






Supporting grandchildren's remote instruction during COVID-19: Experiences of custodial grandmothers

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Abstract

While negative impacts of COVID-19-related remote instruction on children continue to emerge, it appears that vulnerable students will disproportionately bear the burden. One such vulnerable population is children being raised by grandparents. The purpose of this mixed methods study was to gain insight into custodial grandmothers' (CGMs) experiences of their grandchildren's remote instruction, as well as individual and contextual factors associated with these experiences. A national sample of 315 CGMs, drawn from two randomized clinical trials, completed an online survey in Spring of 2020. Results of a thematic analysis and supplemental quantitative analyses revealed three themes. First, access to technology and instructional supports were critical to the success of remote instruction, with barriers being difficulties using technology and poor-quality remote instruction. Next, grandchild socioemotional difficulties, and fit with remote instruction, were central to their engagement and success with remote instruction. Finally, CGMs experienced multiple stressors related to managing the demands of remote instruction, work, and family. Challenges associated with remote instruction were related to pre-pandemic difficulties such as grandchild problems and CGM depressive symptoms. Collectively, the results highlight how multiple adversities may have

amplified grandchildren's existing vulnerability to negative outcomes. Implications are addressed, including strategies for supporting children raised by grandparents beyond the COVID-19 pandemic.

KEYWORDS

COVID-19, grandmothers, grandparents raising grandchildren, remote instruction, remote learning

1 | INTRODUCTION

In Spring of 2020, the COVID-19 pandemic led to elementary and secondary schools in the United States shifting from face-to-face to virtual or remote instruction (Kuhfeld et al., 2020). While this helped mitigate the spread of COVID-19, it also meant that approximately 55 million children in grades K-12 experienced disruptions to their education and daily routines, with many also losing access to critical health and social resources (García & Weiss, 2020; Golberstein et al., 2020; Masonbrink & Hurley, 2020). While the long-term effects of the COVID-19 pandemic on children's academic achievement and socioemotional development continue to emerge, it has been suggested that the pandemic will have detrimental impacts upon and exacerbate existing inequalities for vulnerable children (Kuhfeld et al., 2020; Lancker & Parolin, 2020; Masonbrink & Hurley, 2020). Families of these children have also been profoundly impacted by COVID-19, as caregivers facilitated remote learning while also confronting unemployment, changed work duties, food or housing instability, and the stress of social distancing (Garbe et al., 2020; García & Weiss, 2020; Masonbrink & Hurley, 2020).

According to U.S. Census data, there are approximately 2.7 million children being raised by grandparents in skipped generation households (i.e., homes with no parent present) (Generations United, 2020). This population has grown over the last several decades, primarily due to parental substance misuse (Dolbin-MacNab & O'Connell, 2021), but could grow further due to adult COVID-19 deaths (Hillis et al., 2021). Custodial grandchildren may be uniquely vulnerable to the impacts of remote instruction due to the COVID-19 pandemic, as they have already experienced upheaval in their homes due to the absence of their birth parent(s), and because many have pre-pandemic histories of academic and socioemotional difficulties (Billing et al., 2002; Pilkauskas & Dunifon, 2016; Smith & Palmieri, 2007; Smith et al., 2019; Solomon & Marx, 1995) as well as school-related challenges (Edwards, 2018; Gibson & McGlynn, 2013; Lee et al., 2017). Also relevant are contextual stressors such as grandparent psychological distress and adversity related to systemic inequalities stemming from poverty and being a racial and ethnic minority (Generations United, 2020; Hayslip et al., 2017). Despite these challenges, school personnel may not be aware of the needs of custodial grandchildren or be prepared to respond to them. Specific to the COVID-19 pandemic, little is known about the experience of remote instruction for grandchildren and their grandparents. This study expands this understanding by exploring how custodial grandmothers (CGMs) raising grandchildren in grades K-12 during the early (i.e., Spring of 2020) phase of the COVID-19 pandemic experienced remote instruction.

2 | CUSTODIAL GRANDCHILDREN AND SCHOOL SETTINGS

To understand CGM experiences of remote instruction during the COVID-19 pandemic, it is important to understand custodial grandchildren within the context of school, outside of the pandemic. Academically, grandchildren often are at a disadvantage; compared to children living with other caregivers, custodial grandchildren are more likely to

experience learning and cognitive problems (e.g., difficulties with concentration, task completion, and problem-solving) and lag behind their peers in language literacy and math grades (Pilkuskas & Dunifon, 2016). Additionally, compared to children in two parent and single mother families, grandchildren are at increased risk for repeating a grade (Pilkuskas & Dunifon, 2016; Solomon & Marx, 1995). They are also more likely to have low school engagement, be suspended or expelled, or skip school, when compared to children in parental care (Billing et al., 2002). These academic outcomes are thought to reflect stressors such as grandchildren attending multiple schools or not receiving support services, and a lack of family investment in education (Edwards, 2018).

Due to the adverse circumstances (e.g., parental abuse or neglect, incarceration, substance misuse) that bring them into their grandparents' care, grandchildren were also likely to enter remote instruction with socioemotional difficulties that could impact their learning. Custodial grandchildren have been consistently shown to experience higher rates of conduct problems, oppositional and aggressive behavior, hyperactivity and inattention problems, depression, anxiety, somatic complaints, and peer difficulties (Bramlett & Blumberg, 2007; Edwards, 2006, 2009; Pilkuskas & Dunifon, 2016; Smith & Palmieri, 2007; Smith et al., 2019). Moreover, grandchildren's histories of insecure attachment relationships, toxic stress, and trauma can manifest as challenging behavior problems that may interfere with learning. Disciplinary action in response to these behaviors can result in missed instructional time, which could further compromise grandchildren's academic achievement (Edwards, 2006, 2009).

The experience of remote instruction during COVID-19 is also likely to be influenced by grandparents' pre-pandemic experiences with their grandchildren's schools. Grandparents often lack knowledge about school policies, disciplinary approaches, and pedagogical strategies (Gibson & McGlynn, 2013). They may also struggle to assist their grandchildren with homework and navigate technology (Peterson, 2016). With remote instruction, these homework and digital literacy challenges could be amplified, along with barriers to accessing remote instruction. Shakya et al. (2012) additionally found that custodial grandparents had strained relationships with school personnel, in that they experienced these individuals as not understanding their families and not giving their grandchildren needed attention and supports. This conclusion was supported by Lee et al. (2017), who found that school professionals described custodial grandparents as unable to change and lacking ambition to improve their parenting. Even children raised by grandparents perceived their teachers as viewing their school performance more negatively than children living with two parents (Edwards, 2018). Finally, grandparents have described school as a hierarchical system in which they feel powerless (Shakya et al., 2012; Tucker, 2009). With remote instruction, grandparents could have found themselves feeling further disempowered and disconnected from their grandchildren's education.

3 | COVID-19 AND GRANDFAMILIES

In the context of the COVID-19 pandemic, grandfamilies may have experienced additional stressors that amplified preexisting challenges associated with grandchildren's education and made remote instruction more difficult. For instance, before COVID-19, approximately 20% of custodial grandchildren were living in poverty (Generations United, 2020); pandemic-related economic instability or loss of income may have pushed more grandfamilies into poverty, placing grandchildren at risk for food insecurity and housing instability (Generations United, 2020). Financially distressed grandfamilies may have also struggled to afford internet and computer access necessary for remote instruction. Additionally, grandfamilies are more common within communities of color (e.g., Black, Latinx, American Indian, and Alaska Native), who have been disproportionately impacted by COVID-19 and remote instruction (Generations United, 2020; Hillis et al., 2021; The Education Trust, 2020).

Due to their age and possible health conditions, custodial grandparents also continue to face significant health risks and could leave their grandchildren without appropriate care, should they become incapacitated or die from COVID-19 (Generations United, 2020). Grandparents may also have concerns about their grandchildren contracting the virus, though these concerns were likely less prominent early in the pandemic.

Beyond health concerns, as over half of custodial grandparents are in the labor force (Generations United, 2020), grandparents may have found themselves juggling work responsibilities and oversight of their grandchildren's remote instruction. These pandemic-specific stressors intersect with preexisting stressors common among custodial grandparents including parenting stress, psychological distress, social isolation, and relational challenges (Hayslip et al., 2017). Indeed, research reveals that, for custodial grandparents, financial hardship and job loss during the pandemic were associated with greater parenting stress and poor mental health (Wu et al., 2021; Xu et al., 2020a). Grandparents' parenting stress and poor mental health during COVID-19 were also associated with risky parenting (i.e., psychological aggression, corporal punishment, and neglectful parenting; Xu et al., 2020b).

4 | SCHOOL CLOSURES, REMOTE INSTRUCTION, AND COVID-19

While the impacts of remote instruction and COVID-19 on children's academic achievement continue to emerge, García and Weiss (2020) suggest that children who struggle to learn under typical conditions are the most likely to be negatively impacted. This would include children with characteristics common to those in grandfamilies—children living in poverty, racial and ethnic minorities, and those with learning and socioemotional difficulties (Lancker & Parolin, 2020; Lee, 2020; Masonbrink & Hurley, 2020). Studies support concerns about the impact of COVID-19-related school closures on academic achievement; children were found to be returning to in-person instruction with reduced learning gains in reading and math (Kuhfeld et al., 2020). These academic losses were not universal—children who were high achieving and from high income families likely experienced fewer negative impacts (Kuhfeld et al., 2020).

Concerns about the impact of COVID-19 on children extend beyond academic achievement, as remote instruction likely compromised children's physical and mental health. For vulnerable children, schools are critical sources of nutrition and health care (Golberstein et al., 2020; Masonbrink & Hurley, 2020). Lancker and Parolin (2020) note that school closures due to COVID-19 increased children's risk for food insecurity, which has implications for their academic performance and physical health. Regarding mental health, the structure and routine of school is protective (Lee, 2020). And, for approximately 80% of children, school is the only source of mental health care (Golberstein et al., 2020; Masonbrink & Hurley, 2020). When the stress of the COVID-19 pandemic combined with the lack of access to mental health services, children likely increased their risk of worsening mental health conditions or developing new ones (Golberstein et al., 2020; Lee, 2020). This may have been especially true for custodial grandchildren, given existing evidence of their likelihood of experiencing socioemotional difficulties.

Finally, literature suggests that remote instruction during COVID-19 has not consistently met the needs of vulnerable children. For instance, there is evidence that children of color and those living in poverty did not have access to reliable internet or devices necessary for remote instruction, resulting in missed instructional time and less school engagement (García & Weiss, 2020; Lancker & Parolin, 2020; Masonbrink & Hurley, 2020; The Education Trust, 2020). Children who require accommodations were also impacted, as they lost access to specialized teachers and few schools met their needs remotely (Garbe et al., 2020; Kuhfeld et al., 2020; Lee, 2020; Masonbrink & Hurley, 2020). More broadly, data suggest that children received inadequate remote learning materials and limited real time contact with teachers (Garbe et al., 2020; Kuhfeld et al., 2020; ParentsTogether, 2020; The Education Trust, 2020). Additionally, Garbe et al. (2020) found that parents experienced challenges with monitoring remote instruction due to difficulty managing job responsibilities, multiple learners, and other demands. Motivating children for remote instruction was another challenge, as was accessing information and content knowledge. These findings align with a national survey of custodial grandparents, who noted that their top COVID-19 concern was online education for their grandchildren (Generations United, 2020).

5 | THE PRESENT STUDY

Given the documented vulnerabilities experienced by children raised by grandparents, and challenges associated with remote learning due to the COVID-19 pandemic, the overarching purpose of this mixed methods study was to gain insight into CGMs' experiences of their grandchildren's remote instruction. We additionally sought to identify individual and contextual factors salient to variation in CGMs' experiences of remote instruction for their grandchildren. Our use of a convergent parallel mixed method design (Creswell & Plano Clark, 2010) allowed us to capitalize on the advantages of quantitative and qualitative approaches, for the purposes of deepening the understanding of CGMs' experiences with remote instruction. The qualitative research question guiding the present study was, "How did CGMs experience remote instruction for their grandchildren in grades K-12 during the early phases of the COVID-19 pandemic?" The quantitative research question was, "What are the relationships among demographics characteristics, indicators of grandchild and grandmother well-being, and grandmothers' COVID-19 related stress related to remote instruction? Due to the exploratory nature of the study, no quantitative hypotheses were established, though we anticipated that CGM and grandchild well-being would be related to indicators of COVID-19 related stress.

6 | METHOD

6.1 | Participants

Participants were drawn from two distinct randomized clinical trials (RCTs) of online psychosocial interventions (U.S. National Library of Medicine, 2020a; 2020b) and included 315 CGMs raising at least one grandchild in grades K-12, in a home that did not include the grandchild's biological parents. A total of 147 (46.7%) CGMs were drawn from the Project CONNECT clinical trial (Study 1) and 168 (53.3%) from the GIFT clinical trial (Study 2). CGMs in both RCTs were recruited nationally, using population-based and convenience sampling, and were raising at least one grandchild between the ages of 12 and 18 (Study 1) and infancy and 18 (Study 2). For the current study, CGMs already participating in the RCTs were emailed an invitation to participate in a survey about the COVID-19 pandemic. The response rate for the COVID-19 survey was 99.62% for the Study 2 sample and 67.52% for the Study 1 sample.

Table 1 provides grandfamily demographics, collected at baseline for the RCTs. CGMs were approximately 59 years old ($M = 58.94$, $SD = 7.28$, range: 36–79) and predominately White and non-Hispanic. Educational attainment and household income varied, about half of the CGMs were partnered, and slightly more than half were not employed. Most CGMs were raising one or two grandchildren ($M = 1.94$, $SD = 1.09$, range: 1–7), with the length of caregiving ranging from less than a year to more than 9 years. Regarding the ages of the grandchildren, all CGMs were raising at least one grandchild in grades K-12 at the time of the COVID-19 survey. Any CGMs who reported being unaffected by remote instruction, as they were already homeschooling, or their grandchildren were either too young for school or were no longer in high school, were not included in the sample. CGMs were raising a total of 610 grandchildren at baseline, ranging in age from less than a year to 22 years. The majority (80.5%) of the Study 1 grandchildren were between the ages of 11 and 18, and the majority (51.3%) of the Study 2 grandchildren were aged 5–10 years. Statistical comparisons (see Table 1) revealed that Study 1 CGMs were significantly older and had been caregiving for longer than the Study 2 CGMs. No significant differences between the Studies 1 and 2 samples were found for race, ethnicity, marital status, education, employment status, number of grandchildren, or household size.

TABLE 1 Demographic characteristics of CGM for the full sample and comparisons by study (N = 315)

Demographic characteristic	Full sample (N = 315)	Study 1 (n = 147)	Study 2 (n = 168)	Statistical comparison	
CGM age (years, M SD)	58.94 7.28	62.20 5.54	56.09 7.42	$t(313) = 8.19$	$p = 0.000^{***}$
CGM race (%)				$\chi^2(1, N = 315) = 0.07$	$p = 0.79$
White	76.2	75.5	76.8		
Non-White	23.8	24.5	23.2		
CGM Ethnicity (%)				$\chi^2(1, N = 315) = 0.10$	$p = 0.75$
Hispanic/Latina	7.3	6.8	7.7		
Non-Hispanic/Latina	92.7	93.2	92.3		
CGM marital status (%)				$\chi^2(1, N = 315) = 0.28$	$p = 0.60$
Married/partnered	50.8	52.4	49.4		
Not married/partnered	49.2	47.6	50.6		
CGM employment (%)				$\chi^2(2, N = 315) = 4.51$	$p = 0.11$
Not working	55.6	61.9	50.0		
Part-time	13.7	11.6	15.5		
Full-time	30.8	26.5	34.5		
CGM education (%)				$\chi^2(7, N = 315) = 13.68$	$p = 0.06$
High School (HS) or Less	22.9	26.5	19.6		
Post HS—Associate's Degree	52.1	53.1	57.1		
College/Graduate Degree	25.1	27.2	18.1		
Annual household income ^a (%)					
\$15,999 or Less	–	13.6	–		
\$16,000–\$25,999	–	16.3	–		
\$26,000–\$50,999	–	29.9	–		
\$51,000–\$75,999	–	19.7	–		
\$75,000 or more	–	19.0	–		
Monthly household income (%)					
\$999 or less	–	–	10.7		
\$1000–\$2000	–	–	24.4		
\$2001–\$3000	–	–	19.6		
\$3001–\$4000	–	–	10.7		
\$4001–\$5000	–	–	16.7		

TABLE 1 (Continued)

Demographic characteristic	Full sample (N = 315)	Study 1 (n = 147)	Study 2 (n = 168)	Statistical comparison	
Over \$5000	-	-	13.1		
Prefer not to answer			4.8		
CGC ages ^b (%)					
4 and under	12.5	2.7	21.4		
5–10	33.9	15.1	51.3		
11–18	52.0	80.5	25.8		
19 and over	1.6	1.7	1.6		
Household Size (M SD)	3.79 1.33	3.80 1.35	3.77 1.32	t(311) = 0.17	p = 0.86
Number of CGC (M SD #)	1.94 1.09 610	1.99 1.11 292	1.89 1.06 318	t(313) = 0.76	p = 0.45
Duration of caregiving (%)				$\chi^2(6, N = 314) = 36.78$ p = 0.000***	
< 1 year	2.9	2.0	3.6		
1–2 years	13.0	14.3	11.9		
3–4 years	16.5	13.6	19.0		
5–6 years	15.2	10.9	19.0		
7–8 years	14.6	6.1	22.0		
9+ years	36.8	51.0	24.4		

Note: Percentages for duration of caregiving and annual household income do not total 100% due to missing data. *p < 0.05, **p < 0.01, ***p < 0.001.

Abbreviations: CGC, custodial grandchildren; CGM, custodial grandmother.

^aHousehold income was measured differently in Studies 1 and 2 and could not be combined or statistically compared.

^bDue to how the data were collected, ages for CGC between 11 and 18 could not be separated into narrower age ranges. Percentages are based on the total number of CGC.

6.2 | Procedures

After receiving institutional review board approval for the COVID-19 survey, CGMs who were currently enrolled in the two RCTs were invited, beginning in early May 2020, to participate in a supplemental survey about their feelings and experiences during the early phase of the COVID-19 pandemic. Although the two RCTs are separate, in terms of their goals, samples, and measures, they distributed the same COVID-19 survey to their respective participants. The survey remained open for participation through June 2020. During that time, COVID-19 cases were increasing in the United States and many states were under stay-at-home orders, including the closure of schools. As such, the survey represented a unique opportunity to gather information about how grandfamilies were impacted by the disruptions caused by the pandemic, as well as factors that may have influenced their well-being. CGMs who were interested in participating in the COVID-19 survey accessed it online via Qualtrics. After consenting to participate via Qualtrics, CGMs completed the survey. As compensation, CGMs received \$10 (Study 1) or a \$10 gift card to an online retailer (Study 2).

6.3 | Measures

Demographic information about the CGMs and their families was obtained from the baseline data collected as part of Study 1 and Study 2. Most of the baseline data were collected before the COVID-19 pandemic. Indicators of grandchild well-being, common across the two RCTs and collected at baseline, were CGM reports of whether (0 = No, 1 = Yes) at least one grandchild in grades K-12 was (a) receiving treatment from a mental health professional, (b) had a psychological, emotional, or behavioral problem that had been diagnosed by a mental health professional, (c) experiencing any physical health problems, and (c) experiencing any problems at school that were a major concern. The indicator of CGM well-being was depressive symptoms, measured at baseline with the 20-item Center for Epidemiological Studies Depression Scale (CES-D, Radloff, 1977). CGMs reported how often, from 0 (*rarely or none of the time*) to 3 (*most or all of the time*), they felt specific depressive symptoms in the previous week. CES-D scores of 16 or greater are considered clinically significant (Lewinsohn et al., 1997). The CES-D is a widely used measure of depressive symptoms in adult populations with well-established validity, including for use in studies of CGMs (Merchant et al., 2017).

The COVID-19 survey, from which much of the data for the current analyses were drawn, was developed for the purposes of this study by the Study 2 team. The larger COVID-19 survey included questions related to CGMs' perceptions of (a) their health concerns related to COVID-19, (b) their work and employment situation, (c) the status available services and household items, (d) state-level COVID-19 prevention measures, and (e) the amount of COVID-19 induced stress related to finances, remote learning, obtaining services, and family relationships. Relevant to this study, CGMs marked one of the following options that best reflected the status of their school situation - "schools are still open," "schools are closed and are not providing remote learning," and "schools are closed and are providing remote learning." They also indicated, on a scale from 0 (*not at all stressful*) to 10 (*extremely stressful*), the amount of stress associated with "working from home while balancing childcare responsibilities," "homeschooling/ assisting children in completing online schoolwork," "increased conflict related to more people being home than usual," and "financial strain/money worries." Additionally, CGMs marked the extent to which they agreed (1 = *strongly agree* to 4 = *strongly disagree*) with the statement, "I am worried about receiving counseling/therapy for grandchildren." Finally, CGMs responded to the open-ended question, "If your school is providing remote learning, please tell us how that is working for your family." Additionally, some CGMs addressed remote learning in response to the open-ended question, "What would you like us to know about how your life is right now, during the pandemic?" Only those responses related to remote instruction were included in the present analysis. Responses to the open-ended questions ranged in length from a sentence to multiple sentence paragraphs.

6.4 | Data analysis

For our qualitative research question, we utilized thematic analysis (Braun & Clarke, 2006) to examine CGMs' responses to the open-ended COVID-19 survey questions. The process began with the first two authors reading and rereading the open-ended responses multiple times. During these readings, the authors noted meaning units related to salient issues in CGMs' experiences of remote instruction for their grandchildren in a spreadsheet. After the initial round of coding, the first two authors collaboratively developed a list of initial codes from these meaning units, after which the first author coded the data a second time to ensure that the coding aligned with the initial code list. After the second author reviewed the first author's coding, and all coding discrepancies were resolved via discussion and consensus-building, the first two authors worked collaboratively to collapse and combine the initial codes into themes. These themes were further defined and refined within the context of raw data, so that their scope and content, or "essence," was clear (Braun & Clarke, 2006; p. 92). The final step in the qualitative analysis involved systematically examining variation in the endorsement of the themes based on study enrollment (Study 1 vs. Study 2), clinical levels of depressive symptoms (CES-D ≥ 16), and CGM demographics (race, age, marital status,

income, employment, education, number of grandchildren, household size). We also explored the interrelatedness of the identified themes.

Several strategies were used to ensure the trustworthiness of the qualitative analysis. First, the use of multiple coders, and the process of coming to full consensus with the coding and themes, enhanced the credibility and confirmability of the analysis by encouraging multiple perspectives on the data, which also helped mitigate potential researcher biases (Creswell, 2013; Lincoln & Guba, 1985). We further enhanced the trustworthiness of the analysis by using another co-author as a peer debriefer to review the analysis and the findings (Creswell, 2013; Lincoln & Guba, 1985). Finally, we also maintained an audit trail of all steps in the analysis to enhance dependability (Creswell, 2013; Lincoln & Guba, 1985).

To address the quantitative research question, relationships among the demographic, CGM and grandchild well-being variables, and the COVID-19-related stressors were analyzed using chi-squares, bivariate correlations, analysis of variances, and *t* tests. In accordance with a convergent parallel design (Creswell & Plano Clark, 2010), the quantitative and qualitative strands were prioritized equally, and results were mixed at the level of interpretation (Creswell & Plano Clark, 2010).

7 | RESULTS

Findings from this mixed methods examination of CGMs' experiences of their grandchildren's remote learning during the early phases of the COVID-19 pandemic are organized into three themes, derived from the qualitative analyses (see Table 2). The discussion of each qualitative theme is supplemented with quantitative findings (see Tables 3 and 4). First, however, we provide contextual information about grandchildren's remote instruction.

At the time of the survey, almost all ($n = 313$; 99%) of the CGMs reported that their grandchildren's schools were closed and providing remote instruction via synchronous online classes, asynchronous learning activities,

TABLE 2 Summary of qualitative themes ($N = 315$)

Theme	Explanation	<i>n</i> (%)
Technological & Instructional Supports and Barriers	<ul style="list-style-type: none"> • Access to the internet and a working computer • Difficulties using technology—computer literacy, software, multiple users • Access to school-provided resources and supports for CGC • High vs. low quality instruction—active teacher involvement, structure and organization, appropriate workload and assignments 	166 (53)
Grandchild Well-Being & Response to Remote Instruction	<ul style="list-style-type: none"> • Challenges associated with CGC learning disabilities and other socioemotional difficulties • Variation in degree of CGC motivation and engagement with remote instruction • Alignment of remote instruction with CGC needs and preferences • Challenges resulting from lack of social interaction 	171 (54)
Grandmother & Family Stressors	<ul style="list-style-type: none"> • CGM stress, including psychological distress • CGM difficulty managing remote instruction and life demands; additional financial, family, and contextual stressors • CGM challenges with functioning as teacher for CGC; Managing and responding to needs of CGC; Conflict between CGM and CGC 	150 (48)

Abbreviations: CGC, custodial grandchildren; CGM, custodial grandmother.

and/or online assignments. Live contact with teachers was described as ranging from daily interaction to contact through email or online messaging. Grandchildren who could not access online school materials completed paper packets, which were made available by mail, delivery, or school pick-up. CGMs reported a full range of perceptions related to how well remote instruction was working for their grandchildren, as well as the notion that remote instruction was an adjustment or a work in progress. It is worth noting that, when multiple grandchildren were in school, remote instruction may have been working well for one grandchild but not for the others.

7.1 | Technological and instructional supports and barriers

The qualitative data suggested that CGMs ($n = 166$; 53%), particularly those living in larger households and raising more grandchildren, experienced technological and instructional supports and barriers that influenced their experiences of their grandchildren's remote instruction. Technologically, CGMs found it helpful when schools *provided devices* (e.g., Chromebooks), though not all grandchildren received this technology. In these cases, some CGMs reported purchasing a device for their grandchildren, but many could not afford this, especially for multiple grandchildren. Another common technological barrier was *internet access*, with some CGMs reporting not being able to afford the internet at all and others having internet access that was too slow to support their grandchildren's participation in remote instruction. As one CGM explained, "We have satellite internet which does not provide the bandwidth to watch the required videos without severe lagging ... it [internet] is expensive and we cannot afford the amount of data that is required." The final technological barrier was CGMs' *lack of computer skills*, as illustrated by the CGM who said, "I, the grandmother, am electronically illiterate. I find myself in the dark on trying to help my two grandsons with assignments." Overall, CGMs suggested that these technological barriers resulted in frustration for themselves and their grandchildren and made completing schoolwork difficult, as described by the following CGM:

It has been a challenge to understand all this schoolwork on the computers ... my [limitations of] knowledge have set us all back. It is difficult when, at our age, we are forced to learn and keep up with the children's modern learning.

Instructionally, CGMs reported supports and barriers related to teacher involvement, the organization of remote instruction, and the nature of the assigned schoolwork. Regarding *teacher involvement*, CGMs described their appreciation of accessible and available teachers. They were grateful when teachers were flexible and adjusted deadlines, assignments, and learning modalities, as documented by one CGM:

My grandson has ADHD and it was overwhelming trying to get him settled enough to teach him what he was to be learning. I ultimately spoke with the teacher and his counselor letting them know his workload needed to be reduced, and it is reduced now.

CGMs reported frustration when teachers were not available, or were only available asynchronously or during limited times, which was illustrated by the CGM who described how her grandchild's "speech therapy teacher never connects for his scheduled time and doesn't respond to our request for communication."

In terms of the *organization of remote instruction*, CGMs reported struggling to assist their grandchildren when the remote instruction felt disorganized. For instance, one CGM stated, "the remote learning is not well organized or outlined and is difficult to follow," while another shared, "I felt it was very disorganized and assignments too difficult for students to complete on their own." While CGMs understood that teaching adjustments were necessary, they indicated that multiple changes to the delivery of remote instruction were difficult, in terms of establishing routines for their grandchildren. Managing the volume of electronic communication was a related challenge, as illustrated by

the CGM who said, “they [teachers] are using multiple platforms to communicate and the hardest part is for me to juggle the individual communication style of the staff and teachers.” Finally, CGMs perceived variation in teachers' commitment to high-quality remote instruction, with some noting frustration over grandchildren teaching themselves, minimal direct instruction, and delays in posting and grading assignments. As one CGM explained, “It seems each teacher has their own level of knowledge of how to use their computer systems and send out schoolwork to the kids. It is very clear during this time of crisis which teachers are dedicated to teaching.”

Finally, the *nature of the schoolwork* shaped CGMs' experiences of remote instruction. CGMs expressed frustration with too much or too little work, or what they perceived as busy work. This was captured by the CGM who shared, “there is not enough work in a day to keep them busy or motivated” and the CGM who explained, “some teachers have been very good and have given assignments that are adequate to pass the class, but not over burdening stressed out kids, but one teacher just keeps piling it on and [grandchild] will be failing his class.” CGMs also disliked optional assignments, as they saw their grandchildren as being unmotivated to complete them. Conversely, they appreciated assignments that lent themselves to a remote environment and did not rely on adult involvement, as illustrated by the CGM who stated:

Originally, the children had assignments just like they were in school. It didn't matter that grandma had never taken geometry or calculus and trig. Now the assignments have more choices and have fun options. My ten-year-old grandson made brownies for math.

7.2 | Grandchild well-being and response to remote instruction

The quantitative analyses suggest that grandchildren may have entered remote instruction with needs that could make learning more challenging. Specifically, at baseline (pre-pandemic), CGMs were raising at least one grandchild in grades K-12 who had a psychological, emotional, or behavioral problem that had been diagnosed by a mental health professional (58.1%), physical health problems (23.8%), or problems at school that were a major concern (35.2%). Approximately one-third of CGMs further reported raising at least one grandchild in grades K-12 who was receiving mental health treatment. Correlations among these indicators of grandchild well-being are in Table 3. Demographically, grandchildren's school problems were significantly correlated with the number of custodial grandchildren in the CGMs' care ($r = -0.13, p = 0.02$).

In the context of the pandemic, 42.5% of CGMs agreed or strongly agreed that they were worried about obtaining counseling or therapy for their grandchildren. Study 1 CGMs reported significantly more worry than Study 2 CGMs ($M_{S1} = 2.73, SD_{S1} = 1.00; M_{S2} = 2.47, SD_{S2} = 0.97; t(313) = 2.37, p = 0.02$). As depicted in Table 3, CGM worry about obtaining mental health care was associated with having a grandchild with a psychological diagnosis ($r = -0.25, p < 0.001$), physical health problem ($r = -0.23, p < 0.001$), and school problem ($r = -0.21, p < 0.001$). Additionally, CGM stress related to remote learning was significantly correlated with grandchildren having school problems ($r = 0.24, p < 0.001$) and a psychological diagnosis ($r = 0.24, p < 0.001$). Finally, CGM depressive symptoms were associated with raising at least one grandchild with school problems ($r = 0.14, p = 0.01$), a psychological diagnosis ($r = 0.17, p = 0.002$), and physical health problems ($r = 0.11, p = 0.04$).

The qualitative analyses provide insight into the specific ways remote instruction was challenging for grandchildren ($n = 171; 54\%$). CGMs who identified as White more frequently endorsed this qualitative theme than CGMs of other racial backgrounds, as did CGMs whose grandchildren had problems in school, mental health diagnoses, and were receiving mental health treatment. One major challenge was grandchildren's *learning disabilities and socioemotional difficulties*. CGMs reported diagnoses including depression, anxiety, ADHD/ADD, autism, OCD, ODD, dyslexia, and “special needs.” Due to these circumstances and a lack of necessary supports, CGMs described remote learning as difficult for their grandchildren, who acted out and struggled to keep up, stay focused, and complete assignments. As one CGM explained, “Remote learning is difficult for our grandson. He has ADHD and finds

TABLE 3 Descriptive statistics and correlations for CGM and CGC well-being and pandemic-related stressors (N = 315)

Variable	n M (SD) %	1	2	3	4	5	6	7	8	9	10
1. CGC diagnosis ^a	315 58.1%	-									
2. CGC in MH treatment ^b	315 33.7%	0.40***	-								
3. CGC health problems ^a	315 23.8%	0.17**	0.01	-							
4. CGC school problems ^a	315 35.2%	0.41***	0.14*	0.15**	-						
5. CGM worry GC MH treatment	315 2.59 (0.997)	-0.25***	0.01	-0.23***	-0.21***	-					
6. CGM remote learning stress	297 6.44 (3.24)	0.24***	0.03	0.07	0.24***	-0.38***	-				
7. CGM work-life stress	255 3.43 (3.44)	0.10	-0.07	0.14*	0.05	-0.21***	0.42***	-			
8. CGM household conflict stress	298 4.58 (3.10)	0.17**	0.02	0.05	0.06	-0.35***	0.46***	0.29***	-		
9. CGM financial stress	297 5.19 (3.02)	0.12*	-0.08	0.08	0.10	-0.33***	0.43***	0.27***	0.34***	-	
10. CGM depression	315 15.87 (11.26)	0.17**	-0.07	0.11*	0.14*	-0.27***	0.33***	0.18**	0.24***	0.28***	-

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Abbreviations: CGC, custodial grandchildren; CGM, custodial grandmother.

^a0 = No, 1 = Yes.

it difficult to remain focused on his schoolwork. Some days are worse than others.” The disruption to routines and the change in the learning environment was also difficult, as illustrated by the CGM who said of her autistic granddaughter, “The 7-year-old is having trouble understanding why she can't go to school. We start daily lesson and she melts down yelling, ‘No I have to do all the papers at school.’” When grandchildren were not able to participate fully in remote instruction because of their disabilities, CGMs expressed concern that their grandchildren's IEPs were not being met. For example, one CGM explained, “My grandson is extremely visually impaired, and the Google classroom and some apps are impossible for him to use.” CGMs also reported that grandchildren being away from educational supports, such as aides and counselors, further amplified the challenges of remote instruction, as illustrated by the CGM who said, “We have one grandchild with an IEP and, without her hands-on help from her aides, it doesn't flow.”

Even when grandchildren did not have learning disabilities or socioemotional difficulties, CGMs described variation in their *motivation and engagement with remote instruction*. A minority of grandchildren were described as embracing remote instruction, as it fit with their needs and learning styles. And, in a few cases, CGMs suggested that their grandchildren did better in the remote environment due to less social pressure or getting away from bullies, as illustrated by the CGM who said her granddaughter, “had a bad bullying issue and was wanting to be homeschooled for a couple years now. It has worked out well since she got caught up and we will consider keeping her homeschooled, even if/when schools reopen.” Despite these positives, most CGMs described their grandchildren as having low motivation, a lack of interest in school, poor organization and self-direction, or high levels of distraction. This was described by the CGM who said that her grandson “had trouble being motivated while actually in school, but without teacher interaction, group projects, I am seriously worried that he will fail this semester and next year will be so difficult for him that he might drop out.” Another CGM shared, “my granddaughter was not motivated to get out of bed and do the homework. We have finally come to an agreement ... This week was the first one in which she has finally finished her homework on time.” Unfortunately, there were a few grandchildren who refused to do any schoolwork, as reported by the CGM who said, “the boys refuse to participate and are failing their classes.”

Finally, CGMs reported that their grandchildren were being negatively impacted by the *lack of social interaction* with friends and teachers, as well as their inability to participate in sports, extracurricular activities, and social activities. This was captured by the CGM who said, “The kids thrive on school and their many, many sports. They are grieving. Not being able to play with their friends is sad to see.” CGMs also suggested that it was difficult when grandchildren had to miss out on significant adolescent milestones such as proms, graduation ceremonies, and college visits, as illustrated by the CGM who explained, “We have a senior who this situation has affected in many ways due to no graduation and prom. They have even canceled his college orientation this summer, so that is stressful for all of us.” According to CGMs, grandchildren responded to these losses via acting out, having tantrums, crying, and expressing frustration and anger. As one CGM described:

Our granddaughter is really missing school and her friends, so she has become a little more difficult to deal with ... the tantrums are getting out of hand in the evening, and we feel like all we do every night is tell them 'no' and yell.

7.3 | Custodial grandmother and family stressors

CGM well-being and personal, contextual, and relational stressors were salient to their experiences of their grandchildren's remote instruction. As illustrated in Table 3, the quantitative data revealed that CGM stress associated with remote learning and assisting grandchildren in completing online schoolwork was positively associated with other COVID-19 pandemic stress related to working from home while balancing childcare responsibilities ($r = 0.42$, $p < 0.001$), increased conflict due to more people being home than usual ($r = 0.46$,

$p < 0.001$), and financial strain/money worries ($r = 0.43$, $p < 0.001$). CGM stress with remote learning was also correlated with their baseline depressive symptoms ($r = 0.33$, $p < 0.001$), with 44% of CGMs reporting levels of depressive symptoms within the clinical range. Significant demographic associations with CGM remote learning stress are depicted in Table 4.

Compared to the Study 1 CGMs, Study 2 CGMs reported significantly greater COVID-19 stress related to financial strain/money worries ($M_{S2} = 5.60$, $SD_{S2} = 3.03$; $M_{S1} = 4.67$, $SD_{S1} = 2.94$; $t(295) = -2.66$, $p = 0.009$), working from home while balancing childcare responsibilities ($M_{S2} = 3.95$, $SD_{S2} = 3.47$; $M_{S1} = 2.43$, $SD_{S1} = 3.18$; $t(253) = -3.41$, $p < 0.001$), and homeschooling and assisting grandchildren in completing online school work ($M_{S2} = 7.01$, $SD_{S2} = 3.04$; $M_{S1} = 5.71$, $SD_{S1} = 3.36$; $t(295) = -3.50$, $p < 0.001$). Study 2 CGMs also reported significantly more baseline depressive symptoms than Study 1 CGMs ($M_{S2} = 19.27$, $SD_{S2} = 11.81$; $M_{S1} = 11.98$, $SD_{S1} = 9.19$; $t(313) = -6.05$, $p < 0.000$).

The qualitative analyses revealed specific personal and contextual stressors ($n = 150$; 48%) that CGMs experienced related to managing their grandchildren's remote instruction. These stressors were most frequently endorsed by younger CGMs, those raising multiple grandchildren, and those with greater than a high school education. CGMs represented in this theme were also likely to report that a grandchild in grades K-12 had a mental health diagnosis as well as their own clinical levels of depressive symptoms. They also were likely to endorse the stressors represented in the other qualitative themes including technological and instructional barriers as well as grandchild-specific challenges related to remote learning.

First, CGMs described needing to *supervise grandchildren's participation* in remote instruction. CGMs stated that they had to sit with their grandchildren during remote instruction, to ensure adequate participation. This was illustrated by the CGM who said, "Our two [grand]daughters can't be trusted to work on school assignments unless we are right next to them to ensure that they stay on track. They didn't like school before remote learning, so [they] dislike remote learning even more." In addition, CGMs reported stress related to not understanding their grandchildren's schoolwork and being unable to assist with assignments, for example:

I have one [grandchild] with special needs, which means I have to stay with her the entire time she is on the computer. The older ones help when they are done with their work, but I am helping students with work I have not done myself for years.

CGM monitoring often resulted in *grandmother-grandchild conflict*. As one CGM put it, "There is a lot of fighting and arguing most days when it is time to get school work done." Similarly, another CGM shared, "We have confrontations daily about missing work, getting off technology during school hours, and practicing good health habits." Despite the conflict, CGMs believed that they had to take an active role, or their grandchildren would fall behind academically or fail to progress to the next grade level or academic milestone (e.g., graduation). One CGM described this concern:

I feel that the most stressful part is the remote learning, being awake all night worried that my grandson will have to repeat [a grade] and how difficult that will be for him. Our constant arguments regarding school work. My grandson already has depression and anger issues. This has not been good. I try to let him be responsible for the work, but then I feel I am failing as a parent. If I push, he gets angry and it is awful for both of us.

CGMs also reported stress due to the challenges of *juggling work and grandchildren's remote instruction*. As one CGM explained, "It is difficult to be a teacher for approximately three to four hours in the morning and then go to work and do my regular job the rest of the day!" Even CGMs who worked from home struggled, as indicated by the following CGM: "It is very difficult to both work from home and assist in remote learning, especially since our grands are so young. They need a lot of assistance." To assist with remote instruction, some CGMs cut back on work hours and others used leave time. However, this was not an option when CGMs were essential workers; these

TABLE 4 Correlations for demographic variables and pandemic-related stressors (N = 315)

Variable	1	2	3	4	5	6	7	8	9	10	11
1. CGM White ^a	-										
2. CGM Partnered ^b	.24**	-									
3. CGM Employed (Full- or Part-Time) ^b	-0.03	-0.09	-								
4. CGM High School Education or Less	-0.03	0.02	-0.14*	-							
5. CGM Age	0.01	-0.07	-0.22***	-0.08	-						
6. Number of CGC	-0.06	-0.03	-0.12*	0.15**	-0.02	-					
7. Household Size	0.01	0.25***	-0.08	0.11	-0.12*	0.74***	-				
8. CGM Work-Life Stress	0.03	0.04	0.16*	-0.10	-0.14*	0.01	0.02	-			
9. CGM Household Conflict Stress	0.07	0.03	-0.10	-0.02	-0.02	0.16**	0.13*	0.29***	-		
10. CGM Remote Learning Stress	0.08	-0.04	-0.10	-0.06	-0.20***	0.15**	0.13*	0.42***	0.46***	-	
11. CGM Financial Stress	-0.07	-0.06	-0.13*	0.02	-0.17**	0.03	0.03	0.27***	0.34***	0.43***	-

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Abbreviations: CGC, custodial grandchildren; CGM, custodial grandmother.

^a0 = No, 1 = Yes.

CGMs reported being unable to supervise their grandchildren's remote instruction, which left them feeling guilty and further increased their concern about their grandchildren's academic performance. This was captured by the CGM who shared, "I am working full-time, sometimes at home and sometimes in the office ... even when I am home, I can't really oversee my grandson's schoolwork. I don't know if he is going to pass his classes."

Finally, *contextual stressors* such as pandemic-related concerns, family crises (e.g., deaths, moving, health problems, etc.) were described as compounding CGM stress related to their grandchildren's remote instruction. For instance, CGMs reported worrying about what would happen to their grandchildren should they contract COVID-19:

I have a lot of anxiety. I'm not in great health and I'm afraid of getting the virus because my grandchild needs me. It would be devastating for her to lose me and I just want to make sure that does not happen.

CGMs also reported that risk associated with COVID-19 also meant that they were unable to access their usual supports and resources, as illustrated by the CGM who stated,

Her [granddaughter's] mother and other grandma ... have made matters worse by telling her she cannot stay with either of them for a while ... her grandma said she didn't want her because her grandpa is too afraid of the virus. She took this very hard of course.

Finally, being together at home all the time was difficult, as CGMs were unable to find time for themselves and single CGMs had to manage the demands of childcare, work, housework, and remote instruction. One CGM shared her sense of stress and burden:

I feel the most stress, as it's all on my shoulders. The daily household jobs and now they are not at school so I cannot do the work without them. It makes it so hard to keep up and do school and watch them outside ... I'm so stressed out. I want a little break.

8 | DISCUSSION

The purpose of this mixed methods study was to gain insight into CGMs' experiences of their grandchildren's remote instruction during the early phases of the COVID-19 pandemic. We also sought to identify individual and contextual factors salient to variation in CGMs' experiences of remote instruction for their grandchildren. We found that CGMs experienced challenges related to accessing technology and instructional supports, as well as poor-quality remote instruction, and that these challenges were amplified in households with multiple grandchildren. Additionally, we found that grandchildren's socioemotional health and suitability for remote instruction were central to their engagement and success with remote instruction. Grandchild difficulties before the pandemic appeared to make remote instruction more challenging and were also associated with CGMs' pandemic-related stress and pre-pandemic depressive symptoms. Finally, our study revealed that CGMs experienced multiple stressors related to managing the demands of remote instruction, work, and family. These pandemic-related stressors were interrelated, and greater for CGMs with significant pre-pandemic depressive symptoms. Findings from this study provide needed insight into the needs and experiences of a population of vulnerable children, who may be at increased risk for negative outcomes associated with the COVID-19 pandemic.

8.1 | Technological and instructional barriers

Before the COVID-19 pandemic, custodial grandparents reported challenges related to their grandchildren's education, including using technology (Gibson & McGlynn, 2013; Peterson, 2016; Shakya et al., 2012). Our study confirms that children raised by grandparents were likely to experience this "digital divide," and that lack of access to technology and the internet negatively impacted grandchildren's ability to participate in remote instruction, especially in households with multiple grandchildren. Even when schools provided grandchildren with technology, this did not necessarily overcome the "digital divide," as our study confirmed that CGM's digital illiteracy often made it difficult for them to assist their grandchildren and frequently created more stress and frustration (Peterson, 2016).

Previous research suggests that CGMs may be unfamiliar with the content of their grandchildren's coursework and contemporary pedagogical strategies (Gibson & McGlynn, 2013; Peterson, 2016; Shakya et al., 2012). This helps to partially explain our finding that CGMs struggled in the role of "teacher." However, our findings extend previous work by providing insight into specific instructional strategies that made remote instruction challenging for CGM—these included poorly organized instruction, inappropriate amounts/types of schoolwork, and lack of teacher engagement. Literature on effective remote instruction points to the importance of teacher training and engagement, as well as the ability to tailor remote instruction to children's diverse learning styles and needs (García & Weiss, 2020; Kuhfeld et al., 2020). Unfortunately, our findings support broader evidence that, during the COVID-19 pandemic, children had limited contact with teachers and remote learning materials were often inadequate (Garbe et al., 2020; Kuhfeld et al., 2020; ParentsTogether, 2020; The Education Trust, 2020). What is notable about these findings is the extent to which CGMs felt ill-equipped to mitigate these gaps at home.

8.2 | Grandchild well-being and remote instruction

Prior to the COVID-19 pandemic, children raised by grandparents may have been at increased risk for academic problems (Billing et al., 2002; Pilkauskas & Dunifon, 2016; Solomon & Marx, 1995) as well as socioemotional difficulties (Bramlett & Blumberg, 2007; Edwards, 2006; Edwards, 2009; Pilkauskas & Dunifon, 2016; Smith & Palmieri, 2007; Smith et al., 2019). Our findings indicated that, while many CGMs were challenged by their grandchildren's lack of motivation, focus, organization, and engagement with remote instruction, these struggles were particularly common among grandchildren with learning disabilities and socioemotional difficulties and were a significant source of CGM-grandchild conflict. In this sense, our findings support the notion that children who struggle to learn under typical circumstances could be more negatively impacted by remote instruction during the pandemic (García & Weiss, 2020).

Part of the difficulty for grandchildren may have been a lack of access to social activities and supportive services, and the loss of the structure and routine provided by school (Garbe et al., 2020; Kuhfeld et al., 2020; Lee, 2020; Masonbrink & Hurley, 2020). CGMs in our study raised these concerns, along with the concern that grandchildren had limited or no participation in remote instruction because they were not receiving parts or all of their IEPs, a pandemic-related concern that has also been raised more broadly (Gilman, 2020; ParentsTogether, 2020). We also found significant correlations between grandchildren's pre-pandemic school and mental health problems and CGMs' worries about obtaining counseling for their grandchildren, raising additional concerns regarding the extent to which grandchildren's needs were being met during the pandemic. Associations were also found between grandchildren's pre-pandemic mental health and school problems, CGM stress related to remote instruction, and CGM pre-pandemic depressive symptoms. These findings provide an important reminder that children do not exist in a vacuum and that other family stressors may be relevant to understanding children's outcomes related to remote instruction during the COVID-19 pandemic.

8.3 | Custodial grandmother stress and well-being

The CGMs in our study were highly involved in their grandchildren's remote instruction, for the purposes of keeping their grandchildren on track academically and reducing the negative impacts of remote instruction during the pandemic. Previous research has shown that caregiver involvement, in the form of managing schedules, promoting engagement, providing instruction, is critical to the success of remote instruction (Borup, 2016; Garbe et al., 2020; García & Weiss, 2020; Lancker & Parolin, 2020; Masonbrink & Hurley, 2020). Our findings document that this level of involvement was often difficult for CGMs, as they were also dealing with a host of interrelated pandemic-related stressors including working from home, increased household conflict, financial distress and job loss, and normative family events and crises. CGMs with multiple grandchildren appeared to find remote instruction particularly stressful and the findings about the additional stress experienced by Study 2 CGMs likely reflect challenges associated with managing remote instruction for younger grandchildren.

While these pandemic-related stressors have been described in the context of parents and remote instruction more generally (Garbe et al., 2020; García & Weiss, 2020; Masonbrink & Hurley, 2020), our study extends this work by revealing that pre-pandemic CGM well-being (i.e., depressive symptoms) was related to challenges and stress associated with their grandchildren's remote instruction. Moreover, the interrelationships among our qualitative themes and the multiple sources of CGM pandemic-related stress raise questions about whether CGMs entered remote instruction more distressed than other caregivers. When combined with grandchildren's preexisting mental health diagnoses and academic difficulties, it seems likely that CGMs found themselves in a situation of compounding stress, which may have made remote instruction even more challenging to manage. Emerging research on the impact of the COVID-19 pandemic on grandfamilies has connected pandemic-related stressors to custodial grandparents' mental health and parenting (Wu et al., 2021; Xu et al., 2020a; Xu et al., 2020b). Our findings build on this work by revealing some of the specific parenting challenges associated with grandchildren's remote instruction. Most significantly, our findings suggest that the well-being of children's caregivers also appears highly relevant to understanding the academic and socioemotional impacts of remote instruction due to COVID-19.

8.4 | Limitations

Despite the value of these findings to the understanding of the educational experiences of children being raised by grandparents, there are limitations to the study. First, the open-ended nature of the survey question resulted in a wide range of responses about remote learning. While these responses likely reflected what was most significant to the CGMs, the survey question did not lend itself to a comprehensive evaluation of CGMs' experiences with remote instruction. Additionally, it is possible that those CGMs who elected to complete the COVID-19 survey differed from other CGMs in systematic ways that might have influenced their survey responses. Further, due to combining the data across RCTs, there were some limitations to what variables could be explored in the quantitative analyses. Finally, the study is cross-sectional, and the data were gathered early in the COVID-19 pandemic; as a result, the findings cannot capture the evolution of remote instruction over the course of the pandemic.

9 | FUTURE DIRECTIONS AND IMPLICATIONS

Findings from this study have implications for future research. First, studies should longitudinally examine the impact of the COVID-19 on grandchildren's academic performance and socioemotional well-being. Relatedly, future research should also explore how grandchildren's existing vulnerabilities (i.e., academic and/or socioemotional difficulties) and learning styles might have shaped their outcomes associated with remote instruction. Given our findings that CGM well-being and other contextual stressors were relevant to the experience of remote instruction,

future research could explore the influence of grandparent health, parenting behavior, and social support on grandchild and family outcomes. Consideration should also be given to the experiences of multigenerational grandfamilies, including the influence of the grandchild's parents. Finally, qualitative examinations, particularly those informed by a resilience perspective, could provide unique insights into how grandfamilies navigated and adapted to remote instruction over the course of the pandemic.

The remote learning experiences of grandfamilies during the early phase of the COVID-19 pandemic can guide educational practices during future periods of remote instruction as well as how schools interface with grandfamilies normally. Findings suggest that school personnel should assess and adjust instructional strategies and expectations based on grandchildren's household resources (e.g., internet access) and grandparents' ability to assist their grandchildren with schoolwork. Steps should be taken to avoid placing inadvertent demands on custodial grandparents, or making an implicit assumption that grandparents have no other responsibilities during the school day. When the grandfamily needs additional support to support the grandchild's learning, school personnel can play a critical role in connecting the grandparent to information and resources, even if they are not directly related to the grandchild's education.

Although children raised by grandparents are diverse, they are over-represented in minority communities and families living in poverty (Generations United, 2020) and are more likely to have learning and socioemotional difficulties (Billing et al., 2002; Pilkauskas & Dunifon, 2016; Smith et al., 2019). They are also likely to have custodial grandparents who are experiencing their own psychological distress and other challenges (Hayslip et al., 2017). School personnel must therefore be alert to grandchildren's unique needs and ensure that remote and in-person instruction is designed and executed in a way that facilitates success for all students. As suggested by the results of this study, active teacher involvement and communication with custodial grandparents about assignments, grandchildren's academic progress, and behavioral issues is also key to facilitating student success. Further, when grandparents are supporting learning at home, they may benefit from guidance from school personnel about how to help grandchildren remain motivated, focused, and organized with their schoolwork.

10 | CONCLUSION

As the COVID-19 pandemic continues to evolve, periods of remote instruction may continue to impact children's academic performance and socioemotional well-being. Vulnerable children will likely bear the heaviest burden of the pandemic, including those children raised by grandparents. Findings from this study highlight multiple challenges experienced by this population and provide direction for how school personnel can best support the unique needs of children living in grandfamilies.

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CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

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