

Beyond the four walls: The evolution of school psychological services during the COVID-19 outbreak

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Abstract

The emergence of the novel coronavirus disease (COVID-19) in early 2020 led to the sudden temporary closure of K-12 schools across the United States. Schools were tasked with providing remote instruction to students, and many of these children continued to require mental and behavioral health services provided by school psychologists. In this study, 675 school psychologists were surveyed across the United States to examine how their roles and responsibilities changed as a result of COVID-19. Participants reported the perceived impact of COVID-19 on students' mental health and difficulty serving students and families, as well as their concerns and recommendations pertaining to school reentry. Overall, respondents in this study reported that their roles and responsibilities notably changed because of COVID-19. Participants noted their belief that children and educators will need increased mental health support upon returning to school. Implications for future practice and research are discussed.

KEYWORDS

COVID-19, mental health, pandemic, remote learning

1 | INTRODUCTION

The global spread of the coronavirus disease (COVID-19) in December 2019 and into 2020 led to the sudden temporary closure of 124,000 out of 133,000 public and private schools across the United States (Education Week, 2020; National Center for Education Statistics, 2019; Peele et al., 2020; Viner et al., 2020). These closures

affected over 55.1 million students across the country and forced many educators, like teachers and school psychologists, to abruptly transition their services to virtual platforms (Kaden 2020; National Center for Education Statistics, 2019). Consequently, educational services, such as teacher instruction or counseling with the school psychologist were completed through distance learning (Kaden, 2020). Distance learning or virtual delivery of educational services involves the physical separation of educators and students and the use of computers, tablets, and other technologies to facilitate opportunities and school staff-student communication (Fischer et al., 2016). Given that school psychological and educational services have typically been delivered in-person within the four walls of a school building, the purpose of the current study was to evaluate the perspectives of school psychologists on their roles and responsibilities before and during the initial months of the COVID-19 pandemic.

With schools closing due to COVID-19, educators, such as school psychologists and teachers, tended to provide distance learning in either synchronous or asynchronous formats. In brief, synchronous learning and support services provide “real-time” and “live” interaction between students and their instructor or support service provider. In contrast, asynchronous learning and support services do not take place in real-time and tend to include prerecorded instructional videos and/or other self-paced learning activities (Lowenthal et al., 2020).

By offering educational services virtually through synchronous or asynchronous formats, schools attempted to provide children learning opportunities while taking part in greater social distancing efforts to prevent the spread of COVID-19. It was estimated that such efforts would save an estimated six million lives across the United States (National Center for Education Statistics, 2019; Peele et al., 2020; Viner et al., 2020). Although school closure may assist in containing a viral outbreak, such closures are not without consequences. During the COVID-19 pandemic, scholars estimated that there could be a 9- to 12-month learning loss when children returned to school in the fall, and this loss would only be compounded by the quality of education they received via virtual teaching platforms (Christakis, 2020). For example, Dorn et al. (2020) projected that students who experienced average-quality remote instruction could lose up to four months of learning, and students with lower quality remote instruction and with limited access to stable internet could lose up to 11 months of learning (Dorn et al., 2020). Arguably, the students most greatly affected by remote learning were children living in poverty and rural areas across the United States (Dorn et al., 2020; Lancker & Parolin, 2020). This is because children living in poverty and rural areas often do not have access to reliable internet, computers, or technology (Dorn et al., 2020; Federal Communications Commission, 2019; Lancker & Parolin, 2020).

Aside from a loss of academic instruction, pandemics, such as COVID-19, may impact children's mental health due to lost opportunities to socialize with their peers, witnessing their parents lose their jobs, observing family members or friends becoming sick or pass away, or even becoming ill with the disease themselves (Blustein et al., 2020). Although there is sparse literature on the impact pandemics have on children's mental health, large scale disasters, such as the World Trade Center attacks, mass school shootings, and natural disasters appear to be correlated with increased depression, posttraumatic stress disorder (PTSD), anxiety, and even suicide in youth (Lengua et al., 2005; Lowe & Galea, 2017; Navarro et al., 2016; Sprang & Silman, 2013).

In one of the few studies to investigate the psychosocial responses of children to pandemics, Sprang and Silman (2013) reported that youth who were quarantined or isolated due to a disease outbreak were more likely to develop an adjustment disorder, acute stress disorder, PTSD, or suffer from grief. Additionally, research has demonstrated that youth who experience social-emotional concerns are more likely to repeat a grade, drop out of school, have a lower GPA, and be suspended or expelled from school than their peers without mental health problems (Brännlund et al., 2017; Kang-Yi et al., 2018; Murphy et al., 2015; Teo et al., 1996).

1.2 | School psychological services

School psychology is a specialty of psychology that is concerned with providing services to children, families, and learners of all ages with a special emphasis on schools and other systems (American Psychological Association,

n.d.). Some of the tasks that school psychologists engage in involve data collection and analysis, counseling, consultation, crisis preparedness and response, and development of academic, behavioral, and social-emotional interventions (Bahr et al., 2017; National Association of School Psychologists [NASP], 2014; Nickerson et al., 2014). School psychologists' vantage point of how COVID-19 initially impacted the delivery of school-based services may be unique due to the field providing supports to educators and students in the academic, behavioral, and social-emotional domains.

Although school psychologists are qualified mental health providers under the Affordable Care Act and are capable of providing an array of services to students, the field has traditionally been limited to activities related to special education eligibility (Brown et al., 2006; McNamara et al., 2019; Stoiber & Vanderwood, 2008). For example, 30 years of research estimates that school psychologists spend approximately 50% of their time completing assessments related to eligibility determination (Brown et al., 2006; Hutton et al., 1992; Walcott & Hyson, 2018). Despite school psychologists traditionally spending the majority of their time on tasks related to special education eligibility, studies suggest that practitioners in the field may slowly be expanding in their roles (Bahr et al., 2017; Eklund et al., 2019). Results from the NASP membership survey show that school psychologists who reported ratios lower than 1:1100 reported significantly less engagement in special education evaluations and greater time participating in mental and behavioral health services, crisis intervention, student wellness, and school-wide strategies to promote safe and supportive learning environments (McNamara et al., 2019). Moreover, studies suggest that school psychologists are engaging increasingly in consultation, individual counseling, and participating in crisis intervention teams over completing eligibility evaluations (Bahr et al., 2017; Eklund et al., 2019).

Outside of serving children, a small body of research suggests that school psychologists may support teachers' resilience and well-being in mitigating the everyday stressors of their job (Beltman et al., 2016; Gibbs & Miller, 2014). Existing literature suggests that school psychologists may assist educators in mitigating the everyday stressors of their job through advocacy, consultation, in-service trainings, and even suggesting supports to build their resilience and emotional well-being (Anderson et al., 2007; Atkin-Little et al., 2004; Beltman et al., 2016; Gibbs & Miller, 2014; Hymer et al., 2002). Overall, results of recent studies suggest that the field is expanding to embrace and utilize its comprehensive training beyond that of assessment (McNamara et al., 2018; Splett et al., 2013; Stoiber & Vanderwood, 2008; Walcott & Hyson, 2018).

In understanding the impact that COVID-19 may have on schools and the educators and students found in them, school psychologists may possess a unique multidimensional view (Augustyniak et al., 2016; Bahr et al., 2017). This multidimensional view may be due to school psychologists' training being in the areas of learning, cognition, mental health, multiculturalism, prevention, and intervention (Bahr et al., 2017; NASP, 2014; Splett et al., 2013). Consequently, school psychologists may be uniquely positioned to identify students' learning and overall well-being within a larger sociocultural context. School psychologists also work with a variety of stakeholders regularly, such as administrators, teachers, and school counselors (Bahr et al., 2017; NASP, 2014; Splett et al., 2013). Overall, school psychologists may have important perspectives on the impact that crises, such as COVID-19, may have on students and families (Dwyer et al., 2015).

1.3 | School psychology services and COVID-19

Even though school psychology is slowly starting to embrace and utilize its extensive training, the COVID-19 pandemic and subsequent closure of schools to in-person instruction might have greatly altered their roles. One of the biggest ways that school psychology services may have been altered by the pandemic is through their ability to provide psychoeducational assessments. Since many of the psychoeducational assessments school psychologists use require in-person administration and are not normed or validated for virtual administration, school psychologists may have struggled to complete these assessments upon schools closing as a result of COVID-19 (Farmer et al., 2020).

Consequently, to address concerns by the field over completing initial and re-evaluations for special education during COVID-19, the Office for Civil Rights for the United States Department of Education (2020) noted that: "if an evaluation of a student with a disability requires a face-to-face assessment or observation, the evaluation would need to be delayed until school reopens" (p. 3). Moreover, many state education departments and school psychology associations across the country issued statements or discouraged the use of the virtual delivery of psycho-educational assessments due to concerns over their reliability and validity in being administered in such a manner (Farmer et al., 2020; Hiramoto, 2020; Michigan Department of Education, 2020; New York State Education Department, 2020). Both state education departments and school psychology associations suggested that school psychologists should delay evaluations until schools reopened or recommended that school psychologists consult assessment manuals to see which evaluations allowed for virtual delivery (Farmer et al., 2020; Hiramoto, 2020; Michigan Department of Education, 2020; New York State Education Department, 2020). Therefore, school psychologists may have delayed completing initial testing and re-evaluations for special education during the initial months of the pandemic based on the guidance offered by their state school psychology associations and guidance offered by federal and state education departments.

Aside from completing assessments for special education eligibility, school psychologists' roles may have been altered due to schools closing through the means and ability in which they provided counseling and consultation services. Although these services could have been provided virtually, research on videoconferencing and consultation indicates that the technology remains new to the field of education compared to professions like medicine and business and presents with potential ethical and confidentiality concerns (Schultz et al., 2018). Consequently, school psychologists' means and ability to provide consultation and counseling services might have been significantly impacted by COVID-19.

Lastly, school psychology services during COVID-19 may have been impacted by students from low-income and rural families not having access to reliable internet, tablets, and computers (Lancker & Parolin, 2020). According to the United States Census Bureau (2019), one in six children live in poverty in the United States with the highest poverty rates by race being found among Native Americans, African Americans, and Hispanics. Moreover, in the United States, it is estimated that 2.5% of public school students do not reside in a stable residence (Lancker & Parolin, 2020).

With school psychological services likely being impacted by COVID-19, they may have had more flexibility to engage in and explore other areas of their training. Moreover, due to previous literature indicating that large scale disasters and pandemics may cause increased mental health concerns among youth, school psychologists may have engaged in these practices more often during the initial months of the pandemic (Lowe & Galea, 2017; Navarro et al., 2016; Sprang & Silman, 2013). Therefore, a better understanding is needed for how or if the roles and responsibilities of school psychologists changed during the initial few months of the COVID-19 pandemic and how they responded to such change.

1.4 | Current study

The current exploratory study sought to evaluate the perspectives of school psychologists on their roles and responsibilities before and during the initial months of the COVID-19 pandemic. Through evaluating the perspectives of school psychologists, an understanding can be obtained about the services they provided to students and educators, methods in which such services were provided, challenges encountered, and needs of the profession. Moreover, given that school psychologists work with educators, families, and children, they may possess a multidimensional view of how COVID-19 impacted schools, their profession, fellow educators, and students. By exploring the aforementioned areas, school psychologists and schools can better prepare and plan for extended school closure and school reentry as a result of pandemics and large-scale disasters. Another aim of this study was to provide an understanding of the types of services school psychologists were able to provide beyond the four

walls of the school building during the first few months of the COVID-19 pandemic. Therefore, to evaluate how the COVID-19 impacted the field of school psychology and education as a whole, the current study inquired about the following research questions:

- a. How did the format of instructional modality along with the roles and responsibilities of educators and school psychologists change during the initial months of the COVID-19 pandemic?
- b. Did school psychologists believe there would be an increased need to support the social-emotional needs of children and educators upon returning to school after the initial months of the COVID-19 pandemic?
- c. What factors were associated with the level of difficulty school psychologists experienced when serving children and their families during the initial months of the COVID-19 pandemic?
- d. What were the primary concerns school psychologists reported related to school reentry?

2 | METHODOLOGY

2.1 | Data collection materials

Survey development involved an initial search of scholarly databases including ERIC, PsychInfo, MEDLINE, and GoogleScholar for peer-reviewed articles on previous disease outbreaks, such as Ebola, H1N1, and SARS, and large scale disasters, like September 11, 2001, Hurricane Katrina, and the Parkland school shooting. In addition to these key areas of interest, a search for scholarly articles was conducted in the areas of crisis intervention, distance learning, virtual schooling, video counseling, and barriers to virtual service delivery. After locating articles pertinent to the current study, an examination of the reference lists was conducted to identify other germane articles.

In addition to reviewing peer-reviewed articles, common questions, themes, and areas of interest were revealed through searching school psychology and education-related social media platforms, forums, national association resources, and government guidance documents for schools on COVID-19. Questions related to the roles and responsibilities of school psychologists were based on areas of practice found in the NASP practice model (2010) and in previously conducted surveys on school psychologists, such as the NASP membership survey (Bahr et al., 2017; Eklund et al., 2019; McNamara et al., 2019; Walcott & Hyson, 2018).

The final format of the survey consisted of Likert, ranking, dichotomous, check-all-that-apply, and open-ended items. More specifically, the survey was designed to obtain demographic information and compare school psychologists' perceptions before and during the COVID-19 pandemic in the areas of (a) roles and responsibilities; (b) service delivery; (c) perceived concerns and barriers in providing services; and (d) concerns and recommendations on plans for school reentry. Although the final survey consisted of 53 items, adaptive questioning (skip logic) was utilized to minimize response time. If a respondent indicated their brick-and-mortar school building was open during this period or if they indicated that their primary place of employment was outside of a public, private, or alternative school setting, they were disqualified from the study. Survey questions were formatted specifically for full-time school psychologists working in the K-12 environment. The researchers used a commercial online survey platform, SurveyGizmo, to host the survey and view results.

2.2 | Participants

Participants in this study included 918 school psychologists, all of whom practiced in school settings in the United States. An original subsample of 48 school psychologists from Canada was removed after researchers discovered a vast difference in practice across the international border. Data from another 195 respondents were excluded due to incomplete responses. As is common with online surveys, not all participants responded to every question,

resulting in slight variations for response rates across items. If a participant had a missing response on any variable, they were not included in the regression analysis. Therefore, the number of participants who took part in the study was narrowed from 918 to 675 participants who fully completed the survey. These 675 participants were included in the final sample of the study.

The mean participant age was 36.5 ($SD = 10.1$), and the mean number of years of experience practicing as school psychologists was 8.8 years ($SD = 8.5$). Most participants (92.0%) identified as female, and 85.1% of participants described their race as White/Caucasian. These percentages were comparable with the typical demographics of school psychologists in the United States (Walcott & Hyson, 2018). The highest degree completed by most participants was a specialist degree (63.1%), and most participants worked as full-time employees (94.1%). Most participants (92.3%) worked in public schools with 43.9% of participants practicing in suburban settings. For comprehensive demographic information, see Table 1. With varying response rates, school psychologists from all states across the nation were represented except for those in Montana, New Mexico, North Dakota, and West Virginia. See Figure 1 for state representation.

2.3 | Procedure

2.3.1 | Recruitment of participants

Before the online distribution of the survey, the questionnaire was pilot tested by a group of four practicing school psychologists to confirm the understanding of the questions asked and to provide feedback regarding items, format, and missing topics. Those who pilot-tested the survey were practicing school psychologists from a mix of urban, rural, and suburban settings across grades K-12 in the Midwest and Northeast regions of the US. Feedback obtained from the pilot test was used to finalize the survey questions, and Institutional Review Board approval was granted with the survey meeting the criteria of "exempt."

The recruitment email described the purpose of the study and included a link to the informed consent and survey questions. The survey was open for participant completion from April through May 2020. At this point, the majority of schools had been closed since mid-March 2020 (Education Week, 2020). Participants in this study were recruited via school psychology forums, email distributions to state school psychology associations, and through school psychology social media platforms. Presidents and/or research chairs from state school psychology associations were found on state association websites and compiled into a list for dissemination. To further promote the survey, state association representatives were contacted at least twice in a two-week timespan, though only two known state associations (New York and Ohio) sent the survey to members. The survey completion rate was 79%.

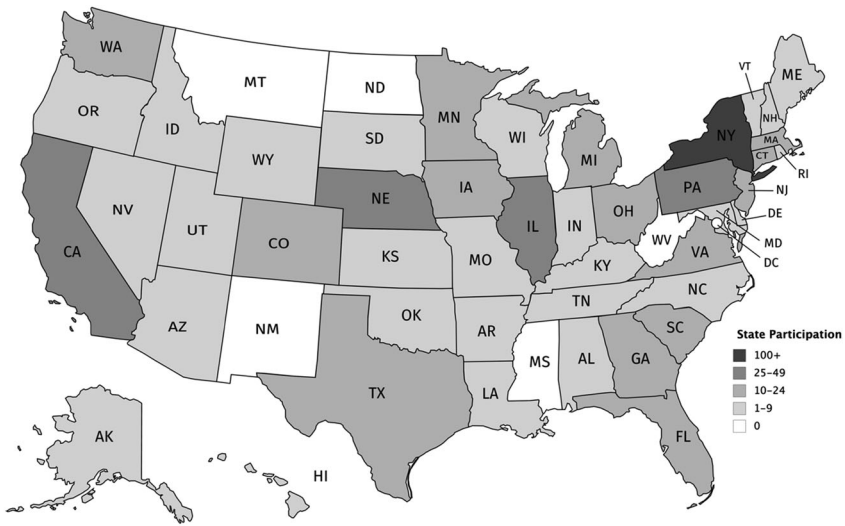
2.4 | Data analysis

Data were collected and analyzed in an aggregate manner. SurveyGizmo provided results in the form of percentages. Descriptive data are presented in tables and within the narrative. To examine how the roles and responsibilities of school psychologists have changed since COVID-19, the researchers conducted a comparison of before-and-after responses for items pertaining to tasks and responsibilities before and during school closure due to COVID-19. Participants who indicated they were not working during this time were removed from this analysis. Three other research questions were analyzed via descriptive data and included participants' perceptions of the need for mental health support for children and educators, concerns about school reentry, and recommendations on how to best address students' and families' needs. To fully capture the responses of participants, some items allowed for respondents to reply "other" to survey items. If survey participants selected "other," respondents were

TABLE 1 Participants' demographic information (*n* = 675)

	Frequency (<i>n</i>)	(%)
Age		
21-30	171	25
31-40	248	38
41-50	147	22
51-60	78	12
61-70	21	3
Gender		
Female	612	92.0
Male	52	7.8
Gender variant/non-conforming	1	0.2
Ethnicity		
Asian	14	2.1
Native Hawaiian or Other Pacific Islander	1	0.2
Black or African American	26	3.9
White	566	85.1
Hispanic/Latino	46	6.9
American Indian/Alaska Native	2	0.3
Mixed Race	7	1.0
Other	1	0.01
Highest degree obtained		
Specialist level	420	63.20
Masters	134	20.10
Ph.D	46	6.90
Psy.D	41	6.20
Ed.D/D.Ed	11	1.70
Other	12	1.80
Years in field		
0-4	202	30.30
5-9	171	25.70
10-19	181	27.20
20+	111	16.70

required to write in an answer. Items that included an "other-write in" or short-answer option were manually analyzed by one of the researchers using thematic analysis. Thematic analysis is a method of analyzing qualitative data to identify common themes, or patterns, in the data (Braun & Clarke, 2006). During one session, two of the researchers reviewed the "write-in" responses together and developed themes for the responses that did not



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FIGURE 1 Participation by State (N)

match the item choices. The researchers then returned to the data and assigned item responses to the identified themes, summed the number of responses associated with each theme, and divided it by the number of total responses for that item to derive a percentage.

In addition to assessing school psychologists’ shifts in their roles as responsibilities, this study aimed to examine participants’ self-assessed difficulty in serving children and their families during the COVID-19 pandemic. The dependent variable was measured using a single item that asked participants: “how difficult has it been for you to serve children and their families during the COVID-19 pandemic?” Response options included: “no difficulty,” “a little bit of difficulty,” “moderate difficulty,” “quite a bit of difficulty,” and “extreme difficulty.” This item was treated as a pseudo-continuous, Likert-type scale for our analysis.

The researchers considered five independent variables of interest in this analysis: (1) the US geographic region in which the participant works (categorical variable including West, Midwest, Southeast, or Northeast), (2) the approximate median household income of the children the participant serves (continuous variable ranging from less than \$20,000 to more than \$200,000), (3) the school psychologist to student ratio at the participant’s school (continuous variable ranging from 1:500 to 1:3000 or more), (4) the degree to which participants think that the COVID-19 pandemic will negatively impact students’ overall mental health (continuous variable ranging from “not at all” to “profoundly”), and (5) the barriers experienced by participants in providing telehealth interventions or telecounseling services to children, and the district does not have access to technology to provide telehealth interventions or telecounseling.

Several variables were used to control for demographic and school setting factors that might confound the relationships amongst the aforementioned five independent variables in the analysis. Demographic factors that were controlled for include participants’ gender, race/ethnicity, highest degree earned, and the total number of years employed as a school psychologist. School setting factors controlled for included: place of employment, school locale, median household income of children served in the district, school psychologist to student ratio, region, perceived impact on students’ overall mental health, and the top three perceived barriers to providing services. An ordinary least squares regression (OLS) was utilized to assess the sociocultural implications of the COVID-19 pandemic and group differences among school districts with varying resources. The OLS regression was

used due to the pseudo-continuous nature of the outcome variable and to be able to include multiple covariates/controls in the model that would help to isolate the relationships between the independent variables and the outcome variable. More specifically, the OLS regression examined potential relationships between the reported income of school districts and perceived difficulty and barriers in supporting students and families. Through the OLS regression, all independent variables of interest and control variables were entered into a single regression model. Continuous variables were standardized before analysis, and the regression model was examined for potential multicollinearity issues. Variance Inflation Factors ranged from 1.02 to 1.89, below recommended VIF limits, suggesting no multicollinearity issues. All independent and control variables were entered into the regression model simultaneously. Graphical analyses did not suggest the presence of outliers, and listwise deletion was used to handle missing data, narrowing the analytical sample to 551 participants. Data were determined to be Missing Completely at Random (MCAR) by using Little's Test (MCAR test) in STATA. Results of the test revealed that data were missing completely at random, using a significance level of 0.05 ($sig. = 0.0781$).

3 | RESULTS

3.1 | Participant demographics

The majority response from participants regarding the median household income of students served by practitioners was between \$21,000 and \$40,000 (27.3%). Approximately 99.3% of participants indicated that their school districts were closed to in-person learning and subsequently provided only e-learning. The remaining 0.07% of individuals were those who worked in settings that either remained open or offered in-person education or those who worked in alternative settings. These two subpopulations were not included within the survey results. The average (27.8%) reported approximate school psychologist to student ratio was 1:500–799. Below are the answers corresponding to the research questions initially found in the current study section of this manuscript.

3.2 | How did the format of instructional modality along with the roles and responsibilities of educators and school psychologists change during the initial months of the COVID-19 pandemic?

After the closure of schools, participants reported that distance learning was provided synchronously (6.4%), asynchronously (25.8%), and in combined synchronous and asynchronous formats (64.0%). Approximately, 3.8% of participants indicated that they were unsure of how the district was providing distance learning. Moreover, about 95.2% of participants reported that classes continued via distance learning, along with other services such as IEP/Eligibility meetings (94.8%), related services (82.1%), 504 meetings (67.5%), parent-teacher conferences (41.1%), and student intervention team meetings (32.9%).

Most school districts (91.4%) continued to write IEPs amidst the pandemic. While most participants (42.7%) indicated that they wrote IEPs as if the students were in session, they drafted distance learning plans to document what services looked like during remote instruction. Other respondents continued to write IEPs based on what was happening when school was in session (26.3%). Still, other school psychologists who took part in the survey (22.5%) indicated that they wrote IEPs as if students were in session but did not draft distance learning plans. Aside from writing IEPs, a large majority of participants (77.6%) indicated that they continued to provide accommodations for students who received special education services. Respondents indicated that the top three accommodations being provided to students included: (1) extended time to complete assignments, (2) shortened assignments and/or assessments, and (3) audio recordings instead of reading text.

Amidst the COVID-19 pandemic, school psychologists continued to offer services remotely, including telehealth interventions or telecounseling (55.4%), posting social/emotional content to databases, such as Google Classroom (44.1%), developing social/emotional or academic interventions for parents to use at home (35.8%), and mailing paper packets or newsletters with social/emotional, behavioral, or academic interventions home to students (19.3%). The two most preferred platforms for telehealth services as indicated by participants of this study were Google Meet/Hangouts (33.6%) and Zoom (29.7%).

Participants were asked to compare their roles and responsibilities from before the pandemic occurred and during COVID-19. The average number of hours worked by participants decreased from 41.1 h before the pandemic to 30.4 h per week during COVID-19. Before the pandemic came to the United States, most participants indicated that assessment was their top-ranked role in terms of services provided followed by consultation and collaboration. The third-ranked area of service provided by school psychologists before COVID-19 was in IEP meeting attendance. After the pandemic occurred, the top three areas of service included (1) consultation and collaboration, (2) IEP meeting attendance, and (3) counseling. This shift in services provided may have been due to 98.3% of participants indicating that they were not required to administer standardized assessments remotely. For a comprehensive understanding of the ranked areas of service provided (from highest to lowest) before and during the pandemic see Table 2.

3.3 | Did school psychologists believe there would be an increased need to support the social-emotional needs of children and educators upon returning to school after the initial months of the COVID-19 pandemic?

Overall, participants reported concerns about the impact of the COVID-19 pandemic on students' mental health. Approximately 56.5% of participants indicated that the COVID-19 pandemic would negatively impact students' overall mental health "moderately," and 22.4% indicated that it would negatively impact students' overall mental health "severely." Despite training in counseling and mental health interventions, 62.5% of participants indicated that they provided mental health interventions "no more than what they did" before the pandemic. Upon returning to school post-pandemic, most participants (48.9%) indicated that mental wellness was "very important" for children to learn academic content.

Participants also indicated that they provided resources to support teachers' and administrators' social-emotional well-being, such as through emailing them self-care resources (54.4%), using platforms to upload resources (36.5%), and speaking to people about coping techniques (24%). Before the pandemic, 76.4% of participants indicated that they felt a responsibility to provide social-emotional support to educators, whereas this figure increased to 89.7% during the pandemic. Relatedly, 77.6% of participants marked "yes" when asked if they felt there would be an increased need for school psychologists to support the social-emotional needs of educators when returning to school buildings.

3.4 | What factors were associated with the level of difficulty school psychologists experienced when serving children and their families during the initial months of the COVID-19 pandemic?

In addition to assessing school psychologists' shifts in their roles as responsibilities, this study aimed to examine relationships between participants' self-assessed difficulty in serving children and their families during the COVID-19 pandemic, and other factors, including median income of the school district, geographic region, school psychologist to student ratio, perceived impact on students' overall mental health, and difficulty in providing telehealth/telecounseling services. Other demographic variables were controlled for in the analysis. Table 3

TABLE 2 School psychologists' service delivery before and during COVID-19

Before COVID-19		After COVID-19	
Rank	Item	Rank	Item
1	Psychoeducational assessments	1	Consultation and collaboration
2	Consultation and collaboration	2	IEP meetings
3	IEP Meetings	3	Counseling
4	Counseling	4	Researching social, emotional, behavioral, or academic interventions/supports
5	CST Meetings	5	Psychoeducational assessments
6	Crisis intervention	6	Family-school collaboration
7	Development and provision of academic, behavioral, and emotional interventions	7	Other
8	FBA/BIP development	8	CST Meetings
9	Data-based decision making	9	Development and provision of academic, behavioral, and emotional interventions
10	Family-school collaboration	10	Data-based decision making
11	Other	11	504 meetings
12	504 meetings	12	Crisis intervention and prevention
13	Researching social, emotional, behavioral, or academic interventions/supports	13	Research and program evaluation
14	Threat assessment	14	FBA/BIP development
15	Manifestation-determination meetings	15	Threat assessments
16	Research and program evaluation	16	Manifestation-determination meetings

Abbreviations: CST, Child Study Team; FBA/BIP, Functional Behavior Assessment/Behavior Intervention Plan; IEP, Individual Education Plan.

presents regression estimates of the association between each independent variable of interest and the outcome variable, self-assessed difficulty in serving children and their families during the COVID-19 pandemic ($N = 551$, $R^2 = 0.11$). In the presence of controls for demographic and school setting factors, two independent variables were associated with difficulty in serving children and their families during the COVID-19 pandemic: (1) the degree to which participants think that the COVID-19 pandemic will negatively impact students' overall mental health ($B = 0.23$, $p < 0.001$) and (2) participants not having access to district-provided technology to provide telehealth interventions ($B = 0.51$, $p < 0.01$). All other independent variables of interest, including geographic region, median household income of the children the participant serves, the school psychologist to student ratio, and all other barriers experienced by participants in providing telehealth interventions or telecounseling services to children were statistically nonsignificant.

When asked on a Likert-type question of how difficult it was to serve children and their families during the pandemic, most participants (36.9%) indicated that they had "quite a bit of difficulty." Participants also indicated that the top three barriers experienced when providing telehealth interventions were: (1) child/family not signing online for services, (2) balancing their work/life balance, and (3) child/family not having adequate internet connection.

TABLE 3 Factors in perceived difficulty serving children and families during COVID-19

	Coef. (SE)
Geographic Region: West (vs. Northeast)	-0.06 (0.13)
Geographic Region: Midwest (vs. Northeast)	0.17 (0.11)
Geographic Region: Southeast (vs. Northeast)	0.09 (0.12)
Median Household Income	-0.02 (0.06)
School Psychologist to Student Ratio	0.01 (0.05)
Perception that COVID-19 Pandemic will Negatively Impact Students' Overall Mental Health	0.23** (0.05)*
Barriers in Providing Telehealth/Telecounseling: Lack of Familiarity with Technology	0.17 (0.12)
Barriers in Providing Telehealth/Telecounseling: Child/Family Not Signing Online for Scheduled Services	-0.16 (0.09)
Barriers in Providing Telehealth/Telecounseling: Child/Family Not Having Access to Adequate Internet Connection	0.04 (0.10)
Barriers in Providing Telehealth/Telecounseling: Child/Family Not Having Access to a Computer or Tablet	0.06 (0.12)
Barriers in Providing Telehealth/Telecounseling: Language Barriers	0.23 (0.16)
Barriers in Providing Telehealth/Telecounseling: Balancing Work/Life While Home During the COVID-19 Pandemic	-0.12 (0.09)
Barriers in Providing Telehealth/Telecounseling: Internet Security	0.03 (0.21)
Barriers in Providing Telehealth/Telecounseling: Cultural Barriers	0.44 (0.44)
Barriers in Providing Telehealth/Telecounseling: Child's Age	0.21 (0.13)
Barriers in Providing Telehealth/Telecounseling: Child's Cognitive Ability	-0.06 (0.20)
Barriers in Providing Telehealth/Telecounseling: Maintaining Confidentiality	0.02 (0.11)
Barriers in Providing Telehealth/Telecounseling: Child's Speech/Language Ability	-0.05 (0.45)
Barriers in Providing Telehealth/Telecounseling: No District Access to Technology to Provide Telehealth Interventions or Telecounseling	0.51**(0.17)
R ²	0.11

* $p \leq 0.05$.

** $p \leq 0.01$.

3.5 | What were the primary concerns school psychologists reported related to school reentry?

At the time of the survey, most participants (34.9%) indicated that their school district had not started to develop a reentry plan. When administrators and school officials started to develop these proposals, most participants (41.1%) believed that school psychologists should be “very involved” with the development of these plans. When students could return to brick-and-mortar buildings, participants ranked their top three work-related concerns. The top three work-related concerns were reported as follows: (1) difficulty catching up with or meeting assessment deadlines, (2) differentiating between children who truly have a disability and those who have fallen behind due to lack of adequate instruction, and (3) increased referrals for special education.

Given the large role that school psychologists play in schools, participants were asked to list the top three things they would like federal and state legislators to know about the field of school psychology amidst the COVID-19 pandemic. Responses were categorized using thematic coding and aligned with 10 common themes. See Figure 2 for a list of the 10 themes reported by the participants. The top three related to the following responses: (1) knowledge of their comprehensive training and skills and that they play many roles in a school setting; (2) there is a need for clearer guidance on special education regulations and guidelines, particularly during remote instruction; and that there is a shortage of school psychologists, resulting in participants being overwhelmed with work. It should be noted that this list only includes the top 10 themed concerns noted by participants; responses for “other” did not adequately align with the identified themes, such as anecdotal commentary.

4 | DISCUSSION

The current exploratory study is the first and largest of its kind focusing on the evolving practice of school psychology and the field of education amid the global COVID-19 pandemic. In regard to how the roles and responsibilities of school psychologists changed as a result of the COVID-19, results from the current study were consistent with previous reports indicating that almost all schools across the United States discontinued in-person classes and services (Peele et al., 2020; Viner et al., 2020). Despite no longer providing in-person instruction or support services, almost all participants indicated that their districts continued to hold classes as well as special education services remotely, such as IEP/eligibility meetings. Additionally, most school psychologists who participated in this study revealed that despite their brick and mortar school building being closed, students receiving special education services continued to be provided their accommodations, such as extended time to complete assignments. Therefore, despite the physical school buildings being closed, educators and school psychologists continued to provide instruction and services to students during COVID-19.

Although school psychologists continued to provide services to students remotely, the current study exposed critical gaps and difficulties in the delivery of those services. Most participants who took part in this study

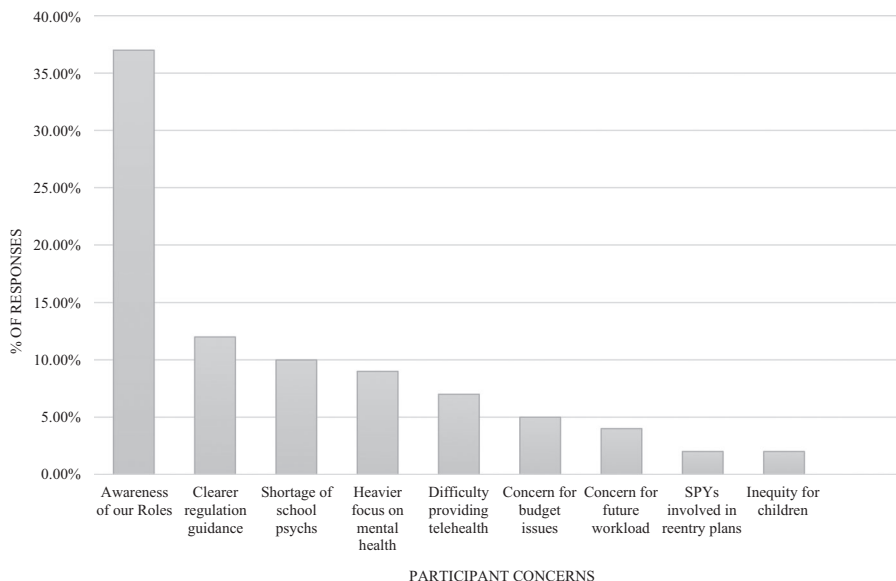


FIGURE 2 What participants want legislators to know

indicated that they had quite a bit of difficulty delivering services virtually, adding that their top three barriers to providing supports in this manner included: (1) the child/family not signing online for services, (2) balancing their own work/life, and (3) the child/family not having an adequate internet connection. The results of this study appear to support and further expose problems encountered by families, especially those facing financial hardship, in obtaining reliable internet connection or signing online for services (Lancker & Parolin, 2020).

Aside from these findings, results from the current study differed from those found by Schultz et al. (2018) who reported that school psychologists attempting teleconsultation experienced difficulty in delivering these services due to how familiar the consultee is with technology and student behavior concerns. Moreover, whereas Schultz et al. (2018) explored the remote delivery of services in a more experimental format with only 62 participating school psychologists, the current study did so in a real-life context with a much larger sample size. Findings between this study and the one conducted by Schultz et al. (2018) were consistent in that teleconsultation and remote service delivery appeared to be an understudied area that was not widely utilized by school psychologists or educators pre-pandemic. Taken altogether, results from this study provide vital information on potential barriers that need to be ameliorated for school psychologists to successfully provide remote services to children both during and potentially after the COVID-19 pandemic has passed.

In addition to exposing critical gaps and barriers in the virtual delivery of school psychological services, the current study revealed how school psychologists' roles and responsibilities changed before and during the pandemic. Similar to findings by previous studies, participants noted that before COVID-19 their primary role involved assessment for special education eligibility, followed by consultation and collaboration, and IEP meeting attendance (Brown et al., 2006; Walcott & Hyson, 2018). During COVID-19, the prioritization of these roles shifted as school psychologists noted that their primary role was in consultation and collaboration, followed by IEP meeting attendance, and counseling. This shift in the prioritization of roles might be due to almost all participants noting that they were no longer able to provide assessments for special education eligibility after schools closed. These results add further gravity to findings by previous studies that suggest that two of the primary roles school psychologists engage in outside of assessment are that of consultation and providing mental health supports (Bahr et al., 2017; McNamara et al., 2019; Walcott & Hyson, 2018).

Despite school psychologists reporting a shift in roles during the COVID-19 pandemic, the majority of respondents indicated that they provided mental health interventions no more than what they did before the pandemic (Eklund et al., 2019; Splett et al., 2013). These results suggest that even in light of COVID-19, school psychologists' training and knowledge in mental health supports may have been not fully accessed in a time of need. Compared with previous studies suggesting that school psychologist training and skills may be underutilized, this study provides a real-life context in which school psychologist training in mental health and crisis intervention may have gone largely untapped during a pandemic (Brown et al., 2006; Eklund et al., 2019; Hughes et al., 2017; Splett et al., 2013). Although school psychologists training went largely untapped during the COVID-19, previous literature suggests that professionals in the field are frequently involved in crisis prevention teams and can further assume leadership roles on these teams by taking part in training, such as through the PREPaRE school crisis prevention and intervention curriculum (Nickerson et al., 2014).

Although school psychological services may have been underutilized during the pandemic, most participants in this study indicated that they believed children would be in increased need of mental health services upon returning to the brick and mortar school building. Moreover, most participants noted that mental wellness is very important for children to be able to learn academic content. Given that previous literature cites that school psychologists are slowly expanding their roles to include more social-emotional support for children, as well as crisis prevention and intervention, it is not surprising that most respondents in this study believed they should be very involved in the development of school reentry plans (Eklund et al., 2019; McNamara et al., 2019; Splett et al., 2013).

Aside from providing mental health support to children, this study provides insight into a much understudied area involving the responsibility that school psychologists feel in providing social-emotional support to their fellow

educators. Results of this study revealed that even before COVID-19 most school psychologists felt a responsibility to provide social-emotional support to their fellow educators. During the pandemic, the number of school psychologists who reported feeling a responsibility to provide social-emotional support to their fellow educators increased. Therefore, this study provides vital insight that school psychologists may not only view themselves as supporting the well-being of children but to that of their fellow educators.

Results from this study add to the limited literature base that suggests that school psychologists may be able to play a larger role in supporting educators' well-being by mitigating the everyday challenges they encounter as a profession (Anderson et al., 2007; Atkin-Little et al., 2004; Beltman et al., 2016; Gibbs & Miller, 2014). Additionally, this study reveals what particular strategies and techniques school psychologists suggested to support educators' well-being during a pandemic. For example, school psychologists noted that they attempted to support the well-being of fellow educators by emailing them self-care resources and speaking to them about coping techniques during the pandemic.

Participants indicated their top three considerations they wanted state and federal legislators to know amid COVID-19. Many participants indicated that they would like legislators to gain further knowledge of their training, skills, and broader roles outside of assessment. Therefore, as is consistent with previous literature, school psychologists appear to be interested in utilizing their extensive training and expertise beyond their traditional duties of assessor and special education gatekeeper (Brown & Sobel, 2019; Brown et al., 2006; Hughes et al., 2017). Participants in this study also wanted legislators to know about the national shortage of school psychologists, which previous research suggests is a hindrance to role expansion and mental health service delivery (Brown & Sobel, 2019; Brown et al., 2006; Eklund et al., 2019; Splett et al., 2013). Ultimately, the results of this study suggest that school psychologists played an integral role in providing services to both students and educators throughout the COVID-19 pandemic and need the opportunity to expand their roles upon schools reopening to best serve students and educators.

4.1 | Implications

The aim of this exploratory study was to provide much needed empirical data on how the profession of school psychology and the field of education were impacted during the initial months of the COVID-19 pandemic. Accordingly, the first major practical contribution of the present study is that it provides a broad foundation for further research on this topic. Second, this study is that it exposes gaps in the remote delivery of school psychological services and those likely encountered by educators in regard to the child/family not signing online for services and the child/family not having an adequate internet connection.

The third contribution of the current study is that it exposed the potential underutilization of school psychologists during a real-life widespread crisis in that of the COVID-19 pandemic. In a similar vein, this study exposed that school psychologists across the nation appear to be aware that policymakers lack a full and comprehensive understanding of their training and skills outside that of assessment. Therefore, continued increased advocacy is needed on the part of school psychologists and national and state associations on how the field can be appropriately utilized during times of crisis and in supporting the social-emotional needs of children and educators. Moreover, schools should seek to have their school psychologists adequately trained in crisis prevention and intervention under curriculums such as the PREPaRE model (Nickerson et al., 2014, 2019).

A final contribution of this study is that it revealed that school psychologists not only felt a responsibility to support the emotional well-being of children but also their fellow educators. Therefore, future studies should further evaluate why school psychologists feel a responsibility to support the emotional well-being of their fellow educators and how they are attempting to enhance their fellow educator's resilience and well-being. Moreover, future studies should build off of the existing literature on school psychologists playing a role in supporting teacher resilience and social-emotional well-being through assessing issues regarding confidentiality and competence to

support educators in such a manner. The small literature base, along with this study, suggests that school psychologists may be able to play a unique role in building educator's resilience and well-being (Anderson et al., 2007; Beltman et al., 2016; Gibbs & Miller, 2014). However, more scholarly literature is needed to determine the ethical boundaries, abilities, additional training, and future directions of providing such support to fellow educators, especially during large-scale disasters and in pandemics.

To help transition children between the opening and closing of schools, school psychologists can work with administrators to identify and provide social-emotional resources and support. For example, school psychologists may want to develop a list of easy to implement resources, interventions, supports, and videos that parents can readily use with their children to promote mental wellness throughout the pandemic and after it has ended. Moreover, school psychologists can collaborate with IT administrators concerning software and applications they can use to promote mental wellness, such as voiceover for slideshows when presenting mental health lessons to students or providing in-service training to staff virtually.

To ensure that school psychologists are prepared to assist students and staff in the areas of mental and behavioral health as well as crisis prevention and intervention, school districts should provide continuing education for school psychologists in these areas. Additionally, both school districts and graduate schools of school psychology should seek to recruit school psychologists and future practitioners who have an interest in the delivery of mental health services and crisis intervention. Moreover, postsecondary programs of school psychology should ensure that the courses being taught provide sufficient knowledge in the areas of mental and behavioral health and crisis intervention services. Aside from coursework, graduate courses and school districts should work together to better incorporate training and field experiences in the areas of crisis intervention and the provision of mental and behavioral health services.

4.2 | Limitations

When interpreting the results of this study, several limitations should be noted. The first limitation is that the study asked school psychologists to recall the duties they were performing before their physical school buildings being closed. By having school psychologists report on their roles and responsibilities before the pandemic, some data from the current study might be subject to recall bias. In brief, recall bias is defined as the difficulty participants may encounter in remembering events accurately due to factors such as time that has passed after an event has transpired or emotions generated by the event (Coughlin, 1990).

To minimize recall bias, respondents participated in the survey within a 2-month timeframe after the majority of school buildings closed in the United States. Therefore, the recall period was minimal between what job duties school psychologists were completing before the pandemic and the physical closure of their school buildings as a result of the pandemic. Additionally, to maximize the accurate recall of potential job roles and responsibilities before the pandemic, questions were based on areas of practice found in the NASP practice model (2010) and in previously conducted surveys on school psychologists, such as the NASP membership survey (Bahr et al., 2017; Eklund et al., 2019; McNamara et al., 2019; Walcott et al., 2018). Finally, efforts were made to specifically frame questions in a clear and neutral manner that referenced the domains in which school psychologists practiced and did not inquire about feelings or the personal impact COVID-19 had on participants beyond their school psychology roles and responsibilities.

Another limitation of the current study relates to the generalizability of its findings. Although great efforts were made to advertise for this study over several weeks using school psychology-related social media platforms, forums, and state association email distribution lists across the country, the sample size obtained was not equivalent across all states. With only two known state associations sending the survey to members, some states disproportionately had more survey respondents than others. Consequently, the results of this study should not be interpreted as being representative of all school psychologists across the country.

Aside from the aforementioned limitations, the rapidly changing, unpredictable, and fragmentary nature in which COVID-19 impacted individual states across the nation presented some challenges to survey questions. At the time the survey was distributed, there was much uncertainty about how the virus would impact the country and schools in terms of severity, longevity, and whether districts would remain closed to in-person instruction for the remainder of the year. Therefore, some questions in the survey asked practitioners to compare and contrast their roles and responsibilities before and after the COVID-19 pandemic came to the United States. However, some participants may have misinterpreted after to mean after the virus had been properly contained or ended due to the development of a vaccine.

Before survey distribution, efforts were made to minimize any misinterpretation of questions through pilot testing the questionnaire with four practicing school psychologists across different regions and states. Additionally, before taking the survey, participants were automatically directed to an informed consent page. On this page, it was explained to participants that the purpose was to examine how roles and responsibilities of school psychologists shifted due to the COVID-19 outbreak.

Despite these limitations, the current study provides vital insight into the roles and responsibilities of school psychologists during the initial months of the COVID-19 pandemic and the services that they provided to children. As such, this timely exploratory study helps to fill the research and literature gap as to how the field of education and profession of school psychology were impacted during the first few months of COVID-19.

4.3 | Future directions

Given that the pandemic was still ongoing when participants provided their responses to the questionnaire, this team of researchers plans to complete a follow-up study to re-evaluate the thoughts, feelings, and beliefs of school psychologists after the pandemic has ended. Additionally, this team of researchers plans to further evaluate how remote services were delivered to students during the COVID-19 pandemic. A particular emphasis will be placed on families who may be facing financial hardship in the school districts and potential barriers encountered by school psychologists serving students in these districts. Moreover, future studies by this team will compare differences in how COVID-19 and remote learning impacted the field of school psychology and education across suburban, urban, and rural school districts.

In completing national studies involving large-scale disasters and pandemics, future research should consider the differences in school psychological service delivery across the United States and within marginalized communities. To further inform the field, subsequent research should focus on the specific social-emotional supports being provided by school psychologists to both children and fellow educators before, during, and after the COVID-19 pandemic. Moreover, future studies should evaluate whether school psychologists feel prepared and fully comfortable in the delivery of children's mental and behavioral health services and what can be done to better prepare them in both of the aforementioned areas. Future studies should also examine how school psychologists are providing social-emotional support to their fellow educators and the reasons why school psychologists feel a responsibility to socially and emotionally support their co-workers.

Due to the complexity and widespread impact of pandemics, natural disasters, terrorist threats, and mass school shootings, an emergency task force and alert system should be developed by national associations representing school psychologists. The purpose of this task force would be to alert the field of national and international crises that may greatly impact children, educators, and schools as a whole. Given the narrow window to study and learn from the effects of national and international emergencies, the task force should work quickly with state associations to encourage and expedite exposure for studies during times of significant crisis, such as COVID-19 or September 11, 2001. The task force should establish criteria for what constitutes a national or international crisis that may greatly affect children, educators, and families. Additionally, the task force should develop an initial set of universal survey questions to ask and disseminate right after a significant national or

international emergency occurs. These questions would widely apply to a variety of crises that may arise throughout the United States and the world. Through the task force and alert system, researchers can readily disseminate questionnaires to quickly assess and study the impact of a national or international crisis as it relates to the field of school psychology or education.

Due to the potential negative side effects large-scale disasters and pandemics may have on children's mental well-being and academic performance, legislators across the nation should highly consider maximizing children's mental and behavioral services through adequate school psychologist to student ratios and through the licensure of specialist-level school psychologists. Such licensure would assist in bringing awareness to the field and allow specialist-level school psychologists to continue to help children beyond the typical school day and outside of the school building (Hughes et al., 2017). Policymakers and school leaders are highly encouraged to familiarize themselves with the training the school psychologists receive beyond that of assessment. Policymakers and school leaders can learn more about the field of school psychology by utilizing resources found on the National Association of School Psychologists webpage and in the scholarly literature. Finally, more research needs to be completed on the viability of delivering school psychological services virtually during large-scale disasters, like COVID-19, or as a potential ongoing supplemental service for children outside the four walls of the school.

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