



## Article

# Perceptions of New Jersey Teachers About Mental Health and School Services Offered During the COVID-19 Pandemic

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**Abstract:** During the COVID-19 pandemic, the New Jersey Safe Schools Program (NJSS) surveyed a subset of newer NJ high school (HS) teachers who completed NJSS work-based learning supervisory trainings from October 2021 to June 2023. The purpose of this study was to gain insight on NJ HS teacher perceptions of school provided mental health services, and well-being supports received during the COVID-19 pandemic. Via online surveys, teachers anonymously identified who should be responsible for supporting mental well-being in schools, satisfaction with existing mental health services, and self-care practices implemented during the COVID-19 pandemic. Of the 114 HS teachers surveyed, nearly 70% would recommend existing school mental health services to colleagues, 53% would like an increase in mental health and counseling services available at their school, and 44% would like their schools to improve mental health literacy. This study presents insight into the needs teachers expressed for appropriate school mental health support and services. Data will inform guidance for how to better address identified needs, including employee wellness, and creating positive social and emotional school environments. School districts should prioritize the implementation of suitable and equitable school-based mental health services to teachers and students alike to promote healthy and productive school environments.



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## 1. Introduction

The New Jersey Safe Schools Program (NJSS) has supplied the state of New Jersey (NJ) code-required safety and health (S&H) trainings and resources statewide to NJ high schools (HS) for nearly 20 years [1,2]. In spring 2020, NJ schools moved to online and hybrid teaching and in-person learning, and work placements were suspended for a time due to the COVID-19 pandemic [3]. During the COVID-19 pandemic through to the present, NJSS offered S&H trainings and shared important online resources related to COVID-19 to NJ schools via the NJSS website and monthly e-newsletters [4].

When the term “school mental health” is used, the initial thought is to discuss the mental health and wellness of students. However, school mental health also includes promoting the well-being of school-based teachers and other education professionals [5,6]. To date, most peer-reviewed published research has been on student well-being and mental health needs or resources provided during the COVID-19 pandemic [7–19]. Teachers also require their own appropriate mental health supports and services; however, there has been less focus placed on teachers in the school setting. Prior to the pandemic, some of the most common sources of stress for teachers included, but were not limited to, testing, large classroom sizes, student behavioral challenges, inadequate resources, workload, and

a high responsibility for others [5]. A systematic review identified four factors potentially influencing teacher well-being: personal capabilities, socioemotional competence, personal responses to work conditions at schools, and professional relationships [20]. Professional relationships can be a factor influencing negative workplace environments, especially if teachers are experiencing feelings of being marginalized or bullied by coworkers, which are also factors contributing to teacher burnout [21].

In the 2020–2021 school year (SY), a qualitative analysis of teacher stress during the COVID-19 pandemic revealed teachers experienced stressors related to their personal and professional roles, concerns for student well-being beyond academics, and frustrations with administration and other institutional entities regarding COVID-19 safety measures [22]. In addition to already existing workplace stressors and new ones brought on by the onset of the COVID-19 pandemic, people in the United States (U.S.), including teachers, faced further stressors during the COVID-19 pandemic, including food and home insecurity, disruptions to medical care and insurance, and overall increases in COVID-19 infection rates, leading to peak rates of anxiety and depression nationwide [23]. Teachers could continue to fulfill their responsibilities at both work and at home with the necessary support and resources implemented. During the COVID-19 pandemic, NJSS started to assess indicators of mental health distress among NJ HS teachers [24], as well as the desired mental health services offered in schools.

It must also be noted how teachers interact with many students each SY and are frequently required to provide student mental health guidance as they are often the first to identify issues among students in the classroom [25,26]. During the COVID-19 pandemic, teachers and education professionals were expected to address issues that students were bringing to the in-person classroom from an extended period of online learning and social distancing, including anxiety, depression, learning detachment, and suicide ideation [25]. Therefore, teachers and education professionals supported their students while facing their own work and home challenges [26].

According to a U.S. Centers for Disease Control and Prevention (CDC) Foundation project, teachers were two times more likely to report mental health distress after the pandemic versus prior to the pandemic [27]. In March 2021, 27% of teachers reported symptoms associated with clinical depression and general anxiety disorder, 27% and 37%, respectively [27]. Comparatively, in August 2020 to February 2021, the percentage of U.S. adults with anxiety or depression symptoms increased from 36% to 42%, and those reporting unmet mental health care needs increased from 9% to 12% [28].

One U.S. study conducted in New Orleans, Louisiana [29], revealed worse mental health and difficulty with coping and teaching among teachers who experienced more stressors; teachers who experienced more protective factors found it easier to cope and teach. Challenging aspects of teaching during the COVID-19 pandemic included lack of social connection and online teaching impositions, while the most helpful aspects included support from coworkers and administrators [29].

Another U.S. study conducted during the pandemic compared mental health outcomes between pre-K-12 teachers and other occupational professionals, and the prevalence of mental health outcomes between teachers working in person versus remotely. These teachers reported a greater prevalence of anxiety symptoms than those in other occupations, and more specifically, teachers working remotely reported significant levels of higher distress than those who were working in person [30].

A national U.S. study conducted in the summer of 2020 revealed only three out of thirteen school re-entry plans pertained to providing school staff mental health resources; the other ten school re-entry plans pertained to strategies addressing student mental health needs [31]. This study highlighted the greater emphasis on student mental health resources in schools and the smaller emphasis on mental health resources for teachers.

Beyond the U.S., a recent study in Portugal concluded that teachers, more so female than male teachers, who have lower perceived life satisfaction and more psychological symptoms are more likely to develop various mental health concerns and psychological

distress. This is also associated with a low perception of quality of life, a worse relationship with school principals, and a worse perception of school environment quality [6].

In summary, teachers and education professionals are vulnerable to anxiety, burnout, and stress due to the nature of their jobs and the roles and responsibilities they hold while working with students [32,33]. This was especially the case during the COVID-19 pandemic when teachers and students engaged in online learning, and then transitioned back to in-person schooling [31]. NJ HS teachers experienced continuous stress and burnout while working during the COVID-19 pandemic, and during the transition to a post-pandemic period. This study presents insight on the needs teachers expressed for appropriate school support and services and these data can assist school districts to better address gaps in devising and implementing mental health supports and services for teachers and education professionals, along with other identified needs, like promoting employee wellness, including S&H, and ensuring positive social and emotional school environments. The main objective of the present study was to analyze self-reported factors that contribute to supporting mental health among NJ teachers working in career and technical education (CTE), and to see if differences exist among social economic factors (race/ethnicity, gender, and NJ region of employment) or temporally (school year). To achieve this main objective, this study had several sub-objectives. These were as follows: to determine who, in the workplace, teachers perceived to be responsible for supporting the mental health for educational professionals, staff, and students; to gain insight into the quality and use of existing mental health services available in schools; to learn what mental health supports these teachers would like to see provided in schools; and what self-care practices teachers reported to have implemented. School districts should prioritize the implementation of suitable and equitable school-based mental health services to teachers and students alike to promote healthy and productive school environments.

## 2. Materials and Methods

During the 2021–2022 and 2022–2023 SYs, the NJSS, in collaboration with the NJ Department of Education—Office of Career Readiness, provided 163 teachers with work-based learning (WBL) supervisory trainings through a special grant-funded opportunity. The goal of this special opportunity was to provide free WBL training to teachers who hold a CTE certificate in NJ via targeted recruitment. Teachers submitted an application titled “Work-Based Learning Supervisor Trainings for Participating CTE Teacher Application Form” via PsychData, (PsychData LLC, State College, PA, USA) to the NJSS. Eligible teachers were endorsed (certification credentials) in CTE, agricultural education, business, human services-cosmetology, allied health, and/or family and consumer sciences, along with being relatively new to CTE and having no more than 10–15 years of overall K-12 teaching experience (ideally <10 in high schools). For specifics on inclusion and exclusion criteria, along with more information on the training, survey distribution, and data collection procedures, please see other published papers from the overall study [34,35].

After participants who met the above requirements completed the training courses, to better understand potential mental health supports and services desired by NJ teachers in their schools during the COVID-19 pandemic, the NJSS conducted a cross-sectional study with repeated measures via a series of online S&H surveys on PsychData between October 2021 and June 2023.

Three online surveys were provided, which participants could complete at their own pace. The first survey included questions regarding built or physical school environments, perceptions on S&H, protocols and training on S&H, physical hazard concerns, and attitudes towards and types of products purchased for school use for cleaning, sanitizing, and disinfecting surfaces. The second survey consisted of questions about where and when teachers worked, symptoms employees may have experienced, ventilation, awareness of government resources, use of PPE, S&H trainings received, personal nutrition and sleep hygiene, and personal physical health and mental health. The follow-up survey was a combination of the first and second surveys. Surveys one and two were provided simultane-

ously via email, a week after the completion of each NJSS training cohort. Those who took the trainings during the 2021–2022 SY were given a follow-up survey in fall 2022, during the initial month of the 2022–2023 SY. This study focuses on survey questions pertaining to NJ teacher mental health practices and school services offered. A total of 205 survey entries were received from the three surveys, but this study focused on 114 survey entries received specifically for the second survey and the follow-up survey. This study hypothesized that consenting participants would believe that other staff, including administrators, are responsible for supporting the mental health of different groups in the school (educational professionals, staff, and students). Another hypothesis was there would not be a statistical difference between different stratifications or groups regarding reported satisfaction with available mental health services in schools. Another hypothesis was there would not be a statistical difference between groups regarding the desired mental health supports in schools and the self-care practices implemented. A total of 114 of 273 (163 for Survey 2 and 110 for the follow-up survey) possible entries were received and were either fully or partially completed for a response rate of 42%. Our sample size estimate was 54 participants per survey, for a total sample size of 108 across the two surveys. The estimated sample size for one survey was 54 with a 95% confidence level, a 5% margin of error, and a 4.5% population proportion of CTE teachers in the general teacher population in the New York, NJ, and Pennsylvania metropolitan area in 2022 [36].

Surveys comprised of multiple-choice questions, some with “select all that apply” answer options, as well as ranking questions. Survey questions were piloted/used in 2019–2020 [37–39] or identified from other federal agency and university (agency funded) studies/references cited [40–44]. As decided by the study team, all participants who answered at least the first two survey questions were included in the analysis. No responses and “I prefer not to answer” were labeled as “missing”. For the survey questions applicable to the present paper’s analysis for our study, after data management and initial descriptive statistics, survey responses were stratified by county of work, gender, race/ethnicity, and training year. Participants working in a total of 19 of the 21 NJ counties completed this survey study; the three NJ regions are north, central, and south, with seven counties in each region [38]. Percentages were used to summarize categorical variables and Fisher’s exact test, and Kruskal–Wallis tests were used to compare between groups due to small sample sizes. *p*-values calculated to be below 0.05 were deemed statistically significant. Missing data were excluded from analyses. Data were cleaned and managed in Microsoft Excel once exported from PsychData and analyzed using SAS Analytics Software 9.4 (Cary, NC, USA).

The Institutional Review Board (IRB) at Rutgers, the State University of New Jersey, granted approval for this study.

### 3. Results

#### 3.1. Demographics

Overall, for the 114 teachers who responded to the mental health-related questions included in survey two and the follow-up survey, 42% of participants identified as male and 59% identified as female, which is similar to the national average of CTE teachers working in the U.S. [45]. Over two-thirds (69%) of participants identified as white, with 60% of the overall study population identified as non-Hispanic white (NHW). Due to the majority of NHW study participants, all other participant respondents will be referred to as “not NHW” in this paper. Over half of participants (53%) taught in north NJ, 20% taught in central NJ or statewide, and 27% taught in south NJ (Table 1). Most teachers’ (68%) highest level of education or degree earned was a master’s degree, 27% had a bachelor’s degree, and 5% had a doctoral degree. Teachers worked, on average, about 14 (13.8) years, both in NJ (standard deviation (SD): 6.3) and overall (14.1, SD: 6.2). The average birth year reported by teachers was 1977 (SD: 9.5).

**Table 1.** Demographics of study participants.

Survey Questions	Total <sup>a</sup> (n = 114)	Total % <sup>c</sup>	% Answered <sup>c</sup>
School County Region			
North	52	46%	53%
Central and Statewide	20	18%	20%
South	27	24%	27%
Missing	15	13%	
Race and Ethnicity <sup>b</sup> :			
White	68	60%	69%
Hispanic White	9	8%	9%
Non-Hispanic White	59	52%	60%
Black	14	12%	14%
Hispanic Black	2	2%	2%
Non-Hispanic Black	12	11%	12%
I prefer not to answer this question	11	10%	11%
Other	6	5%	6%
Missing	15	13%	
Gender Identity			
Male	39	34%	42%
Female	55	48%	56%
Missing or Prefer not to answer	20	18%	
	<b>Total <sup>c</sup> (n = 35)</b>	<b>Total %</b>	<b>% Answered</b>
Number of Years Teaching in NJ (mean ± SD)	14 ± 6.3		
Missing	12		
Number of Years of Teaching Overall (mean ± SD)	14 ± 6.2		
Missing	12		
Birth Year (mean ± SD)	1977 ± 9.5		
Missing	12		

Note: <sup>a</sup> Questions/participants are included from Survey 2 and Follow-up Survey. <sup>b</sup> One participant identified as American Indian or Alaskan Native, one identified as Middle Eastern/North African, and one identified as Native Hawaiian or Other Asian-Pacific Islander. Race and ethnicity do not add up to 100%, as some participants may have chosen more than one response. <sup>c</sup> Due to rounding, totals may not equal 100%.

### 3.2. Responsibility of Supporting Mental Well-Being in Schools

The first mental health-related question in the survey asked teachers who they thought were responsible for supporting the mental well-being of each of the following: school educational professional, operations and maintenance (O&M) staff and other staff, and students. Teachers were to choose one of the following answer options: other school educational professionals, including administrators and staff; school guidance/academic counselors; school health and behavioral health staff, including school psychologists; community health and behavioral health providers; or NA/I prefer not to answer. Across the 2021–2022 and 2022–2023 SYs, 54 of 83 (65%) and 46 of 76 teachers (61%) who responded to this question believed that other school educational professionals, including administrators and staff should be responsible for supporting the mental well-being of school educational professionals and O&M staff and other types of staff, respectively. When it came to supporting the mental well-being of students, teachers believed school educational professionals (31 of 88, 35%), O&M staff and other types of staff (27 of 88, 31%), as well as school health and behavioral health staff, including school psychologists (29 of 88, 33%) should be responsible. Only one teacher believed that community health and behavioral health providers should be responsible for student mental well-being (Table 2).



**Table 2.** Responsibility of supporting mental well-being of different groups in schools.

Group in Consideration	Other School Educational Professionals, Including Administrators and Staff— <i>n</i> (% of Answered)	School Guidance/Academic Counselors— <i>n</i> (% of Answered)	School Health and Behavioral Health Staff, Including School Psychologists— <i>n</i> (% of Answered)	Community Health and Behavioral Health Providers— <i>n</i> (% of Answered)	Missing/NA/ I Prefer Not to Answer— <i>n</i> Only
School educational professionals	54 (65%)	6 (7%)	9 (11%)	14 (17%)	31
O&M staff and other staff	46 (61%)	9 (12%)	9 (12%)	12 (16%)	38
Students	31 (35%)	27 (31%)	29 (33%)	1 (1%)	26

Note: *n* = 114. Percentages are of those who answered each part of the question and may not add up to 100% due to rounding.

### 3.3. Teacher Satisfaction with Available Mental Health Services in Schools

The next survey question asked teachers how satisfied they were with the mental health services offered in the school they work in on a scale of 1 to 10, with 10 being most satisfied, if the teacher had used previously used the services (*n* = 33). Of the teachers who responded, eleven (33%) rated the mental health services in the school where they work between 1 and 3, sixteen teachers (49%) rated the services between 4 and 7, and six teachers provided a rating between 8 and 10 (18.2%). Those who identified as NHW rated the services between 1 and 3 than between 8 and 10 (43% vs. 14%, respectively), but those who identified as not NHW rated the services between 8 and 10 (29%) compared to their NHW counterparts.

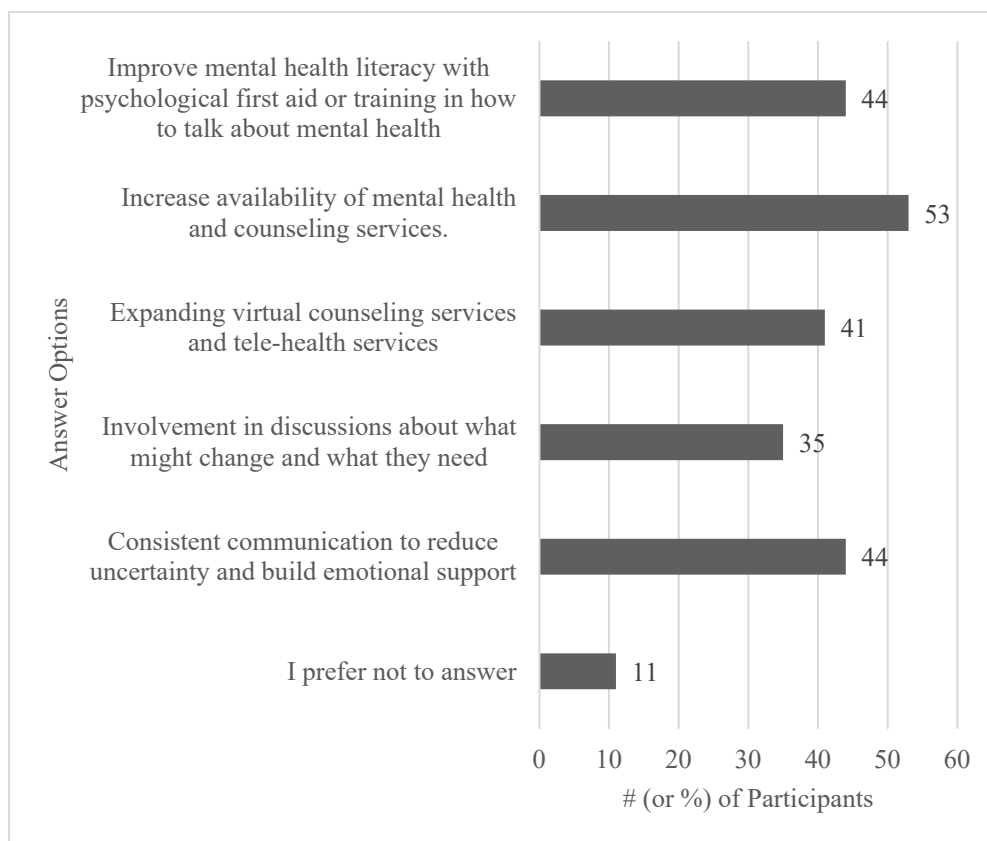
Another question teachers were asked is if they would recommend the available mental health services at their school to a colleague. Of those who responded to this question across the 2021–2022 and 2022–2023 SYs (*n* = 98), the majority (*n* = 68, 69%) responded “yes”, six (6%) responded “no”, twenty (20%) responded “I’m not sure”, and four teachers (4%) chose “N/A/I prefer not to answer”. Less than 10% across all stratifications by SY, gender identification, race/ethnicity, or NJ region responded “no” to this question.

### 3.4. Desired Mental Health Supports for Implementation in Schools

Teachers were also asked to select the mental health supports they would like to see at their school as they transitioned back to full-time in-person learning; of 114 teachers across both SYs of data collection, 100 responded to this question. All support options provided were selected by at least one third of the teachers or more with the top three being: increase the availability of mental health and counseling services (53%); improve mental health literacy with psychological first aid or training in how to talk about mental health (44%); and consistent communication to reduce uncertainty and build emotional support (44%) (Figure 1). Those who identified as female were more likely to select “expanding virtual counseling services and tele-health services” than those who identified as male, 56% vs. 26%, respectively; Fisher’s *p*-value = 0.004. Similarly, those who identified as female were more likely to select “consistent communication to reduce uncertainty and build emotional support” than those who identified as male, 58% vs. 26%, respectively; Fisher’s *p*-value = 0.003 (Table 3).

### 3.5. Teacher Self-Care Practices

Teachers were asked to select all the self-care practices they implemented in their day-to-day life since the beginning of the COVID-19 pandemic; 100 of 114 teachers responded to this question. All self-care options provided were selected by at least 40% of the teachers or more: getting regular exercise; eating healthy; staying hydrated; making sleep a priority; trying/practicing a relaxing activity; practicing gratitude and positivity; and staying connected with friends or family members.



**Figure 1.** Desired mental health supports in school. Teachers were asked to select mental health supports they would like to see at their school as schools transitioned back to full-time, in-person learning ( $n = 114$ ;  $n = 100$  without missing data).

**Table 3.** Desired mental health supports in school, by gender. Teachers were asked to select mental health supports they would like to see at their school as schools transitioned back to full-time, in-person learning ( $n = 114$ ;  $n = 100$  without missing data).

	Male ( $n = 39$ )	%	Female ( $n = 55$ )	%	Total ( $n = 94$ )	%	Fisher's $p$ -Value
Improve mental health literacy with psychological first aid or training in how to talk about mental health	17	44%	25	46%	42	45%	1.00
Increase availability of mental health and counseling services	17	44%	35	64%	52	55%	0.06
Expanding virtual counseling services and tele-health services	10	26%	31	56%	41	44%	0.004 **
Involvement in discussions about what might change and what they need	10	26%	24	44%	34	36%	0.09
Consistent communication to reduce uncertainty and build emotional support	10	26%	32	58%	42	45%	0.003 **
I prefer not to answer	4	10%	6	11%	10	11%	1.00
Other (please specify)	2	5%	2	4%	4	4%	1.00

Note: \*\*  $p \leq 0.01$ .

Across all answer options, those who identified as females were more likely to practice self-care than those who identified as males. Those who identified as female were more likely to select the following than those who identified as male: “staying hydrated” (Fisher’s  $p$ -value = 0.01; 76% vs. 49%, respectively), “trying/practicing a new activity” (Fisher’s  $p$ -value = 0.04; 64% vs. 41%, respectively), and “staying connected with friends or family members” (Fisher’s  $p$ -value = 0.01; 75% vs. 46%, respectively). Those who identified as NHW were more likely to respond to this survey question regarding self-care, whereas

those who identified as not NHW were more likely to select “I prefer not to answer” (Fisher’s  $p$ -value = 0.04; 2% vs. 13%, respectively) (Table 4).

**Table 4.** Self-care practices implemented during the COVID-19 pandemic. Self-care means taking the time to do things that help you live well and improve both your physical health and mental health. What self-care practices have you implemented in your day-to-day life since the beginning of the COVID-19 pandemic? (select all that apply).

	Male ( <i>n</i> = 39)	%	Female ( <i>n</i> = 55)	%	Total ( <i>n</i> = 94)	%	Fisher’s <i>p</i> -Value
Getting regular exercise	21	54%	34	62%	55	59%	0.53
Eating healthy	18	46%	33	60%	51	54%	0.21
Staying hydrated	19	49%	42	76%	61	65%	0.01 **
Making sleep a priority. Stick to a schedule and getting enough sleep	17	44%	31	56%	48	51%	0.30
Trying/practicing a relaxing activity	16	41%	35	64%	51	54%	0.04 *
Practicing gratitude and positivity	13	33%	29	53%	42	45%	0.09
Staying connected with friends or family members	18	46%	41	75%	59	63%	0.01 **
I prefer not to answer	3	8%	2	4%	5	5%	0.65

Note: \*  $p < 0.05$  and \*\*  $p \leq 0.01$ .

#### 4. Discussion

This research recognizes the perceptions and needs expressed by teachers who worked during the COVID-19 pandemic, which contributes to achieving the main objective of this study, which was to analyze self-reported factors that contribute to supporting mental health among NJ teachers working in CTE. These data can provide insight of relevant mental health supports and services teachers desire in their workplaces at schools.

To achieve the study’s main objective, this study had several sub-objectives, including determining who, in the workplace, teachers perceived to be responsible for supporting the mental health for educational professionals, staff, and students. This study revealed teachers had split opinions as to who should be responsible for supporting the mental well-being of students. Participants suggested school-based educational professionals and staff should be responsible for student mental health. While not considered their primary roles, teachers and school education professionals also typically are asked to help identify, refer, and provide support for students with various mental health needs [25,46]. It is imperative to acknowledge the importance of teacher mental health and the support they require as they potentially care for themselves as well as their students.

It should be noted that, during the present study, in February 2022, during COVID-19 pandemic, the NJ Department of Education released the “New Jersey Comprehensive School-Based Mental Health Resource Guide”, created to emphasize various components pertaining to wellness planning in K-12 schools. The Guide comprises information on mental health needs assessments, resource mapping, tailored interventions, universal support, self-care practices, and funding available for school mental health supports [46].

Even prior to the COVID-19 pandemic, however, there was an increase in school-based mental health services used by adolescents in 2019 vs. 2018, and every year between 2009 and 2018. However, less than 20% of adolescents in the U.S. used these available school-based mental health services [47]. The current study revealed only one teacher believed community health and behavioral health providers should be responsible for student mental well-being.

In NJ, after the COVID-19 pandemic, the state’s new service plan, known as the NJ Statewide Student Support Services (NJ4S) program, began at the start of the 2023–2024 SY and continues in the 2024–2025 SY. The goal of this model of services and resources is to support youth mental wellness. The NJ4S network created 15 regional hubs throughout the state to provide prevention and brief intervention services to NJ public school students, parents/caretakers, and school staff [48]. This leads to the question, do students throughout



the U.S. have access to readily available school-based mental health services? Similarly, do teachers and education professionals also have the proper access to appropriate adult mental health resources and services where they need them, like in their schools? In this study, we asked such questions to address the sub-objective on the quality and use of existing mental health services available in schools. While more teachers ( $n = 68$ ) would recommend the available mental health services at their school to a colleague, far fewer ( $n = 33$ , 29% response rate) were able to rate the services in their schools based on actual personal use. This suggests the other teachers in this study have not personally previously used school-based mental health services. Of those who did rate the services in their schools, the majority rated the services as “average” (score 4–7), and more had a “low” (33%) rather than “high” (18%) level of satisfaction.

When asked about self-care practices [49] to address the study sub-objective of what self-care interventions teachers were implementing, this study revealed that female teachers were more likely to practice self-care than male teachers. The existing literature also suggests that women, more often than men, tend to seek social support when coping with various stressors, i.e., there are gender differences in self-care practices like seeking social support and mental health service use [50]. For the self-care options directly related to physical health care like participating in regular exercise, eating healthily, and staying hydrated, female teachers were more likely to practice these than male teachers. A recent Cleveland Clinic survey revealed 81% of American men believed they are leading healthy lifestyles, but the survey results revealed the behaviors and habits of many men are inconsistent with their beliefs: almost half of men (44%) neither receive a yearly physical nor make a conscious effort to take care of their mental health; half said they maintain a healthy diet (51%); and 83% have experienced stress during the prior six months [51]. The Cleveland Clinic survey study, as well as others of its kind pertaining to gender differences in physical health perception, highlighted the disconnect between men’s health perceptions and the health habits practiced. Thus, this study’s data were also consistent with recent research on adults.

One recent scoping review study of interventions to reduce stress and burnout among teachers identified mindfulness-based interventions as the most popular one studied to date. These mindfulness-based interventions could be implemented alone or in combination with yoga or cognitive behavioral therapy. These implemented activities led to decreased overall teacher stress inventory scores and emotional exhaustion subscale scores [52].

This study had notable strengths. First, survey questions collected primary data from NJ teachers and education professionals who continued to work during the COVID-19 pandemic, regarding who they believed should be responsible for supporting mental well-being in schools, satisfaction with existing mental health services, and self-care practices implemented during the COVID-19 pandemic. Another strength was the approach to how the surveys were distributed to participants. Since the surveys were disseminated online, data were gathered, saved, managed, and analyzed digitally and confidentially de-identified in aggregate. Participants could complete the online surveys on their own time and at their own speed. Participant survey responses also remained anonymous, allowing participants not to worry about repercussions for responses submitted, and therefore being more likely to be honest and express their true opinions. Additionally, while email addresses were gathered for e-gift card distribution purposes, survey responses were not linked to the email addresses received.

One limitation of this study is the specific population, i.e., NJ high school CTE teachers, and the modest sample size of 114 teachers in this study during the 2021–2022 and 2022–2023 SYs. Data cannot be generalized to an expansive population outside the state of NJ, or even outside of high schools and similar CTE school districts in other U.S. states. Since data were collected over the course of 1.5 years, during two SYs, another limitation is the possible introduction of extraneous variables, such as the state of COVID-19 at the time participants completed the surveys, as well as effects of the seasons. Additionally, due to anonymity, another limitation is it cannot be determined if multiple people completed the

online surveys from the same high school/district computer available to teachers and/or if a participant completed the surveys multiple times. Thus, in this study every response was included.

## 5. Conclusions

Due to the COVID-19 pandemic, and the social isolation/distancing and online learning challenges many faced during consecutive SYs, the mental and emotional health of teachers and students in the U.S. has been impacted. Teachers possess various responsibilities working in schools, oftentimes taking on roles not primarily attributed to teaching when working with and developing adolescents in various aspects of life. Thus, it is critical for school districts to prioritize and invest in mental health. This study's data reported on perceptions of existing school mental health services offered, mental health supports desired, and self-care practices implemented during the COVID-19 pandemic from a statewide sample of NJ HS education professionals who continued to work during various transitional phases of the COVID-19 pandemic. When teachers were asked to select the mental health supports they would like to see at their school as they transitioned back to full-time in-person learning, the following were identified as the top three: increase availability of mental health and counseling services; improve mental health literacy with psychological first aid or training in how to talk about mental health; and consistent communication to reduce uncertainty and build emotional support. Results of this study can provide direction and guidance to school districts on how to offer necessary support, and better approach identified needs, such as promoting employee wellness, and creating a positive social and emotional learning environment. School districts and administrators should prioritize the implementation of suitable and equitable school-based mental health services to teachers and students alike in order to promote healthy and productive school environments. Future analyses throughout the U.S. should further study both currently existing and planned (started pending funding) school-based mental health services and their effectiveness, with the purpose of executing an equitable distribution of resources to students and teachers alike throughout the U.S.

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## References

- Shendell, D.G.; Hemminger, L.E.; Campbell, J.K.; Schlegel, B. Supervising Structured Learning Experiences for Students in New Jersey: Training Teachers in School-Based Occupational Health and Safety Practice. *Public Health Rep.* **2009**, *124* (Suppl. S1), 74–82. [[CrossRef](#)] [[PubMed](#)]
- New Jersey Department of Education. Office of Career Readiness. Work-Based Learning. Available online: <https://www.nj.gov/education/cte/secondary/wbl/> (accessed on 9 September 2022).
- Office of the Governor. Governor Murphy Announces Aggressive Social Distancing Measures to Mitigate Further Spread of COVID-19 in New Jersey. 16 March 2020. Available online: <https://www.nj.gov/governor/news/news/562020/20200316c.shtml> (accessed on 9 September 2022).
- New Jersey Safe Schools Program at Rutgers School of Public Health. Available online: <https://sph.rutgers.edu/njss/about> (accessed on 10 December 2023).
- Lever, N.; Mathis, E.; Mayworm, A. School mental health is not just for students: Why teacher and school staff wellness matters. *Rep. Emot. Behav. Disord. Youth* **2017**, *17*, 6. [[PubMed](#)] [[PubMed Central](#)]
- Tomé, G.; Rodrigues, N.; Matos, M.G. Psychological Health and Life Satisfaction of Portuguese Teachers. *Future* **2024**, *2*, 80–91. [[CrossRef](#)]
- Panchal, U.; Salazar de Pablo, G.; Franco, M.; Moreno, C.; Parellada, M.; Arango, C.; Fusar-Poli, P. The impact of COVID-19 lockdown on child and adolescent mental health: Systematic review. *Eur. Child. Adolesc. Psychiatry* **2023**, *32*, 1151–1177. [[CrossRef](#)]
- Gazmararian, J.; Weingart, R.; Campbell, K.; Cronin, T.; Ashta, J. Impact of COVID-19 Pandemic on the Mental Health of Students From 2 Semi-Rural High Schools in Georgia. *J. Sch. Health* **2021**, *91*, 356–369. [[CrossRef](#)]
- Fegert, J.M.; Vitiello, B.; Plener, P.L.; Clemens, V. Challenges and burden of the Coronavirus 2019 (COVID-19) pandemic for child and adolescent mental health: A narrative review to highlight clinical and research needs in the acute phase and the long return to normality. *Child Adolesc. Psychiatry Ment. Health* **2020**, *14*, 20. [[CrossRef](#)]
- Shepherd, H.A.; Evans, T.; Gupta, S.; McDonough, M.H.; Doyle-Baker, P.; Belton, K.L.; Karmali, S.; Pauer, S.; Hadly, G.; Pike, I.; et al. The Impact of COVID-19 on High School Student-Athlete Experiences with Physical Activity, Mental Health, and Social Connection. *Int. J. Environ. Res. Public Health* **2021**, *18*, 3515. [[CrossRef](#)]
- Rao, M.E.; Rao, D.M. The Mental Health of High School Students During the COVID-19 Pandemic. *Front. Educ.* **2021**, *6*, 719539. [[CrossRef](#)]
- Hawrilenko, M.; Kroshus, E.; Tandon, P.; Christakis, D. The Association Between School Closures and Child Mental Health During COVID-19. *JAMA Netw. Open* **2021**, *4*, e2124092. [[CrossRef](#)]
- Giannopoulou, I.; Efstathiou, V.; Triantafyllou, G.; Korkoliakou, P.; Douzenis, A. Adding stress to the stressed: Senior high school students' mental health amidst the COVID-19 nationwide lockdown in Greece. *Psychiatry Res.* **2021**, *295*, 113560. [[CrossRef](#)]
- Ueda, M.; Nordström, R.; Matsubayashi, T. Suicide and mental health during the COVID-19 pandemic in Japan. *J. Public Health* **2021**, *44*, 541–548. [[CrossRef](#)]
- Liang, L.; Ren, H.; Cao, R.; Hu, Y.; Qin, Z.; Li, C.; Mei, S. The Effect of COVID-19 on Youth Mental Health. *Psychiatr. Q.* **2020**, *91*, 841–852. [[CrossRef](#)] [[PubMed](#)]
- Zhang, C.; Ye, M.; Fu, Y.; Yang, M.; Luo, F.; Yuan, J.; Tao, Q. The Psychological Impact of the COVID-19 Pandemic on Teenagers in China. *J. Adolesc. Health* **2020**, *67*, 747–755. [[CrossRef](#)] [[PubMed](#)]
- Yang, D.; Swekwi, U.; Tu, C.C.; Dai, X. Psychological effects of the COVID-19 pandemic on Wuhan's high school students. *Child. Youth Serv. Rev.* **2020**, *119*, 105634. [[CrossRef](#)] [[PubMed](#)]
- Qi, M.; Zhou, S.J.; Guo, Z. The Effect of Social Support on Mental Health in Chinese Adolescents During the Outbreak of COVID-19. *J. Adolesc. Health* **2020**, *67*, 514–518. [[CrossRef](#)] [[PubMed](#)]
- Fisher, H.H.; Hawkins, G.T.; Hertz, M.; Sliwa, S.; Beresovsky, V. Student and School Characteristics Associated With COVID-19-Related Learning Decline Among Middle and High School Students in K-12 Schools. *J. Sch. Health* **2022**, *92*, 1027–1039. [[CrossRef](#)]
- Nwoko, J.C.; Emeto, T.I.; Malau-Aduli, A.E.O.; Malau-Aduli, B.S. A Systematic Review of the Factors That Influence Teachers' Occupational Wellbeing. *Int. J. Environ. Res. Public Health* **2023**, *20*, 6070. [[CrossRef](#)]
- Sohail, M.M.; Baghdady, A.; Choi, J.; Huynh, H.V.; Whetten, K.; Proeschold-Bell, R.J. Factors influencing teacher wellbeing and burnout in schools: A scoping review. *Work* **2023**, *76*, 1317–1331. [[CrossRef](#)] [[PubMed](#)]
- Robinson, L.E.; Valido, A.; Drescher, A.; Woolweaver, A.B.; Espelage, D.L.; LoMurray, S.; Long, A.C.; Wright, A.A.; Dailey, M.M. Teachers, stress, and the COVID-19 pandemic: A qualitative analysis. *Sch. Ment. Health* **2023**, *15*, 78–89. [[CrossRef](#)]
- Coley, R.L.; Carey, N.; Baum, C.F.; Hawkins, S.S. COVID-19-Related Stressors and Mental Health Disorders Among US Adults. *Public Health Rep.* **2022**, *137*, 1217–1226. [[CrossRef](#)]

24. Campbell, M.; Aggarwal, J.; Shendell, D. Assessing Indicators of Mental Health Distress Among New Jersey High School Teachers During the COVID-19 Pandemic. *Med. Res. Arch.* **2024**, *12*. [CrossRef]
25. Ali, A. As Student Stress Grows, So Does Pressure on Teachers. NJ Spotlight News. 28 January 2022. Available online: <https://www.njspotlightnews.org/2022/01/as-student-stress-grows-so-does-pressure-on-teachers/> (accessed on 18 August 2022).
26. US Department of Health and Human Services. Office of the Surgeon General. Protecting Youth Mental Health: The U.S. Surgeon General's Advisory. 2021. Available online: <https://www.hhs.gov/sites/default/files/surgeon-general-youth-mental-health-advisory.pdf> (accessed on 18 August 2022).
27. CDC Foundation. Mental Health Impact of the COVID-19 Pandemic on Teachers and Parents of K-12 Students. May 2021. Available online: <https://www.cdcfoundation.org/mental-health-triangulated-report?inline> (accessed on 29 September 2022).
28. Vahratian, A.; Blumberg, S.J.; Terlizzi, E.P.; Schiller, J.S. Symptoms of anxiety or depressive disorder and use of mental health care among adults during the COVID-19 pandemic—United States, August 2020–February 2021. *MMWR Morb. Mortal. Wkly. Rep.* **2021**, *70*, 490–494. [CrossRef] [PubMed]
29. Baker, C.N.; Peele, H.; Daniels, M.; Saybe, M.; Whalen, K.; Overstreet, S.; Trauma-Informed Schools Learning Collaborative The New Orleans. The experience of covid-19 and its impact on teachers' mental health, coping, and teaching. *Sch. Psychol. Rev.* **2021**, *50*, 491–504. [CrossRef]
30. Kush, J.M.; Badillo-Goicoechea, E.; Musci, R.J.; Stuart, E.A. Teachers' Mental Health During the COVID-19 Pandemic. *Educ. Res.* **2022**, *51*, 593–597. [CrossRef] [PubMed]
31. Hoke, A.M.; Pattison, K.L.; Molinari, A.; Allen, K.; Sekhar, D.L. Insights on COVID-19, school reopening procedures, and Mental Wellness: Pilot Interviews with School Employees. *J. Sch. Health* **2022**, *92*, 1040–1044. [CrossRef]
32. Skaalvik, E.; Skaalvik, S. Teacher Stress and Teacher Self-Efficacy as Predictors of Engagement, Emotional Exhaustion, and Motivation to Leave the Teaching Profession. *Creat. Educ.* **2016**, *7*, 1785–1799. [CrossRef]
33. Buonomo, I.; Fatigante, M.; Fiorilli, C. Teachers' Burnout Profile: Risk and Protective Factors. *Open Psychol. J.* **2017**, *10*, 190–201. [CrossRef]
34. Aggarwal, J.; Campbell, M.L.; Rehman, M.; Nguyen, K.T.; Shendell, D.G. Perspectives and Attitudes of Newer New Jersey High School Teachers towards Cleaning, Sanitizing and Disinfecting Consumer Products Used in School Classrooms. *Int. J. Environ. Res. Public Health* **2024**, *21*, 211. [CrossRef]
35. Aggarwal, J.; Shendell, D.G.; Nguyen, K.T.; Rehman, M.; Campbell, M.L. Newer New Jersey work-based learning teachers during the COVID-19 pandemic: School safety regarding ventilation, trainings, and awareness of government agencies resources. *Int. J. Environ. Health Res.* **2024**. [CrossRef]
36. U.S. Bureau of Labor Statistics. Occupational Employment and Wage Statistics. Available online: <https://www.bls.gov/oes/> (accessed on 16 January 2024).
37. U.S. Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance Survey/Asthma Survey: Adult Questionnaire (v. 2006-). Available online: <https://www.cdc.gov/brfss/questionnaires/pdf-ques/2006brfss.pdf> (accessed on 16 February 2015).
38. Shendell, D.G.; Aggarwal, J.; Campbell, M.L.F.; Gonzalez, L.N.; Kaplun, E.; Koshy, K.; Mackie, T.I. Fall 2020 COVID-19 Needs Assessment among New Jersey Secondary School Educational Professionals. *Int. J. Environ. Res. Public Health* **2021**, *18*, 4083. [CrossRef]
39. Koshy, K.; Shendell, D.G.; Presutti, M. Perspectives of region II OSHA authorized safety and health trainers about initial COVID-19 response programs. *Saf. Sci.* **2021**, *138*, 105193. [CrossRef] [PubMed]
40. Czeisler, M.É.; Lane, R.I.; Petrosky, E.; Wiley, J.F.; Christensen, A.; Njai, R.; Weaver, M.D.; Robbins, R.; Facer-Childs, E.R.; Barger, L.K.; et al. (U.S. Centers for Diseases Control and Prevention). Mental Health, Substance Use, and Suicidal Ideation During the COVID-19 Pandemic—United States, June 24–30, 2020. *MMWR Morb. Mortal. Wkly. Rep.* **2020**, *69*, 1049–1057. [CrossRef] [PubMed]
41. National Center for School Mental Health, University of Maryland School of Medicine. The SHAPE System. Available online: <https://www.schoolmentalhealth.org/shape/shape-assessments/> (accessed on 11 August 2021).
42. American Psychological Association. Employee Mental Health. Available online: <https://www.apa.org/topics/covid-19/employee-mental-health> (accessed on 11 August 2021).
43. U.S. Department of Education. ED COVID-19 Handbook (2021 vol. 3): Strategies for Safe Operation and Addressing the Impact of COVID-19 on Higher Education Students, Faculty, and Staff. Available online: <https://www.ed.gov/sites/ed/files/documents/coronavirus/reopening-3.pdf> (accessed on 11 August 2021).
44. U.S. National Institutes of Health, National Institute of Mental Health. Caring for Your Mental Health. Available online: <https://www.nimh.nih.gov/health/topics/caring-for-your-mental-health> (accessed on 11 August 2021).
45. Alvarado, V. Analysis of National Data Illustrates CTE Teacher Shortages. Available online: <https://ctepolicywatch.acteonline.org/2023/07/analysis-of-national-data-illustrates-cte-teacher-shortages.html> (accessed on 1 November 2023).
46. New Jersey Department of Education. New Jersey Comprehensive School-Based Mental Health Resource Guide. 2022. Available online: [https://www.nj.gov/education/safety/wellness/mh/docs/NJDOE\\_MentalHealthGuide.pdf](https://www.nj.gov/education/safety/wellness/mh/docs/NJDOE_MentalHealthGuide.pdf) (accessed on 18 August 2022).
47. Wilk, A.S.; Hu, J.; Wen, H.; Cummings, J.R. Recent Trends in School-Based Mental Health Services Among Low-Income and Racial and Ethnic Minority Adolescents. *JAMA Pediatr.* **2022**, *176*, 813–815. [CrossRef] [PubMed]

48. Brier, B. Critics Question if Hub-and-Spoke Model for Student Mental Health Has Anything New to Offer. NJ Spotlight News. 5 October 2023. Available online: <https://www.njspotlightnews.org/2023/10/nj-critics-question-if-hub-and-spoke-mental-health-model-offers-anything-new/> (accessed on 6 October 2023).
49. Lomas, T.; Medina, J.C.; Ivztan, I.; Rupperecht, S.; Eiroa-Orosa, F.J. The impact of mindfulness on the wellbeing and performance of educators: A systematic review of the empirical literature. *Teach. Teach. Educ.* **2017**, *61*, 132–141. [[CrossRef](#)]
50. Zwicker, A.; DeLongis, A. Gender, stress, and coping. In *Handbook of Gender Research in Psychology: Volume 2: Gender Research in Social and Applied Psychology*; Springer: New York, NY, USA, 2010; pp. 495–515. [[CrossRef](#)]
51. Cleveland Clinic Newsroom. Cleveland Clinic Survey examines the current state of Men’s Health in America. 6 September 2023. Available online: <https://newsroom.clevelandclinic.org/2023/09/06/cleveland-clinic-survey-examines-the-current-state-of-mens-health-in-america/> (accessed on 18 December 2023).
52. Agyapong, B.; Brett-MacLean, P.; Burbach, L.; Agyapong, V.I.O.; Wei, Y. Interventions to reduce stress and burnout among teachers: A scoping review. *Int. J. Environ. Res. Public Health* **2023**, *20*, 5625. [[CrossRef](#)]

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