledge and affirm identities (e.g., Andenoro et al., 2012), and contextualizing classroom curriculum to students' lived experiences (e.g., Gay, 2010). While empirical research on outcomes related to culturally-relevant education is limited, past research has suggested that students, particularly students of color, who receive culturally-relevant education experience higher levels of well-being in the form of positive social identity development, interest in school, and academic achievement (e.g., Aronson & Laughter, 2016; Byrd, 2016).

The Current Study

Overall, as past research has emphasized the positive outcomes associated with teachers' use of emotional support and culturally-relevant strategies in the classroom, the aim of the current study was to examine the extent to which K-12 teachers utilized these practices during a time of heightened social unrest as schools reopened after COVID-19 related closures. Further, we focused on what these relationships looked like in classrooms with 50% or more students of color and students who spoke a language other than English at home (i.e., "foreign-born students and their families who have recently arrived in the United States," or newcomer homes; U.S. Department of Education, n.d.) as research has highlighted the additional levels of distress and

mental health issues that Black, Latino/a, and Asian students were experiencing during this time (e.g., Thomeer et al., 2023). Specifically, our research questions were:

1. Did teachers perceive an overall decline in student mental health since the onset of the COVID-19 pandemic?
2. To what extent are teachers' perceptions of changes in student mental health since the COVID-19 pandemic associated with teachers' use of culturally-relevant teaching practices and emotionally-supportive teaching practices?
3. To what extent does racial (i.e., % of students in class who are BIPOC) and language (% of students in class who speak language other than English at home) makeup of the students in teachers' classes moderate the relationship between teachers' perception of changes in student mental health since the pandemic and their use of culturally-relevant and emotionally-supportive practices?

We predicted that teachers would perceive an overall decline in student mental health since the COVID-19 pandemic. Further, we predicted that teachers who perceived student mental health decline would also implement more culturally-relevant and emotionally-supportive teaching practices in the classroom during the 2021-2022 school year. Finally, we predicted that the relationships between teachers' perception of mental health decline and their use of emotionally-supportive strategies would not differ as a function of the racial or language makeup of the classroom due to the benefits of emotional support for all students' mental health regardless of racial/ethnic background. However, we predicted that the relationship between teachers' perceptions of student mental health decline and their use of culturally-relevant strategies would be stronger in classes with more students who spoke a language other than English at home (i.e., students from newcomer homes) and classes with more students of color,

respectively, due to the additional support these students may have needed during a time of heightened racial tension and civil unrest and the particularly promising benefits culturally-relevant strategies hold for centering the experiences of BIPOC students.

Methods

Participants

The current study was part of a larger project assessing teaching practices and student engagement during the 2021-2022 school year (see Patall et al., 2023). Participants included a convenience sample of 1,449 full-time elementary and secondary teachers (70.8% white; 82.0% female; 18-74 years old ($M = 43$); average teaching experience 14.3 years) from 1,134 schools (30.4% elementary, 39.2% middle, 30.5% high) across all 50 states and the District of Columbia who were teaching during May to June 2022. The demographic characteristics of teachers who participated in the current study were similar to nationally representative data on full-time teachers in the United States from the National Center for Education Statistics (see Table S1 in the Supplemental Materials for more details; NCES, 2017). Approximately 4.01% ($n = 568$) of classes that teachers reported on were STEM (i.e., science, technology, engineering, and math). In addition, 62.1% ($n = 763$) of classes had $\geq 50\%$ of students who qualified for free & reduced lunch, 21.6% ($n = 266$) of classes had $\geq 50\%$ of students who spoke a language other than English at home, and 44.4% ($n = 548$) of classes had $\geq 50\%$ of BIPOC (i.e., Black, Indigenous, People of Color) students. Approximately 25% of classes had $\geq 50\%$ Latino/a students, 14% of classes had $\geq 50\%$ Black students, 2% of classes had $\geq 50\%$ Asian students, and 3% of classes had $\geq 50\%$ other race/ethnicity students.

Procedures

Participants were recruited through GoGuardian communication channels (e.g., social media, emails, newsletters, digital application messaging) and were asked to complete an online Qualtrics survey. Total attempted participant outreach was estimated to be over 1.2 million educators that were connected to GoGuardian in some fashion. Upon obtaining consent, teachers were asked to think about their experiences regarding one particular class section (i.e., one group of students who were in class together) that they were teaching over the last few months during the Spring 2022 semester when responding to survey questions. Participants were incentivized to complete the survey by informing them that complete surveys would be entered into a raffle to win one of 25 gift cards for \$150.

There were 4,567 initial responses; however, 166 responses were removed as they did not meet the screening requirement of being a full-time elementary or secondary teacher currently teaching in the United States. In addition, to ensure responses only included valid data, authenticity checks were utilized and an additional 2,952 responses (not excluding cases with missing data) were removed as they did not meet authentication criteria. For example, some responses were excluded due to: 1) open-ended responses including only nonsense or was not in English, 2) failed attention checks that asked respondents to select a particular answer, and 3) straight line responding (i.e., identical responses for all non-demographic questions) (see Patall et al., 2023 for full details on authentication process). Of the 1,449 retained responses, the number of responses from each state varied widely (from 1 to 247 teachers), with the largest number of teachers being from California, New York, Ohio, and Texas.

Measures

Student Mental Health Decline. Teachers' perceptions of students' psychological well-being (i.e., mental health) was assessed using one original item that the researchers created for

the current study. Creating the original item allowed us to assess teachers' perceptions of change in student mental health without pre-COVID data while simultaneously minimizing cognitive load. Participants were asked to rate the extent to which they felt student well-being had worsened or improved since the COVID-19 pandemic on a 5-point Likert scale from (1) well-being is a lot lower now to (5) well-being is a lot higher now. The item was recoded so a higher score indicated poorer well-being (i.e., a decline in mental health) for all subsequent analyses.

Culturally-Relevant Teaching Practices. Teachers' use of culturally-relevant practices was measured using three subscales that assessed teachers' use of culturally-relevant education, storytelling, and contextualized teaching. Subscale items were created for this study or adapted from previously validated measures in order to attend to various facets of this multidimensional construct that has not been adequately attended to in previous research. Culturally-relevant education was measured using three adapted items from the Culturally Responsive Education: Multicultural Teaching Competency Scale (Spanierman et al., 2011; e.g., "I planned activities to celebrate diverse cultural practices in my classroom"). Storytelling has not been previously incorporated into measures of culturally relevant education. However, more recent research and theory has highlighted the importance of sharing personal narratives for student learning, particularly in indigenous populations (MacLean & Wason-Ellam, 2006; Szurmak & Thuna, 2013). Thus, storytelling was measured using three original items created for the current study (e.g., "I encouraged students to share stories from their own lives in order to help them connect with the topic"). Contextualized teaching was measured using three original items created for the current study (e.g., "I created activities and projects that embedded the learning content into authentic situations"). Participants were asked to rate the extent to which they engaged in these practices using a 5-point Likert scale from (1) Never to (5) Very Often / Always. Confirmatory

factor analyses (CFAs) indicated that items loaded well onto a higher-order, three-factor model (see Table S2 in Supplemental Materials for factor loadings and model fit).

Emotionally-Supportive Teaching Practices. In line with the emotional support subscale of Pianta et al. (2008)'s Classroom Assessment Scoring System (CLASS), teachers' use of emotionally-supportive teaching practices were measured using three subscales that assessed teachers' use of enthusiasm, caring, and incorporating student interest. Enthusiasm was measured using three adapted items from Keller et al. (2014)'s Teachers' Positive Emotional Expressivity Scale (e.g., "When I was happy in class, my feelings showed"). Teacher caring was measured using three adapted items from the Classroom Life Measure (Johnson et al., 1985), Child and Adolescent Social Support Scale (Malecki & Demaray, 2002), and Student-Teacher Relationship Scale (Pianta, 2001; e.g., "I was caring towards my students"). Incorporating student interest was measured using three adapted items from the Supportive Teacher Practices Scale (Patall et al., 2017; e.g., "I structured class activities around student interests"). Participants were asked to rate the extent to which they engaged in these practices using a 5-point Likert scale from (1) Never to (5) Very Often / Always. CFAs indicated that items loaded well onto a higher-order, three-factor model (see Table S2 in Supplemental Materials).

Racial Makeup of Classrooms. Five items were used to measure the percentage of Black, Latino/a, Asian, white, and other race/ethnicity students in the teacher's class on a 4-point Likert scale from (1) Less than 25% to (4) More than 75%. A 50% or more BIPOC classroom categorical variable was created and coded yes if teachers selected $\geq 50\%$ for any of the Black, Latino/a, and Asian items or $< 25\%$ for the white item.

Language Makeup of Classrooms. One item was used to measure the percentage of students who spoke a language other than English at home on a 4-point Likert scale from (1)

Less than 25% to (4) More than 75%. A 50% or more primary language other than English classroom categorical variable was created and coded yes if teachers selected $\geq 50\%$ for percentage of students speaking a language other than English at home.

Analysis Plan

CFAs with a focus on measurement invariance testing across classes with $\geq 50\%$ (vs. $< 50\%$) BIPOC students and classes with $\geq 50\%$ (vs. $< 50\%$) of students who speak a language other than English at home were conducted using MPlus v.8 (Muthen & Muthen, 2017). Specifically, a series of increasingly restrictive models were modeled and compared to establish configural, metric, and scalar invariance (see Table S3 in Supplemental Materials). Upon establishing at least partial scalar invariance for culturally-relevant and emotionally-supportive teaching measures across classes with $\geq 50\%$ (vs. $< 50\%$) students of color (i.e., BIPOC) and students who speak a language other than English at home (i.e., students from newcomer homes), two structural equation models (SEMs) were specified to examine the relationships between teachers' perceptions of student mental health and their use of culturally-relevant and emotionally-supportive practices, respectively. There was approximately 14% missing data for the student mental health decline item, 7% missing data for culturally-relevant teaching strategies, and 6% missing data for emotionally-supportive teaching strategies. However, full information maximum likelihood estimation with robust standard errors (MLR) was used for all models to handle missing data and to provide parameter estimates robust to non-normality.

Next, to examine whether the relationship between teachers' perceptions of student mental health and their use of culturally-relevant and emotionally-supportive practices differed between classes with 50% or more students of color or students from newcomer homes, respectively, four multigroup SEMs were specified. All models controlled for region, school

level, subject, teacher age, teacher degree, teacher sex, teacher race, teaching experience, percentage of students in class who qualify for free-and-reduced, percentage of students in class who spoke a language other than English at home, and percentage of students of color in class, where applicable.¹ This study's design and its analysis were pre-registered and can be found at <https://aspredicted.org/mmtty-qygc.pdf>.

Results

Descriptive statistics and bivariate correlations of key variables are available in Table 1. Teachers reported an overall decline in students' mental health since the pandemic ($M = 4.3$, $SD = .77$). Specifically, 44.3% of teachers ($n = 550$) reported that student well-being was "a lot lower now," 45.0% of teachers ($n = 559$) reported that well-being was "a little lower now," 7.6% of teachers ($n = 95$) reported no difference in well-being, 2.3% of teachers ($n = 29$) reported well-being was "a little higher now," and 0.8% of teachers ($n = 10$) reported that well-being was "a lot higher now." Correlations between teachers' perceptions of student mental health decline, culturally-relevant teaching practices, and emotionally-supportive teaching practices were all positive as expected, although not all were statistically significant. After controlling for all relevant school, teacher, and class covariates, SEMs indicated that teachers' perceptions of student mental health decline predicted more use of emotionally-supportive teaching practices but did not predict more use of culturally-relevant practices (see Table 2 for standardized estimates). School level and subject were found to significantly predict teachers' use of emotionally-supportive and culturally-relevant teaching practices such that secondary school

¹ Region = West, Midwest, South, Northeast; School level = elementary, middle high; Subject = STEM, non-STEM; Teacher degree = graduate degree, non-graduate degree; Teacher sex = male, female; Teacher race = White, non-White, % of students in class who qualify for free-and-reduced lunch = < 50%, ≥ 50%; % of students in class who spoke a language other than English at home = < 50%, ≥ 50%; % of students of color in class = < 50%, ≥ 50%.

teachers (vs. elementary school teachers) and STEM teachers were significantly less likely to utilize these practices controlling for all other variables. Teacher sex also significantly predicted emotionally-supportive teaching practices, such that women reported using them significantly more.

Multigroup SEMs found that the relationship between teachers' perceptions of student mental health decline and their use of both emotionally-supportive and culturally-relevant teaching practices did not differ by percentage of students of color in class (see Table S4 in Supplemental Materials). However, the relationship between teachers' perceptions of student mental health decline and their use of culturally-relevant teaching significantly differed between classes with $\geq 50\%$ (vs. $< 50\%$) of students from newcomer homes, such that the positive relationship between teachers' perceptions of student mental health decline and use of culturally-relevant practices was significantly stronger among teachers with classes of $\geq 50\%$ students from newcomer homes compared to teachers with classes of $< 50\%$ of students from newcomer homes ($\Delta\chi^2(1) = 6.28, p = .01$). Further, the relationship between teachers' perceptions of student mental health decline and their use of emotionally-supportive practices in classes with $\geq 50\%$ (vs. $< 50\%$) of students from newcomer homes also significantly differed, such that the relationship between teachers' perceptions of student mental health decline and use of emotionally-supportive practices was significantly stronger among teachers with classes of $\geq 50\%$ students from newcomer homes compared to teachers with classes of $< 50\%$ of students from newcomer homes ($\Delta\chi^2(1) = 3.95, p = .047$; see Table 3 for standardized estimates).

Discussion

The current study examined K-12 teachers' perceptions of changes in student mental health since COVID-19, the relationships between student mental health and teachers' use of

emotionally-supportive and culturally-relevant strategies, and whether these relationships differed across classrooms with 50% or more students of color and students from newcomer homes. Aligned with predictions, as well as previous research on student mental health following the onset of COVID-19, our results indicated that teachers perceived an overall decline in student mental health following the pandemic (e.g., Samji et al., 2022; Thomeer et al., 2023). Notably, teachers' perception of student mental health decline was associated with more emotionally-supportive practices from teachers. These findings highlight teachers' attentiveness to the social-emotional needs of students during the transition back to in-person learning, and their responsive use of emotionally-supportive practices in the classroom. These results are promising in light of past research that indicates teachers' emotional support as important for student well-being, motivation, and achievement (e.g., Roorda et al., 2017; Wentzel et al., 2018), particularly when students experience emotional and behavioral difficulties (Yeung & Leadbeater, 2009).

On the other hand, contrary to predictions, teachers' perceptions of student mental health decline since the pandemic was not associated with more use of culturally-relevant teaching practices. As predicted, we found the relationship between student mental health decline and teachers' use of culturally-relevant strategies was significantly stronger in classes with 50% or more students from newcomer homes, but also found this was the case for emotionally-supportive strategies in classes with 50% or more students from newcomer homes. Contrary to predictions, there was no difference in the relationship between student mental health decline and teachers' use of culturally-relevant strategies as a function of the racial makeup of the class.

Overall, these results highlight both the strengths and weaknesses of teachers' responsive teaching strategies following the height of the COVID-19 pandemic. While teachers who perceived student mental health decline seemed to be responding to students' needs by utilizing

emotionally-supportive strategies, our results spotlight the need for teachers to bolster their use of culturally-relevant strategies in the classroom, particularly during a time of heightened social, race-related unrest and increased civil participation from youth (e.g., Baskin-Sommers et al., 2021). Further, while our findings showcase teachers' responsive use of culturally-relevant (and emotionally-supportive) strategies in classes with 50% or more from newcomer homes, culturally-relevant support in classrooms with 50% or more students of color was less pronounced. That is, while teachers may have been thoughtfully responding with culturally-relevant practices in classrooms with more students from newcomer homes, this may not have been the case for classrooms with more students of color. This discrepancy prompts important questions for future research to explore why the presence of more newcomer but not students of color classrooms elicited these responses. One possible explanation is that teachers may feel more responsibility in integrating practices that address the distinct cultural backgrounds and challenges faced by newcomer students, while the cultural needs of students of color, which may be perceived as less distinct or more integrated into the mainstream, might be overlooked. Additionally, the long history of systemic and institutionalized racism toward students of color might influence teachers' perceptions and practices, leading them to be more proactive in addressing the needs of newcomer students while inadvertently neglecting the cultural needs of students of color (e.g., Banaji et al., 2021). Understanding these dynamics more deeply can inform the development of more effective training and support systems for teachers, ensuring that all students receive equitable and culturally-responsive education.

However, as the current study focused on teachers' perceptions of student mental health only, future research should assess teachers' perceptions, and responses to, students' race-related distress during this time to fully capture the responsive strategies they employed across diverse

classrooms as schools reopened. Another suggestion for future research is to delineate potential antecedents for teachers' use of culturally-relevant strategies across diverse classrooms. For example, possible antecedents like policy/funding, curriculum (e.g., English Language Learners (ELL) vs. non-ELL), or teachers' beliefs regarding culturally-relevant practices could account for variation in teachers' use of such strategies. A better understanding of the antecedents that lead to teachers' use of these strategies across diverse classrooms could help researchers and school leaders develop appropriate interventions and professional development regimens to motivate teachers to adopt culturally-relevant strategies in the classroom, particularly for classrooms with more students of color during times of race-related social unrest. Finally, our results indicate that STEM teachers, as well as secondary school teachers, may benefit from additional training and support with incorporating both emotionally-supportive and culturally-relevant practices in the classroom. Professional development programs should provide subject-specific examples and strategies on implementing culturally-relevant practices, such as integrating culturally-relevant examples in math problems or science experiments. Mentorship programs pairing STEM teachers with those experienced in these practices can offer ongoing support, and further research should explore the effectiveness of these interventions to refine them for all teachers.

A few limitations exist in the current study. First, due to its cross-sectional design, implications regarding directionality and causality are limited. Second, as our study focused on teachers' perceptions of student mental health and their own teaching strategies, the potential for common method bias exists such that our findings may be overestimating the strength of these relationships. Future research might address this limitation by collecting comprehensive student reports of mental health, as well as their perceptions of teachers' supportive strategies. Further,

possibility of selection bias exists as over 2,000 responses were removed due to failing authentication requirements. Educators and policymakers should consider the possibility that the excluded responses might have offered diverse perspectives and insights not captured in the final dataset and take care when interpreting these results, ensuring that they remain mindful of the potential limitations and biases introduced by the exclusion criteria. Finally, as change in student mental health was measured using one item in the current study, we could not adequately assess the validity and reliability of the construct, as well as account for the multidimensional nature of mental health. Future research should utilize validated measures of specific dimensions of mental health (e.g., depression, anxiety), as well as pre- and post- measures to assess change, to better capture the complexities of the relationship between student mental health decline and teachers' supportive practices.

Constraints on Generality

Although our sample consisted of full-time elementary and secondary teachers from all 50 states and the District of Columbia, it may not fully represent the broader population of U.S. teachers due to the specific recruitment channels used. Additionally, the focus on understanding the educational landscape following COVID-related school closures limits the temporal generalizability of the findings. While the reliance on an online survey format and the focus on a single class section per teacher may not capture the full diversity of teaching practices and experiences, the primary findings are unlikely to depend on these specific characteristics. Methods such as the use of online surveys and the examination of a single class section could be varied without significantly affecting the results. However, maintaining a focus on full-time teachers currently teaching in the United States and ensuring robust authentication checks should remain constant to preserve the integrity and relevance of the data.

Conclusion

Overall, our findings highlight teachers' perceptions of changes in student mental health since the COVID-19 pandemic, and the teaching strategies they implemented during the transition back to in-person instruction. Our results showcase teachers' responsive use of emotionally-supportive strategies to perceived student mental health decline. However, our findings emphasize the need for school leaders to focus on equipping, and providing ongoing support, for teachers to utilize culturally-relevant strategies alongside their emotionally-supportive practices in the classroom. As conversations regarding racial inequity and systemic injustice have been, and will continue to be, a part of our nation's past, present, and future, teachers' considerate use of such strategies may help to mitigate the potential detrimental effects that racially-traumatic events can have on student well-being.

Our research has implications for practitioners, administrators, and education leaders who want to better understand the teacher-student interactions that unfolded during a particularly tumultuous and unpredictable time in the United States. Utilizing this information in ongoing teacher training programs may better prepare and sustain teachers to implement responsive strategies to support diverse students, especially during difficult, and potentially traumatic, times of crises.

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Table 1*Means, SDs, and Pearson Correlations*

Variables	M (SD)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) Mental Health	4.30 (.77)	--								
(2) CRE	3.38 (.95)	0.05	--							
(3) STT	4.02 (.73)	0.07*	0.46***	--						
(4) CTL	3.73 (.73)	0.02	0.44***	0.47***	--					
(5) TCR	4.46 (.53)	0.11***	0.31***	0.48***	0.26***	--				
(6) ENT	4.16 (.62)	0.04	0.24***	0.42***	0.27***	0.43***	--			
(7) INT	3.63 (.71)	0.08**	0.52***	0.52***	0.55***	0.43***	0.37***	--		
(8) ESS	-0.01 (.24)	0.12**	--	--	--	0.85***	0.62***	0.69***	--	
(9) CRS	-0.21 (.73)	0.06	0.82***	0.78***	0.65***	--	--	--	--	--

Notes. Mental Health = student mental health. CRE = culturally-relevant education. STT = storytelling. CTL = contextualized learning. TCR = teacher caring. ENT = teacher enthusiasm. INT = teacher interest. ESS = emotionally-supportive strategies. CRS = culturally-relevant strategies. $p < .05$. ** $p < .01$. *** $p < .001$.

Table 2

Standardized Coefficients for Student Mental Health, Emotional-Supportive Strategies (ESS), and Culturally-Relevant Strategies (CRS) Structural Equation Models

Predictor	Overall ESS Model	Overall CRS Model
Mental Health	0.10** (.04)	0.04 (.03)
Midwest	0.11** (.04)	0.05 (.04)
South	0.07 (.04)	0.08* (.04)
Northeast	0.07 (.04)	0.12** (.04)
Middle	-0.14** (.04)	-0.05 (.04)
High	-0.14** (.05)	-0.13** (.04)
STEM	-0.26*** (.04)	-0.39*** (.04)
BIPOC	0.06 (.04)	0.07 (.04)
OTLG	0.003 (.04)	0.05 (.04)
FRL	0.05 (.04)	0.03 (.04)
White	-0.02 (.04)	-0.16*** (.04)
Male	-0.15*** (.04)	-0.04 (.04)
Teach Exp	-0.03 (.05)	-0.03 (.05)
Degree	0.06 (.04)	0.05 (.03)
Age	-0.09 (.05)	-0.02 (.05)
	χ^2 (df) = 303.29 (144), $p < .001$	χ^2 (df) = 434.46 (144), $p < .001$
Model fit	CFI = .94	CFI = .93
	RMSEA [90% CI] = .03 [.03 / .04]	RMSEA [90% CI] = .04 [.04 / .05]
	SRMR = .04	SRMR = .04

Notes. ESS = emotional support strategies. CRS = culturally-relevant strategies. Mental Health = student mental health. Midwest (teacher/school located in Midwest region of U.S. = 1, teacher/school located in West region of U.S. = 0, teacher located in another region = 0). South (teacher/school located in South region of U.S. = 1, teacher/school located in West region of U.S. = 0, teacher located in another region = 0). Northeast (teacher/school located in Northeast region of U.S. = 1, teacher/school located in West region of U.S. = 0, teacher located in another region = 0). Middle (Elementary school = 0, Middle school = 1, High school = 0). High (Elementary school = 0, Middle school = 0, High school = 1). STEM (Science, Technology, Engineering, & Math = 1, Non-STEM = 0). BIPOC = percentage of class who identify as Black, Indigenous, People of color (0 = < 50%, 1 = \geq 50%). OTLG = percentage of class who speak language other than English at home (0 = < 50%, 1 = \geq 50%). FRL = percentage of class who qualify for free-reduced lunch (0 = < 50%, 1 = \geq 50%). White (Teacher race is white = 1, Teacher race is non-white = 0). Male (Teacher sex is male = 1, Teacher sex is not male = 0). Teach Exp = teaching experience (in years). Degree = teacher degree (0 = associate / bachelors, 1 = masters, PhD). Age = teacher age. $p < .05$. ** $p < .01$. *** $p < .001$.

Table 3

Standardized Coefficients for Student Mental Health, Emotional-Supportive Strategies (ESS), and Culturally-Relevant Strategies (CRS) Multigroup Structural Equation Models for Classes with $\geq 50\%$ (vs. $< 50\%$) Students Who Speak Language Other Than English at Home

Predictor	Overall ESS Model		Overall CRS Model	
	$\geq 50\%$ OTLG	$< 50\%$ OTLG	$\geq 50\%$ OTLG	$< 50\%$ OTLG
Mental Health	0.19* (.08)	0.02 (.05)	0.23* (.10)	-0.01 (.03)
Midwest	0.13 (.08)	0.08 (.05)	0.01 (.08)	0.02 (.05)
South	0.12 (.09)	0.03 (.05)	0.09 (.08)	0.05 (.04)
Northeast	-0.003 (.08)	0.07 (.05)	0.01 (.07)	0.10* (.04)
Middle	-0.16 (.10)	-0.13** (.05)	-0.09 (.11)	-0.04 (.04)
High	-0.22* (.09)	-0.11* (.05)	-0.26** (.10)	-0.08 (.05)
STEM	-0.21* (.09)	-0.28*** (.04)	-0.27** (.09)	-0.43*** (.04)
BIPOC	-0.001 (.07)	0.06 (.04)	-0.06 (.08)	0.08* (.04)
FRL	-0.11 (.08)	0.07 (.04)	-0.09 (.09)	0.04 (.04)
White	-0.11 (.08)	-0.01 (.05)	-0.23** (.08)	-0.16*** (.04)
Male	-0.18* (.08)	-0.16*** (.04)	-0.12 (.09)	-0.01 (.04)
Teach Exp	-0.14 (.10)	0.01 (.06)	-0.08 (.10)	-0.05 (.05)
Degree	0.01 (.08)	0.07 (.04)	0.01 (.08)	0.06 (.04)
Age	-0.13 (.10)	-0.16*** (.04)	0.01 (.11)	-0.01 (.05)
	χ^2 (df) = 444.20 (286), $p < .001$		χ^2 (df) = 441.30 (242), $p < .001$	
	CFI = .94		CFI = .95	
Model fit	RMSEA [90% CI] = .03 [.03 / .04]		RMSEA [90% CI] = .04 [.03 / .04]	
	SRMR = .05		SRMR = .05	
Wald's Test of Parameter Constraints	3.95 (1), $p = .047$		6.28 (1), $p = .01$	

Notes. ESS = emotional support strategies. CRS = culturally-relevant strategies. OTLG = percentage of class who speak language other than English at home. Mental Health = student mental health. Midwest (teacher/school located in Midwest region of U.S. = 1, teacher/school located in West region of U.S. = 0, teacher located in another region = 0). South (teacher/school located in South region of U.S. = 1, teacher/school located in West region of U.S. = 0, teacher located in another region = 0). Northeast (teacher/school located in Northeast region of U.S. = 1, teacher/school located in West region of U.S. = 0, teacher located in another region = 0). Middle (Elementary school = 0, Middle school = 1, High school = 0). High (Elementary school = 0, Middle school = 0, High school = 1). STEM (Science, Technology, Engineering, & Math = 1, Non-STEM = 0). BIPOC = percentage of class who identify as Black, Indigenous, People of color (0 = $< 50\%$, 1 = $\geq 50\%$). FRL = percentage of class who qualify for free-reduced lunch (0 = $< 50\%$, 1 = $\geq 50\%$). White (Teacher race is white = 1, Teacher race is non-white = 0). Male (Teacher sex is male = 1, Teacher sex is not male = 0). Teach Exp = teaching experience (in years). Degree = teacher degree (0 = associate / bachelors, 1 = masters, PhD). Age = teacher age. Wald's test compares models where structural path between student mental health decline to teachers' use of ESS or CRS (respectively) is unconstrained across the two groups (i.e., \geq vs. $< 50\%$ students from newcomer homes, respectively) to a model in which the structural path is constrained to be equal across the groups. $p < .05$. ** $p < .01$. *** $p < .001$.